

# **SCHEDULE OF RATES**

## **FOR TERM CONTRACTS FOR BUILDING WORKS**

2016 EDITION

Volume 1  
(Builder's Works)



ARCHITECTURAL SERVICES DEPARTMENT  
HONG KONG

**ARCHITECTURAL SERVICES DEPARTMENT**

**HONG KONG**

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# **VOLUME 1**

## **CONTENTS**

|            |  | <b>Items</b>        | <b>Pages</b> |
|------------|--|---------------------|--------------|
| Section 00 | General Regulations .....  |                     | 00/1 - 00/19 |
| Section 01 | Contract Facilities and Special Attendances.....                     | 01001 - 01019 ..... | 01/1 - 01/9  |
| Section 02 | Demolition.....  | 02001 - 02034 ..... | 02/1 - 02/7  |
| Section 03 | Excavation.....  | 03001 - 03063 ..... | 03/1 - 03/11 |
| Section 04 | Concrete Work.....   | 04001 - 04125 ..... | 04/1 - 04/16 |
| Section 05 | Brickwork and Blockwork.....   | 05001 - 05098 ..... | 05/1 - 05/11 |
| Section 06 | Masonry.....   | 06001 - 06035 ..... | 06/1 - 06/8  |
| Section 07 | Roofing and Waterproofing.....                                       | 07001 - 07112 ..... | 07/1 - 07/19 |
| Section 08 | Carpentry and Joinery.....   | 08001 - 08248 ..... | 08/1 - 08/35 |
| Section 09 | Ironmongery.....   | 09001 - 09336 ..... | 09/1 - 09/26 |
| Section 10 | Steel and Metal Work.....  | 10001 - 10482 ..... | 10/1 - 10/62 |
| Section 11 | Plastering and Finishes.....   | 11001 - 11403 ..... | 11/1 - 11/42 |
| Section 12 | Roadwork and Cable Duct.....   | 12001 - 12066 ..... | 12/1 - 12/14 |
| Section 13 | Plumbing and Drainage.....   | 13001 - 13619 ..... | 13/1 - 13/70 |
| Section 14 | Glazing.....   | 14001 - 14112 ..... | 14/1 - 14/16 |
| Section 15 | Painting.....  | 15001 - 15335 ..... | 15/1 - 15/47 |
| Section 16 | Repairs and Alterations to Specialty Works.....                      | 16001 - 16038 ..... | 16/1 - 16/12 |
| Section 17 | Labour.....  | 17001 - 17034 ..... | 17/1 - 17/7  |
| Section 18 | Temporary Plant and Facilities .....                                 | 18001 - 18050 ..... | 18/1 - 18/10 |
| Section 19 | Recreational / Sports Surfacing and Protective Padding.....          | 19001 - 19061 ..... | 19/1 - 19/12 |
| Section 20 | Fixtures and Fittings.....   | 20001 - 20365 ..... | 20/1 - 20/41 |
| Section 21 | Partitions and Cubicle System.....                                   | 21001 - 21079 ..... | 21/1 - 21/11 |
| Section 22 | Landscape Work.....  | 22001 - 22314 ..... | 22/1 - 22/34 |
| Section 23 | Geotechnical Works.....  | 23001 - 23086 ..... | 23/1 - 23/22 |
| Section 24 | Preservation and Protection of Preserved Trees.....                  | 24001 - 24007 ..... | 24/1 - 24/5  |
| Section 25 | Control Treatment on Pests, Termites and Red Imported Fire Ants..... | 25001 - 25020 ..... | 25/1 - 25/7  |

## **VOLUME 1 (Cont'd)**

### **CONTENTS**

|            |   | <b>Items</b>        | <b>Pages</b> |
|------------|---|---------------------|--------------|
| Section 61 | Site Safety.....  | 61001 - 61010 ..... | 61/1 - 61/7  |
| Section 62 | Site Cleanliness and Tidiness.....                                  | 62001 - 62002 ..... | 62/1 - 62/3  |
| Section 63 | Trip Ticket System.....   | 63001 - 63002 ..... | 63/1 - 63/3  |
| Section 64 | Monitoring Payment of Wages.....                                    | 64001 - 64003 ..... | 64/1 - 64/5  |
| Section 65 | Sub-contractor Management Plan .....                                | 65001 - 65002 ..... | 65/1 - 65/2  |
|            | Annex 'A' - Drawing Schedule and Drawings for Builder's Works ..... |                     | A/1 - A/38   |
|            | Annex 'B' - Grouping of Plant Materials.....                        |                     | B/1 - B/8    |
|            | Annex 'C' - Tables of Metal Weights, etc.....                       |                     | C/1 - C/34   |

## **VOLUME 2**

### **CONTENTS**

|            |   | <b>Items</b>        | <b>Pages</b> |
|------------|---|---------------------|--------------|
| Section 00 | General Regulations .....                                   |                     | 00/1 - 00/19 |
| Section 01 | Contract Facilities and Special Attendances.....            | 01001 - 01019 ..... | 01/1 - 01/9  |
| Section 27 | Electrical Installation - Lighting System and Fixtures..... | 27001 - 27848 ..... | 27/1 - 27/69 |
| Section 28 | Electrical Installation - Small Power Distribution.....     | 28001 - 28563 ..... | 28/1 - 28/37 |
| Section 29 | Electrical Installation - Main Distribution Systems.....    | 29001 - 29733 ..... | 29/1 - 29/38 |
| Section 30 | Electrical Installation - Miscellaneous.....                | 30001 - 30812 ..... | 30/1 - 30/60 |
| Section 31 | Low Voltage Cubicle Switchboard.....                        | 31001 - 31111 ..... | 31/1 - 31/10 |
| Section 32 | Emergency Generator Installation.....                       | 32001 - 32108 ..... | 32/1 - 32/11 |
| Section 33 | Burglar Alarm and Security.....                             | 33001 - 33099 ..... | 33/1 - 33/13 |
| Section 34 | Public Address System .....                                 | 34001 - 34037 ..... | 34/1 - 34/6  |
| Section 35 | Broadcast Reception.....                                    | 35001 - 35022 ..... | 35/1 - 35/5  |

## **VOLUME 2 (Cont'd)**

### **CONTENTS**

|            |  | <b>Items</b>        | <b>Pages</b> |
|------------|--|---------------------|--------------|
| Section 36 | Heating, Ventilation and Air-Conditioning - Pipework .....   | 36001 - 36596 ..... | 36/1 - 36/45 |
| Section 37 | Heating, Ventilation and Air-Conditioning - Ductwork .....   | 37001 - 37211 ..... | 37/1 - 37/16 |
| Section 38 | Heating, Ventilation and Air-Conditioning - Equipment.....   | 38001 - 38797 ..... | 38/1 - 38/65 |
| Section 39 | Heating, Ventilation and Air-Conditioning - Electrical Power Supply,<br>Control and Monitoring System..... | 39001 - 39058 ..... | 39/1 - 39/5  |
| Section 40 | Fire Services.....   | 40001 - 40383 ..... | 40/1 - 40/32 |
| Section 41 | Liquefied Petroleum Gas.....   | 41001 - 41091 ..... | 41/1 - 41/13 |
| Section 42 | Town Gas.....  | 42001 - 42048 ..... | 42/1 - 42/7  |
| Section 43 | Medical Gases.....   | 43001 - 43259 ..... | 43/1 - 43/26 |
| Section 44 | Catering Equipment.....  | 44001 - 44095 ..... | 44/1 - 44/14 |
| Section 45 | Swimming Pool Water Treatment Installation.....  | 45001 - 45110 ..... | 45/1 - 45/15 |
| Section 46 | Crane and Hoist Installation.....  | 46001 - 46025 ..... | 46/1 - 46/5  |
| Section 47 | Fuel Supply System.....  | 47001 - 47050 ..... | 47/1 - 47/9  |
| Section 48 | Chimney.....   | 48001 - 48075 ..... | 48/1 - 48/8  |
| Section 49 | Sewage Treatment Installation.....   | 49001 - 49025 ..... | 49/1 - 49/8  |
|            | Annex 'A' - Drawings for Building Services Works .....   |                     | A/1 - A/9    |

**Section 00**

**GENERAL REGULATIONS**

**SECTION 00****GENERAL REGULATIONS****Associated documents****GR.01**

This Schedule of Rates (hereinafter referred to as "this Schedule" or "the Schedule") shall be read and used in conjunction with :-

- (a) The General Conditions of Contract and Special Conditions of Contract adopted for the Term Contract.
- (b) The Conditions of Tender, Form of Tender and Articles of Agreement of the Term Contract.
- (c) Drawings, Specification and Employer's Requirements of the Term Contract.
- (d) The term "Specification" shall mean the General Specification, Codes of Practice and other documents referred herein below, Particular Specifications and all other specification requirements issued therein and referred to in the Term Contract.
- (e) The General Specifications and other documents for building works including but not limited to the document as listed below including all current amendments issued thereto, and any further document all as referred to in the Term Contract :-
  - (i) General Specification for Building issued by Architectural Services Department.
  - (ii) Appropriate Sections of General Specification for Civil Engineering Works issued by Civil Engineering and Development Department.
  - (iii) Design Manual : Barrier Free Access issued by Buildings Department.
  - (iv) Code of Practice for Fire Safety in Buildings issued by Buildings Department.
  - (v) The Fresh Water Plumbing Maintenance Guide, Handbook on Plumbing Installation for Buildings, Hong Kong Waterworks Standard Requirements for Plumbing Installations in Buildings, Maintenance of Internal Plumbing and Circular Letters issued to Licensed Plumbers and Authorized Persons by Water Supplies Department.
  - (vi) Geotechnical Manual for Slopes, Geoguide 5 - Guide To Slope Maintenance and other relevant Geoguides issued by Geotechnical Engineering Office, Civil Engineering Department.
- (f) The General Specifications, Codes of Practice and other documents for building services installations including but not limited to the document as listed below, which are issued by Architectural Services Department or Electrical and Mechanical Services Department including all current amendments issued thereto, and any further document all as referred to in the Term Contract :-
  - (i) General Specification for Electrical Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
  - (ii) General Specification for Air Conditioning, Refrigeration, Ventilation and Central Monitoring and Control System Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.

**Associated  
documents  
(Cont'd)**

**GR.01  
(Cont'd)**

- (f) (iii) General Specification for Mechanical Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (iv) General Specification for Fire Service Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (v) General Specification for Lift, Escalator and Passenger Conveyor Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (vi) General Specification for Liquefied Petroleum Gas Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (vii) General Specification for Catering Equipment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (viii) General Specification for Swimming Pool Water Treatment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (ix) General Requirements for Electronic Contract (ESG01) issued by Electrical and Mechanical Services Department.
- (x) General Specification for Broadcast Reception Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xi) General Specification for Public Address Systems (ESG11) issued by Electrical and Mechanical Services Department.
- (xii) General Technical Specification for Monochrome and Colour Closed Circuit Television Systems (ESG14) issued by Electrical and Mechanical Services Department.
- (xiii) General Technical Specification for Uninterruptible Power Supply (UPS) (ESG15) issued by Electrical and Mechanical Services Department.
- (xiv) General Specification for Plumbing and Drainage Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xv) Code of Practice for the Electricity (Wiring) Regulations issued by Electrical and Mechanical Services Department.
- (xvi) Code of Practice for Energy Efficiency of Building Services Installation issued by Electrical and Mechanical Services Department.
- (xvii) Code of Practice on Working near Electricity Supply Lines issued by Electrical and Mechanical Services Department.

**Associated documents (Cont'd)****GR.01 (Cont'd)**

- (f) (xviii) Code of Practice on Avoiding Danger from Gas Pipes issued by Electrical and Mechanical Services Department.
- (xix) Code of Practice for Hong Kong LPG Industry issued by Electrical and Mechanical Services Department.
- (xx) Code of Practice GU01, GU03 - 06, GU09, GU12, GU13, GU15 and GU21 issued by Electrical and Mechanical Services Department.
- (xxi) Code of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment issued by Fire Services Department.
- (xxii) Code of Practice for Lift Works and Escalator Works issued by Electrical and Mechanical Services Department.
- (xxiii) Testing and Commissioning Procedure for Electrical Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxiv) Testing and Commissioning Procedure for Air-conditioning, Refrigeration, Ventilation and Central Monitoring and Control System Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxv) Testing and Commissioning Procedure for Fire Services Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxvi) Testing and Commissioning Procedure for Lift, Escalator and Passenger Conveyor Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxvii) Testing and Commissioning Procedure for Liquefied Petroleum Gas Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxviii) Testing and Commissioning Procedure for Catering Equipment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxix) Testing and Commissioning Procedure for Swimming Pool Water Treatment Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxx) Testing and Commissioning Procedure for Broadcast Reception Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxxi) Testing and Commissioning Procedure for Burglar Alarm and Security Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.

**Associated documents (Cont'd)****GR.01 (Cont'd)**

- (f) (xxxii) Testing and Commissioning Procedure for Emergency Generator Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxxiii) Testing and Commissioning Procedure for Steam Boiler and Calorifier Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (xxxiv) Testing and Commissioning Procedure for Plumbing and Drainage Installation in Government Buildings of the Hong Kong Special Administrative Region issued by Architectural Services Department.
- (g) Particular Specification(s) and all other specification requirements issued and referred to in the Term Contract.
- (h) Any Amendments and Corrigenda to the Schedule of Rates issued and referred to in the Term Contract.

All items of works contained in this Schedule and in the Amendments and Corrigenda to the Schedule of Rates issued and referred to in the Term Contract, shall be executed in accordance with the conditions and stipulations as provided in the above mentioned documents, and in compliance with all requirements on workmanship, materials, plant, measurements and any other requirements as stipulated in the above documents.

Due allowance is deemed to have been made in the Contract Percentages for complying with the requirements in the Specification and/or Employer's Requirements as adopted in the Term Contract.

**Definitions generally****GR.02**

Where any of the definitions given in these General Regulations are at variance with those given in the Special Conditions preceding the Sections throughout this Schedule, the definitions given in the Sections in this Schedule shall take priority.

- “approved” shall mean approved in writing by the Maintenance Surveyor but this approval shall not relieve the Contractor from responsibilities imposed by the Term Contract.
- “described” shall mean described in the Specification and all current amendments (if any) issued thereto.
- “ditto” shall mean the whole of the work described in detail in the preceding item, except as qualified in the description in which it occurs.
- “origin” shall mean the place or country where the material (which shall be natural material only) is originally produced.
- “proprietary” shall mean a proprietary material or product, protected by a patent or registered trade mark ® or a trade mark symbol <sup>TM</sup> or similar recognizable trade mark or copyright, that is manufactured and marketed by the owner who has exclusive rights of use, or other material or product that the Contractor could provide authentication documents on its make and origin as required by the Maintenance Surveyor and to his satisfaction.



**Definitions  
generally  
(Cont'd)**

**GR.02  
(Cont'd)**

|                 |   |
|-----------------|---|
| “Schedule”      | shall mean this Schedule of Rates.  |
| “specified”     | shall mean specified in the Specification and all current amendments (if any) issued thereto.   |
| “submission”    | shall mean the submission of all documents like design, calculation, working drawings, shop drawings, records, etc. as required in the Special Conditions to each Section of the Schedule including obtaining the approval of the Maintenance Surveyor on the submission. |
| "Term Contract" | shall mean the Contract referring this Schedule as forming part of the Contract.  |

**Abbreviations**

|                   |   |
|-------------------|---|
| “exc.”            | shall mean exceeding.   |
| “n.e.”            | shall mean not exceeding.   |
| “c/w”             | shall mean complete with.   |
| “xx - yy”         | shall mean a range of dimensions exceeding the first dimension as stated but not exceeding the second, for example: "1.50 - 3.00" shall mean exceeding 1.50 and not exceeding 3.00. |
| “bore”            | shall mean nominal internal diameter.   |
| “dia”             | shall mean nominal diameter.  |
| “mm”              | shall mean millimetre.  |
| “m”               | shall mean linear metre.  |
| “m <sup>2</sup> ” | shall mean square metre.  |
| “m <sup>3</sup> ” | shall mean cubic metre.   |
| “kg”              | shall mean kilogram.  |
| “AL”              | shall mean Accredited Laboratory which is an independent body accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS).   |
| "B.S."            | shall mean British Standard.  |
| "DIN"             | shall mean German Institute for Standardization.  |
| "DBH"             | shall mean diameter of trunk of tree or plant measured at a height of 1.3 m above ground level.   |
| "EN"              | shall mean European Standard.   |
| "FRR"             | shall mean fire resistance rating.  |
| “G.S.”            | shall mean the General Specification and other documents referred to in General Regulations Clause GR.01(e) and (f) where appropriate.  |

|                                     |                           |  |
|-------------------------------------|---------------------------|--|
| <b>Abbreviations<br/>(Cont'd)</b>   | <b>GR.02<br/>(Cont'd)</b> | <p>"MDF" shall mean medium density fibreboard.</p> <p>"PWL" shall mean Public Works Laboratories.</p> <p>"RSE" shall mean Registered Structural Engineer.</p> <p>"TCP" shall mean Technically Competent Person.</p>  |
| <b>Methods of<br/>measurement</b>   | <b>GR.03</b>              | <p>All works including "Supply only of materials" measured and paid for under this Schedule shall be measured in accordance with the conditions and rules detailed herein irrespective of any local or trade customs.</p> <p>All works shall be measured net as completed or fixed in its place. Due consideration has been made in the Schedule rates for works executed in small quantities, narrow widths, short lengths, isolated patches, repairs, any height or locations above or below ground, difficult positions or confined spaces or any other exceptional circumstances; and no additional payment for such circumstances shall be made except where specifically provided for in this Schedule.</p> <p>All works of "Supply only of materials" shall be the net quantities specified in a Works Order. No allowance or payment shall be made to the Contractor for small quantities, short lengths, breakage or damage, delivery to store or any designated location as directed by the Maintenance Surveyor or any other circumstance except where specifically provided for in this Schedule.</p> <p>Any disadvantage which may be entailed by items being performed under exceptional circumstances must be regarded as being offset by other items which may be proven exceptionally advantageous.</p> |
| <b>Overtime</b>                     | <b>GR.04</b>              | <p>All works shall be deemed to be executed during any working hour in a 24 hour-day (from 00:00 hour to 24:00 hour) including Sundays and General Holidays. No additional payment shall be made for any overtime including :-</p> <p>(a) Overtime which is ordered by the Maintenance Surveyor in accordance with the Conditions of Contract to expedite slow progress of the work caused by default, negligence or omission by the Contractor.</p> <p>(b) Watchmen or security guard at any time.</p>  |
| <b>Deductions for<br/>voids</b>     | <b>GR.05</b>              | <p>Where a minimum area is defined for the deduction of voids, such minimum shall refer only to openings or wants detached from the boundaries of the space measured. Openings and wants caused by projections from the boundary of the space measured shall always be the subject of deduction, irrespective of size.</p>   |
| <b>Curved or<br/>circular works</b> | <b>GR.06</b>              | <p>Except where specified items are included in this Schedule for curved or circular work, all work shall be measured and priced as if straight and flat. Where specific items for curved work or circular work are included, the maximum radius stated in such description shall be the limit for which curved or circular work shall be paid for and any work curved to a radius greater than this limit shall be measured and priced as if straight and flat.</p>   |

**Works executed by Specialist Sub-contractors, sub-contractors, etc.**

**GR.07**

Where appropriate throughout this Schedule and where specified in the Term Contract, the following categories of works shall be executed by :-

- (a) Specialist Sub-contractors included in the list of Approved Suppliers of Materials and Specialist Contractors for Public Works maintained by Development Bureau namely :-
- (i) Air-conditioning Installation
  - (ii) Audio Electronics Installation
  - (iii) Broadcast Reception Installation
  - (iv) Burglar Alarm and Security Installation
  - (v) Catering Equipment Installation
  - (vi) Design, Manufacture and Installation of Glass (or Fibre) Reinforced Plastic Units
  - (vii) Diesel Generator Installation
  - (viii) Electrical Installation
  - (ix) Electrical and Mechanical Installation for Sewage Treatment and Screening Plant
  - (x) Electronic Timing and Display Installation
  - (xi) Fabrication of Steel Pipe Specials
  - (xii) Fabrication of Unfired Pressure Vessels
  - (xiii) Fire Service Installation
  - (xiv) Fountain Installation
  - (xv) Landscaping
  - (xvi) Landslip Preventive/Remedial Works to Slopes/Retaining Walls
  - (xvii) Lift, Escalator and Passenger Conveyor Installation
  - (xviii) Liquefied Petroleum Gas Installation
  - (xix) Low Voltage Cubicle Switchboard Installation
  - (xx) Mechanical Handling and Lifting Installation
  - (xxi) Mechanical Plant and Equipment Installation
  - (xxii) Plumbing Installation
  - (xxiii) Radio Electronics Installation

**Works executed  
by Specialist  
Sub-contractors,  
sub-contractors,  
etc.  
(Cont'd)**

**GR.07  
(Cont'd)**

- (a)
  - (xxiv) Repair and Restoration of Historic Buildings
  - (xxv) Repair of Motors, Transformers and Switchgear
  - (xxvi) Road Marking
  - (xxvii) Soil and Rock Testing
  - (xxviii) Space Frame Systems
  - (xxix) Steam and Compressed Air Installation
  - (xxx) Structural Steelwork
  - (xxxi) Supply and Installation of Pumpsets and Associated Pipework
  - (xxxii) Supply and Installation of Water Treatment Plant
  - (xxxiii) Supply of Bituminous Pavement Materials and Construction of Special Bituminous Surfacing
  - (xxxiv) Swimming Pool Water Treatment Installation
  - (xxxv) Turn-key Interior Design and Fitting-out Works
  - (xxxvi) Uninterruptible Power Supply Installation
  - (xxxvii) Video Electronics Installation
- (b) Maintenance Surveyor's approved sub-contractors or applicators namely : -
  - (i) Medical Gas
  - (ii) Town Gas
  - (iii) Curtain Walling
  - (iv) Fuel Supply
  - (v) Chimney

The above categories of specialist works are not exhaustive. Other categories of works, if specified in the Term Contract, shall also be executed by Specialist Sub-contractors or other approved sub-contractors or applicators.

Due allowance is deemed to have been made in the Contract Percentages for complying with these requirements.

**Latest standards and specification****GR.08**

Where materials, workmanship and works are specified in this Schedule to be in conformity with certain British Standards or other International Standards, or to be in accordance with certain G.S. Items, Code of Practice and the like, they shall deem to be referred to the latest relevant and equivalent standards and amendments as specified in the Specification; or where no specific dates are stated, they shall deem to be referred to the latest relevant and equivalent standards and specification current and published on or after the date 10 days prior to the tender closing date for the Term Contract unless otherwise specified. If conflict occurs between various standards, then the more onerous is to apply.

Due allowance is deemed to have been made in the Contract Percentages for complying with these requirements.

**Imperial equivalents where required or necessary****GR.09**

Whenever practicable, the Contractor shall supply materials in metric sizes and execute the works strictly in accordance with the metric dimensions specified. Imperial equivalents may be accepted only when circumstances prohibit compliance with this sub-clause (for example, statutory obligations) or where the Maintenance Surveyor considers it impracticable, undesirable or impossible to use metric sizes or dimensions or when suitable materials are not available in metric sizes.

The provision of this sub-clause shall not apply to materials which are specified in this Schedule by their actual manufactured sizes or their metric equivalents (for example, roof tiles, plywood, building boards, p.v.c. pipes, mosaic tiles) or classified in accordance with the relevant British Standards (for example, copper pipes) or other International Standards.

**Schedule rates****GR.10**

The rates throughout this Schedule shall include for : -

- (a) All materials supplied, and all works and services executed complying strictly with the Specification as detailed in General Regulations Clause GR.01 and the provision or execution of all samples of materials or finished works in patterns where required.
- (b) Provision of all materials and cutting and wastage on the same, except where otherwise stated, including collection, loading, conveyance, delivery, unloading, stacking, storage of the same, multi-handling between positions as directed on Site and provision of storage accommodation, handling, hoisting, lowering, distributing, etc. to specified location.
- (c) Provision of all labour including contributions to Mandatory Provident Fund, paid leave, travelling expenses, lodging allowance or living accommodation and any other allowances as required.
- (d) Provision of all tools, plant, temporary water, power and lighting, watching and work sheds.
- (e) All expenses for delivery, distribution or transportation of articles, materials, labour, personnel, tools, plant, work sheds etc. by all means including land, sea or air except otherwise specifically provided for in the Special Conditions of each Section in this Schedule or when specifically required and ordered by the Maintenance Surveyor.
- (f) Executing work in any position, location and height unless otherwise stated.

**Schedule rates  
(Cont'd)**

**GR.10  
(Cont'd)**

- (g) Providing record of photograph, location plan and schedule of existing trees, if any, within and in close vicinity (within 2.00 m) of the site boundary and works areas including protective and preservative works/measures such as tree surgery works, temporary fencing, etc. and the like, allowance for method of operation and vehicular access for tree preservation throughout the period of the Works and removing all temporary protective and preservative works/measures on completion and making good all works disturbed.
- (h) Setting up monitor points for controlling noise, vibration, settlement and lateral movement imposed on adjoining properties including provision of equipment, technical and supervisory personnel carrying out daily monitoring and submission of records as directed by the Maintenance Surveyor.
- (i) Providing and maintaining temporary access and road as G.S. Item 1.25 and making good to match existing.
- (j) Providing and maintaining temporary drainage system as G.S. Item 1.26 and making good to match existing.
- (k) Provision of drawings including shop drawings and/or as built drawings, and operation and maintenance manuals, and carrying out tests on samples or finished works including the submission of test reports and test certificates to the satisfaction of the Maintenance Surveyor; unless specifically provided otherwise in the Schedule.
- (l) Allowance for the works to be executed by Specialist Sub-contractors, Maintenance Surveyor's approved sub-contractors and applicators where required in the Specification, or as stated in the Special Conditions of each Section of the Schedule.
- (m) Carrying out tests by the Public Works Laboratories (PWL) or by an independent body accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS) (hereinafter referred to as the "Accredited Laboratory") (AL) including provision and submission of sampling and analysis methodology to the Maintenance Surveyor for approval prior to conducting any tests. The testing laboratories to be engaged by the Contractor shall be approved by the Maintenance Surveyor. The testing laboratories shall submit test results directly from the laboratory to the Maintenance Surveyor in sealed envelopes.
- (n) Conducting compliance tests on structural works by the PWL/AL. The testing laboratories to be engaged by the Contractor shall be approved by the Maintenance Surveyor. The testing laboratories shall submit test results directly from the laboratory to the Maintenance Surveyor in sealed envelopes.
- (o) Certification including the employment of independent certification bodies wherever required or necessary.
- (p) Provision, erection, maintenance, alteration, dismantling and clearing away of the following temporary works and protective measures that are required for the execution and completion of the Works unless specifically provided otherwise in the Schedule : -
  - (i) All bamboo, metal or proprietary scaffolding, staging, ladders, trestles, cradles, gondolas, platforms and similar items complete with all netting, coverings, screens, dust sheets, barricades, catch-fans, protective canopies, etc.;

**Schedule rates  
(Cont'd)**

**GR.10  
(Cont'd)**

- (p) (ii) All types of hoardings and walkways complete with gateways, adequate lighting, associated power supply and electrical work as required by the Maintenance Surveyor including the types of hoardings and walkways (including internal metal/aluminium hoardings) referred to in Section 10 - Steel and Metal Work of this Schedule and other proprietary hoardings and walkways systems, and the submission of detailed drawings together with supporting calculations certified by TCP or RSE for approval and provision of operation manuals of other proprietary hoardings and walkways systems not referred to in Section 10 - Steel and Metal Work; and
- (iii) Similar temporary measures including but not limited to protective shield coverings, fences, barriers and the like and/or other protective measures specifically covered by the Special Conditions of each Section in this Schedule, and the erection, alteration and dismantling of such temporary measures on a daily basis where required by the Maintenance Surveyor for all necessary protection to new works and the public from harm, dust or nuisance.

The drawings referred to in Section 10 - Steel and Metal Work of this Schedule and in sub-clause (ii) above are not exhaustive and would be subject to change. The Contractor is deemed to allow for complying with the latest requirements.

- (q) Clearing away debris, surplus materials or other materials arising from the works and leaving the works and areas affected by the works clean and tidy on completion to the satisfaction of the Maintenance Surveyor.
- (r) Provision of mechanical dump truck covers in accordance with Particular Specification for Mechanical Dump Truck Covers.
- (s) All superintendence, establishment charges, overhead, expenses and profit.
- (t) Any cost and/or expenses incurred for carrying out the works at all times including working outside normal working hours as provided in General Regulations Clause GR.04.
- (u) Any costs and/or expenses in supplying materials or products to match existing works, finishes or systems when instructed by the Maintenance Surveyor, except when such materials or products are not specifically mentioned in this Schedule.
- (v) Any other expenses incurred in conforming with the Term Contract.
- (w) Reinstatement and making good surfaces disturbed.
- (x) Imperial equivalents wherever required or necessary.

Where the Contractor considers any of the rate contained in the Schedule is insufficient or inadequate, the Contractor is deemed to have made all necessary allowances in the Contract Percentages adjustment and/or in any other priced items in the Term Contract for executing the works as contained in the Schedule and in compliance with all requirements as stipulated in the Term Contract.

**Schedule rates and application of Contract Percentages**

**GR.11**

The Schedule rates in this Schedule are derived from the basic rates of provisions of labour, materials, plant and all other provisions as stated in this Schedule including adjustments made to the basic rates giving due consideration of factors including market trends, trade practices and the management efficiency and bidding strategies of contractors as reflected in the past term contracts procurement.

The Schedule rates also take into account conditions under which term contracts works are executed, which may include but not be limited to works executed in small quantities or large quantities, narrow widths, short lengths, isolated patches, repairs, any height or locations above or below ground, difficult positions or confined spaces or any other exceptional circumstances of the works.

The Schedule rates shall apply to the valuation of works instructed by the Maintenance Surveyor, and in all cases, the Schedule rates to be paid for the works shall be determined and applied before applying any relevant Contract Percentages.

The Contract Percentages including any percentage addition as priced and included in the Contract shall include the Contractor's profits and overheads, attendance, all costs and expenses incurred in connection with the Works and are necessary in fulfilling the requirements of the Term Contract where they are not separately itemized or stated in this Schedule, including the works or services assessed under proportional rate items, star rate items and re-applicable rate items.

**Rates for items not specifically mentioned in this Schedule**

**GR.12**

Rates for items not specifically mentioned in this Schedule shall be valued as follows : -

- (a) Proportional rate      When an article, a material, workmanship or service is of similar form, character or quality to that detailed in the Schedule or executed under similar conditions and circumstances as described therein, then at a rate equal to a Schedule rate but with a fair adjustment for the difference in form, character and quality or in conditions and circumstances, and such rate to be agreed upon between the Maintenance Surveyor and the Contractor.
- Such proportional rate shall be subject to relevant Contract Percentages adjustment.
- (b) Star rate                When an article, a material, workmanship or service is not of similar form, character or quality to that detailed in the Schedule or not executed under similar conditions and circumstances as described therein, or when work or material of any kind which is not detailed in the Schedule, then at a reasonable rate to be agreed upon between the Maintenance Surveyor and the Contractor.
- Such star rate shall not be subject to relevant Contract Percentages adjustment unless otherwise specifically stated.
- (c) Re-applicable rate      A rate fixed in accordance with the Term Contract requirements and to be re-applicable in any other Works Orders as approved by the Maintenance Surveyor for the whole duration of the Term Contract and not subject to adjustment of fluctuation and Contract Percentages adjustment.



**Materials supplied by Government or other designated suppliers**

**GR.13**

When materials are supplied to the Contractor by Government or other designated suppliers, no allowance shall be made to the Contractor other than the payment for "Fix only" ("Lay only" or "Set only", etc.) as detailed under the appropriate items of this Schedule.

**"Supply only"**

**GR.14**

The term "Supply only" used throughout this Schedule shall mean the provision complete by the Contractor of an article, a fitting or a material. The rates for such items shall include for, where applicable, obtaining and taking delivery of the articles, fittings or materials, transporting by land, sea, or air to sites or Government stores or other designated locations as directed by the Maintenance Surveyor, and all necessary off-loading and moving into sites, Government stores or other designated locations.

The rates listed in the "SUPPLY ONLY OF MATERIALS" in each Section of this Schedule shall include all the foregoing charges and allowance for replacement of materials damaged during delivery to sites, off-loading and moving into sites, Government stores or other designated locations as directed by the Maintenance Surveyor.

**"Take down ("Take up" or "Take out", etc.) and clear away"**

**GR.15**

The term "Take down ("Take up" or "Take out", etc.) and clear away" used throughout this Schedule shall mean execution complete by the Contractor of the work of taking down, taking up or taking out of an existing article, fitting or material either in whole or in part and removing from Site and disposing of the same. The rates for such items shall include for all or any of the following :-

- (a) Works executed by skilled labourers of the required trades, unless specifically provided otherwise in the Schedule.
- (b) Payment of all fees and charges.
- (c) Taking down, taking up or taking out of the articles, fittings or materials either in whole or in part together with any associated plugs, holdfasts, lugs, brackets and other fixings and all necessary cutting out and disposal.
- (d) Making good any works disturbed and any damage to surrounding surfaces and filling up all mortices, holes, etc. or alternatively leaving the same open and clean to receive readily new articles, fittings or materials.
- (e) Reinstatement and making good surfaces disturbed.
- (f) Preparing edges, ends or surfaces of remaining materials to receive junctions with new.
- (g) Taking up or removing covers, access doors, etc. and the like for the execution of the works and re-fixing the same on completion.

The articles, fittings, or materials taken down shall become property of the Contractor. Unless otherwise specified, due allowance for credits has been considered in the Schedule rates where applicable.

**“Take down (“Take up” or “Take out”, etc.) and set aside for re-use”**

**GR.16**

The term “Take down (“Take up” or “Take out”, etc.) and set aside for re-use” used throughout this Schedule shall mean execution complete by the Contractor of the work of taking down, taking up or taking out of an existing article, fitting or material either in whole or in part and setting the same aside on site or transporting to Government stores or other Government sites for subsequent re-use. The rates for such items shall include for all or any of the following : -

- (a) Works executed by skilled labourers of the required trades, unless specifically provided otherwise in the Schedule.
- (b) Payment of all fees and charges.
- (c) Carefully taking down, taking up or taking out of the articles, fittings or materials together with associated plugs, holdfasts, lugs, brackets and other fixings and all necessary cutting out and disposal.
- (d) Thoroughly cleaning, oiling and adjusting the articles, fittings or materials ready for re-use, dismantling, re-assembling again as necessary, moving and stacking or putting into stores on sites or alternatively loading, transporting, unloading and moving to Government stores or other Government sites.
- (e) Making good any works disturbed and any damage to surrounding surfaces and filling up all mortices, holes, etc. or alternatively leaving the same open and clean to receive readily re-used or new articles, fittings or materials.
- (f) Reinstatement and making good surfaces disturbed.
- (g) Preparing edges, ends or surfaces of remaining materials to receive junctions with re-used or new.
- (h) Repairing or replacing at Contractor's own cost any damage caused to the articles, fittings or materials during taking down, taking up, taking out, etc. and transit.
- (i) Taking up or removing covers, access doors, etc. and the like for the execution of the works and re-fixing the same on completion.

**“Fix only” (“Lay only” or “Set only”, etc.)**

**GR.17**

The term “Fix only” (“Lay only” or “Set only”, etc.) used throughout this Schedule shall mean execution complete by the Contractor of the work of fixing, laying, setting, jointing, re-fixing, re-laying, re-setting and re-jointing an article, a fitting or a material made available free of charge to the Contractor by Government or it has been previously taken down. The prior taking down of the existing articles, fittings or materials shall be measured separately and paid for at the appropriate rates under applicable Sections of this Schedule. The rates for such items shall include for any or all of the following : -

- (a) Works executed by skilled labourers of the required trades, unless specifically provided otherwise in the Schedule.
- (b) Payment of all fees and charges.
- (c) Taking delivery of the articles, fittings or materials at Government stores or other designated suppliers, loading, transporting to sites, unloading, checking and examining the same and storing on sites and returning any crates and other packings to Government stores, if required.

|   |                            |   |
|---|----------------------------|---|
| <b>“Fix only”<br/> (“Lay only”<br/> or “Set only”,<br/> etc.)<br/> (Cont'd)</b> | <b>GR.17<br/> (Cont'd)</b> | <p>(d) Taking the articles, fittings or materials from stores on sites, sorting, cutting and fitting, fabricating, assembling, moving, hoisting, distributing at locations, fixing, laying, setting, jointing, re-fixing, re-laying, re-setting and re-jointing in new or existing work, opening or position.</p> <p>(e) Providing all fixing and jointing materials such as nails, bolts, nuts, washers, screws, gaskets, mastic, adhesive, mortar and the like or other fixing and jointing materials made available from taking down.</p> <p>(f) Executing all plugging and screwing, jointing, cutting all mortices and grouting the same, and executing all cutting, fitting, easing or adapting necessary to the articles, fittings or materials to the positions in which the same are to be fixed, and oiling and leaving in good working order.</p> <p>(g) Making good any damage caused to the articles, fittings or materials and surrounding surfaces and making good new or existing finishes up to the same.</p> <p>(h) Reinstatement and making good surfaces disturbed.</p> <p>When the articles, fittings or materials despite having been taken down from another positions and set aside for re-use or having been delivered by Government or other designated suppliers or their agents are made available on site, no deduction shall be made from the rates of “Fix only” (“Lay only” or “Set only”, etc.) for transporting the said articles, fittings or materials to Site.</p> |
| <b>Built up fittings or<br/> composite units</b>                                | <b>GR.18</b>               | The rates for “Take down and clear away”, “Take down and set aside for re-use” and “Fix only” are not intended to cover built up fittings or composite units, i.e. fittings or units that are fabricated and can be moved in their entirety or broken down into fabricated components. These items are to be measured as the appropriate items in the respective Sections unless otherwise provided in this Schedule.   |
| <b>Nominated<br/> Sub-contractors'<br/> accounts</b>                            | <b>GR.19</b>               | When works are carried out by Nominated Sub-contractors and facilities for the execution of such works are afforded to the Nominated Sub-contractors by the Contractor and accounts for such works are paid by the Contractor in accordance with the Conditions of Contract, the percentage addition allowed to the Contractor on the net cost of such works shall be as that contained in the Form of Tender for “Profit and Attendance on Nominated Sub-contractors' Works”.  |
| <b>“Making good”</b>  | <b>GR.20</b>               | The term “Making good” shall be understood as including all labour and materials necessary to bring the disturbed area to the same appearance, colour, texture, etc., in the same materials as the surrounding work and shall include for painting, colouring and/or varnishing any new work to match the surrounding existing work to the entire satisfaction of the Maintenance Surveyor.   |
| <b>Daywork</b>  | <b>GR.21</b>               | When daywork is ordered by the Maintenance Surveyor, measurement of daywork shall be made according to the Special Conditions set out in Section 17 - Labour and Section 18 - Temporary Plant and Facilities of this Schedule.  |

**“Utility Connection  
And Pavement  
Works”****GR.22**

The term “Utility Connection And Pavement Works” shall mean the works of drainage connection, water supply connection, construction of run-in and reinstatement of footways which shall be executed complete by contractors selected and employed by the Contractor from the “List of Approved Contractor for Public Works in Group A, B or C for Road & Drainage Works” for the drainage connection and construction of run-in and reinstatement of footways and from the “List of Approved Contractors for Public Works in Group A, B or C for Waterworks” for the water supply connection work.

When Utility Connection and Pavement Works are required to be executed under the Term Contract and are ordered specifically by the Maintenance Surveyor for such purpose, the Contractor shall be reimbursed a lump sum fee payment as included in Item 03063 in Section 03 – Excavation of this Schedule for compliance with the requirements stated herein and as provided in the Term Contract for the Utility Connection and Pavement Works. This lump sum fee payment is an allowance made for all costs and expenses other than the valued works executed in connection with the Utility Connection and Pavement Works under the relevant Sections in this Schedule, and shall include for the following : -

- (a) Complying with the requirements and procedures in connection with the Utility Connection And Pavement Works specified in the Particular Specification referred to in the Term Contract and submitting assessments and reports as required.
- (b) Liaising with the relevant authorities and utility companies, preparing and submitting relevant drawings, programmes and documents and completing all the forms in connection with the Utility Connection And Pavement Works.
- (c) Submitting all the detailed particulars in connection with the granting of an Excavation Permit [Note : Excavation Permit means any excavation permit issued by the Government in respect of the Utility Connection And Pavement Works under Section 8 of the Land (Miscellaneous Provision) Ordinance] as required by the Maintenance Surveyor.
- (d) Obtaining approvals and permits from relevant utility companies or Government departments.
- (e) Complying with the conditions of any Excavation Permit applicable to the Utility Connection And Pavement Works.
- (f) Providing and maintaining temporary road or access where required for pedestrian and vehicular traffic diversions and subsequent clearing away after completion of the Works.
- (g) Providing and maintaining traffic control as G.S. Item 1.18.
- (h) Locating and protecting existing services as G.S. Item 1.22.
- (i) Carrying out all necessary site inspections (including handing over inspections) jointly with the relevant authorities and utility companies.
- (j) Provision of identification tapes along the water connection mains.
- (k) Cleaning and sterilization of fresh water mains for making connections.
- (l) Provision of as built drawings and test reports as specified.
- (m) Protection of curbs, masking and unmasking of drainage channels, manhole covers, gully gratings, expansion joints, road studs and road marking.

**“Utility Connection  
And Pavement  
Works”  
(Cont'd)**

**GR.22  
(Cont'd)**

- (n) Provision, maintenance and removal of all measures to maintain traffic flow including labour and temporary traffic diversion lighting and signs and paying all charges incurred.
- (o) Provision, maintenance and removal of temporary road, walkway, covers to trenches and the like.
- (p) Making good all surfaces, features, etc. and the like disturbed by all temporary road, access, traffic control, pedestrian footway, etc. and the like to match existing and including all requirements as stipulated in the Term Contract for carrying out the Utility Connection and Pavement Works.

This lump sum fee payment shall only be paid once for each location specified in the Works Order. Works executed in connection with the Utility Connection and Pavement Works shall be measured separately in accordance with the General Regulations and the Special Conditions of the relevant Sections in this Schedule.

**Submission of  
measurement  
and accounts**

**GR.23**

All quantities shall be measured and rounded to the nearest two decimals of a unit.

**Materials/  
Products**

**GR.24**

All materials / products shall generally be based on the corresponding properties and/or performance standards as stipulated in the Specification (as defined in General Regulations Clause GR.01(d) herein) and/or as set out in this Schedule.

Where materials, products or works in this Schedule are stipulated as "proprietary", "approved", of "specific quality" or by their origins of which properties and/or performance standards are specified without their brand names, authentication documents on such materials, products or works including certificates of origins, technical literature and catalogues, test certificates and/or compliance test reports, manufacturers' guarantees or warranties, samples and mock-ups of these materials, products or works together with other documents required by the Maintenance Surveyor should be submitted or provided for the Maintenance Surveyor's written approval before purchase, delivery and execution. If any of these materials, products or works delivered or executed without the Maintenance Surveyor's prior written approval, or are not carried out to the Maintenance Surveyor's satisfaction, they should be removed or reinstated by the Contractor at his own expenses. The Maintenance Surveyor may also adjust this payment to the Contractor in accordance with General Regulations Clause GR.26.

For all materials, products and works within the definition of "proprietary" in General Regulations Clause GR.02, the Contractor, if required by the Maintenance Surveyor, shall provide a certificate of patent or registered trade mark or copy right; or provide authentication documents like the make or origin of the materials or products, test reports, test certificates, operation and maintenance manuals, warranties and manufacturer's guarantees and any other document that could provide the authentication to the same effect; and provide local project reference to demonstrate that the materials, products and works have proven track record of similar application, all to the satisfaction of the Maintenance Surveyor. The Contractor shall further be required to have specific proprietary materials / products / works executed by approved sub-contractors / applicators and submit technical literature, method statements, etc. where required by the Maintenance Surveyor or as stated in the Term Contract.

Due allowance is deemed to have been made in the Contract Percentages for complying with all of the above requirements.

**Materials/Products specified as "specific quality"**

**GR.25**

Certain materials / products in this Schedule are stipulated as of "specific quality". These shall generally be materials / products of significance, such as those that are safety critical, prestigious in nature, or such are required to create a specific visual impact to the completed works, or are critical to the completed works from their functionality, operation and maintenance perspectives that the quality of such materials / products exceeds the requirement generally stated in the General Specification and in the Term Contract.

The Contractor shall provide authentication of documentary evidence and proof including those specified in this Clause and General Regulations Clause GR.24 herein to identify and justify the properties and/or performance standards of "specific quality" of the subject materials / products are generally of higher quality than that specified in the General Specification and the requirements as stated in the Specification of the Term Contract, for the Maintenance Surveyor's approval. Such proof may include carrying out appropriate quality tests to verify the quality of the subject materials / products is of quality higher than that specified in the General Specification, or obtaining certification from an independent testing authority / expert (to be approved by the Maintenance Surveyor) confirming of such specific quality.

Due allowance is deemed to have been made in the Contract Percentages for complying with all of the above requirements.

**Payment for materials/products**

**GR.26**

Throughout this Schedule and including items valued under General Regulations Clause GR.12, the payment of materials / products shall generally be assessed according to the corresponding properties or performance standards as set out in this Schedule (with reference to the Specification) regardless of whether the materials / products are specified with brand names or referred as "proprietary", "approved", of "specific quality" or by their origins, or not.

The onus of proof is vested with the Contractor to identify the origins, properties and/or performance standards of materials / products used in the works corresponding to those set out in this Schedule (with reference to the Specification) and / or approved or accepted by the Maintenance Surveyor, and to provide the necessary documentary evidence and authentications including but not limited to certificates of origins, certificates of patent, registered trade marks or copy rights, local job references to demonstrate that the materials, products and works have proven track records of similar applications, technical literature and catalogues, test certificates and / or compliance test reports, manufacturers' guarantees or warranties, sub-contractors' / applicators' warranties and the like of the materials / products specified or approved all to the satisfaction of the Maintenance Surveyor, and for use by the Maintenance Surveyor for payment of the corresponding materials / products as set out in this Schedule.

In the absence of any documentary evidence and authentications that are required to demonstrate the conformity or compliance of the materials / products / works with the respective "proprietary", "approved", of "specific quality", origins or brand names, the assessment of such materials / products / works may be based on the basic costs of the materials / products / works that are available in the Schedule as ascertained by the Maintenance Surveyor, or otherwise the Maintenance Surveyor shall withhold or deduct the value of such materials / products / works that are not being carried out to his satisfaction from the final value of the works.

**Adjustment  
to unit rates  
exceeding  
\$99,999.99**

**GR.27**

Whenever the unit rate for an item exceeds \$99,999.99, it has been divided by a factor (“adjustment factor”) to reduce the figure to fall within \$99,999.99 (“adjusted rate”) for inclusion in this Schedule. Such unit rate before adjustment is described in the item description as the actual rate. When the adjusted rate is to be used for all purposes under the Term Contract, such adjusted rate shall be multiplied by the adjustment factor to revert it back to the actual rate before making any adjustment of the relevant Contract Percentages.

**Application of  
Schedule rates**

**GR.28**

This Schedule comprises Volume 1 for Builder's Works and Volume 2 for Building Services Works (B.S. Works). The compilation of unit rates in these two volumes of Schedule of Rates are made with due consideration on the specific natures, purposes and requirements which would vary for the execution of the builder's works and the building services works.

Where similar Schedule rates are found in different Sections, whether within the same volume or different volume of the Schedule, such valuation shall in so far as reasonable be based on Schedule rates of the same Section under which the works are executed.

**Section 01**

**CONTRACT FACILITIES AND SPECIAL ATTENDANCES**



## SECTION 01

### CONTRACT FACILITIES AND SPECIAL ATTENDANCES

#### SPECIAL CONDITIONS

#### Contract Requirements

- SC01.01** This Section shall be read and used in conjunction with the Specification and the Employer's Requirements adopted in the Contract.
- Contract Facilities stated in this Section shall refer to land transport facilities, contract equipment and contract staff services provided by the Contractor for the exclusive use by the Maintenance Surveyor, his representatives, the Employer or his staff all in accordance with the requirements of the Contract for the Contract Period or such other period as instructed by the Maintenance Surveyor.
- Special Attendances stated in this Section shall mean the Contractor's provision of means of access for the works in Works Orders of incidental minor maintenance and repair nature at a height of over 10 metre where no other proper means of access is available. Payments of Special Attendances shall satisfy the conditions as stated in Special Conditions Clause SC01.11 below.
- The Contractor shall arrange for the provisions of Contract Facilities and Special Attendances to be readily available for use at the time or any time, for the duration and in the manner as specified in the Contract, or otherwise as may be instructed by the Maintenance Surveyor.

#### Particular Preamble

- SC01.02** The rates appearing in this Section are allowances for providing the Contract Facilities as required in the Contract and Special Attendances. The Contractor is deemed to have allowed in his Contract Percentage(s) for this and other Sections in the Schedule of Rates of any insufficiency of rates and all other expenses incurred under the Contract for : -
- (a) Meeting all contractual and statutory obligations in connection with the provision of Contract Facilities and Special Attendances, and any other related obligations, liabilities, risks and profit borne by the Contractor;
  - (b) Any of the Contract Facilities requirement which is impracticable or not available (e.g. when the model satisfying the contract requirement is no longer available or out of stock), the Contractor shall provide similar facilities and services satisfying the requirement of the Contract and accepted by the Maintenance Surveyor;
  - (c) Any item or part thereof of any Contract Facilities that is required and specified in the Contract but the methods of measurement provided hereunder do not measure or have excluded such item or part thereof in this Section;
  - (d) The payment for Special Attendances shall in no way vitiate the provisions as stipulated in General Regulations for all works and services carried out under the Contract;
  - (e) Any further period of Contract Facilities provided beyond the period of measurement as provided in the Special Conditions contained in this Section and without any confirmation from the Maintenance Surveyor; and
  - (f) All other allowance as stipulated in the Contract in connection with the provision of the Contract Facilities and Special Attendances.

**SPECIAL CONDITIONS****Rates generally****SC01.03**

The rates in this Section shall generally include for :-

- (a) Maintenance, repairs, service charges, tax, licence and any other government fees and charges in connection with the use of the Contract Facilities and provisions of Special Attendances.
- (b) Provisions of all insurances on the Contract Facilities against accident, damage, loss by theft or fire, etc.
- (c) Replacement of contract staff.
- (d) Replacement of damaged or lost facilities.
- (e) Removal of the Contract Facilities within the time as stipulated in the Contract, or at any time as may be informed by the Maintenance Surveyor.

**Measurement of Contract Facilities generally****SC01.04**

The items for Contract Facilities shall generally be measured and paid for in accordance with the Special Conditions provided below and the Employer's Requirements where such facilities are specifically stated in the Contract.

**LAND TRANSPORT****Measurement of land transport facilities****SC01.05**

The land transport facilities shall include the provision of petrol private car, electric vehicle or multi-purpose vehicle (MPV) and the driver services as specified in the Contract.

The rates for land transport facilities shall be measured each and on a monthly basis for the period from the date when such land transport facilities are provided for use under the Contract until the expiry of the Contract Period as specified in the Contract, and any further period of provision of the land transport facilities that the Maintenance Surveyor expressly confirms in writing.

In case where the period of the provision of land transport facilities provided for use is not in a whole month, or where no land transport or alternative replacement facilities are provided on any day(s) within a particular month, the rate to be paid to the Contractor shall be adjusted as follows :-

Amount to be deducted from the Schedule rate for the provision of land transport facilities in a particular month for each number vehicle 
$$= \frac{D_1}{D} \times R$$

$D_1$  = The number of days on which the land transport or alternative replacement facility is not provided in the particular month.

$D$  = Total number of days in the particular month where provision of the land transport facility is required.

$R$  = Schedule rate for the provision of land transport facilities in a particular month for each number vehicle subject to Contract Percentage adjustment.

The periods ( $D_1$ ) and ( $D$ ) are measured in half calendar day unit occurring during the said month.

No measurement and payment shall be made for any period of time during which no land transport nor other alternative replacement facilities are provided for use under the Contract.

**SPECIAL CONDITIONS****LAND TRANSPORT****Rates for  
land transport  
facilities****SC01.06**

The rates for land transport facilities shall further include for : -

- (a) Provision of Environment-friendly Petrol Private Cars, Electric Vehicles or Hybrid Vehicles of not more than one year old, and in good working order. A valid Environment-friendly Vehicle Certificate shall be provided for Environment-friendly Petrol Private Cars.
- (b) Provision of a competent and licensed driver for each vehicle who must have not less than 3 years' driving experience, no dangerous driving records and who shall be approved by the Maintenance Surveyor. The driver shall be equipped with a mobile telephone for contact purpose when on duty.
- (c) Provision of the vehicles at all times and for the uses as specified in the Contract.
- (d) Arranging the vehicles to be standby during the period when the vehicles are not in use including having the vehicles parked at a location designated by the Maintenance Surveyor.
- (e) All tunnels, bridges and cross harbour tunnel toll fees, and parking fees including the parking fees incurred when the vehicles are standby.
- (f) Maintaining a record of the use of the vehicles including details, times and purposes of journeys together with appropriate pedometer readings and distances travelled.
- (g) Maintaining effective comprehensive insurances covering passenger liabilities of the vehicles to be driven by any driver. In the case of a private car under the ownership of the Contractor, inclusion of an endorsement in the insurance policy expanding the definition to cover the Maintenance Surveyor and his Representatives and all personnel of the Employer.
- (h) Fuels, oils, lubricant and the like for the proper running and functioning of the vehicles.
- (i) Provision for similar alternative transport when the vehicles provided are unavailable.
- (j) Providing or painting the contract number, contract title, the Contractor's name or other suitable identification as approved by the Maintenance Surveyor to the vehicles.

**SPECIAL CONDITIONS****CONTRACT EQUIPMENT****Measurement of contract equipment****SC01.07**

The rates for provision of contract equipment shall be measured each and on a monthly basis from the date when such equipment is provided for use until the expiry of the Contract Period as specified in the Contract, and any further period of provision of the contract equipment that the Maintenance Surveyor expressly confirms in writing.

In case where the period of the provision of contract equipment provided for use is not in a whole month, or where no contract equipment or alternative replacement is provided for a period exceeding seven calendar days within a particular month, the rate to be paid to the Contractor shall be adjusted as follows : -

Amount to be deducted from the Schedule rate for the provision of contract equipment in a particular month for each number contract equipment =  $\frac{D_1}{D} \times R$

$D_1$  = The number of days on which the contract equipment or alternative replacement is not provided in the particular month  
(No deduction shall be made for the initial seven calendar days of non-provision, but deduction shall be made for a period of continuous non-provision more than seven calendar days and of which shall include the initial seven calendar days of non-provision).

$D$  = Total number of days in the particular month where provision of the contract equipment is required.

$R$  = Schedule rate for the provision of contract equipment in a particular month for each number contract equipment subject to Contract Percentage adjustment.

The periods ( $D_1$ ) and ( $D$ ) are measured in half calendar day unit occurring during the said month.

No measurement and payment shall be made for any period of time during which no contract equipment nor other alternative replacement is provided for use under the Contract.

**Rates for contract equipment****SC01.08**

The rates for contract equipment shall further include for : -

- (a) Provision of all equipment with functions, configurations and specifications as stated in the Contract and in good working order.
- (b) Provision of all necessary consumables like paper, toner, etc.
- (c) Licence fees, connection charges, rental charges, broadband internet connection, service charges, insurance and the like.
- (d) Maintaining monthly report on usage.
- (e) Regular maintenance, repair and temporary replacement of the devices of similar functions and configurations during period of repair.

**SPECIAL CONDITIONS****CONTRACT STAFF SERVICES****Measurement of  
contract staff  
services****SC01.09**

The contract staff services shall include the provision of the following staff services when specified in the Contract : -

- (a) Clerical support staff
- (b) Maintenance support officer
- (c) Technical officer
- (d) Works supervisor (builder's work) and works supervisor (building services)
- (e) Quality control assistant (builder's work) and quality control assistant (building services)
- (f) Customer services officer
- (g) Senior customer services officer

The rates for provisions of contract staff services shall be measured each and on a monthly basis from the date when the contract staff reports duty at the Employer's office until the expiry of the Contract Period as specified in the Contract, and any further period of provision of the contract staff services that the Maintenance Surveyor expressly confirms in writing.

Payment shall only be made when the Contractor has demonstrated to the Maintenance Surveyor's satisfaction that salary payments have been received by the contract staff.

In case where the period of the provision of contract staff services is not in a whole month, or where replacement is not provided for the respective contract staff service on any day(s) within a particular month, the rate to be paid to the Contractor shall be adjusted as follows : -

Amount to be deducted from the Schedule rate for  
the provision of contract staff services in a  
particular month for each number contract staff

$$= \frac{D_1}{D} \times R$$

$D_1$  = The number of days on which the contract staff or alternative replacement is not provided in the particular month.

$D$  = Total number of days in the particular month where provision of the contract staff services is required.

$R$  = Schedule rate for the provision of contract staff services in a particular month for each number contract staff subject to Contract Percentage adjustment.

The periods ( $D_1$ ) and ( $D$ ) are measured in half calendar day unit occurring during the said month.

No measurement and payment shall be made for the period of time during which no contract staff services nor other alternative replacement are provided for use under the Contract.

**SPECIAL CONDITIONS****CONTRACT STAFF SERVICES****Rates for  
contract staff  
services****SC01.10**

The rates for "contract staff services" shall further include for : -

- (a) Provision of full time contract staff with qualification and experience that meet the requirements as specified in the Contract.
- (b) Performance of all duties.
- (c) Maintenance of an attendance diary.
- (d) All expenses and reimbursement in connection with employment of the contract staff including but not limited to basic salary, contribution to the Mandatory Provident Fund, gratuity and all necessary levies, e.g. levy for Construction Industry Council, insurances, etc.
- (e) Transportation arrangement required for executing their respective duties.
- (f) Provision of facilities for executing their respective duties like computer equipment and mobile phone (including internet connection and its services charges, hardware and software), digital cameras, stationery and consumables, etc.
- (g) Working outside normal working hours.
- (h) Working on General Holidays, emergency and urgent works and working at specific locations.
- (i) Replacement by temporary staff when the contract staff is on leave, absent or resigned.
- (j) Any other related costs and expenses that the Contractor may incur from the recruitment, management and deployment of the contract staff services.

**PAYMENT FOR SPECIAL ATTENDANCES****Measurement of  
Payment  
for Special  
Attendances****SC01.11**

The item for "Payment for Special Attendances" shall only be measured and paid for when the Maintenance Surveyor is satisfied that the following conditions have been fulfilled : -

- (a) Where the work instructed under the Works Order is incidental minor maintenance and repair work in nature and the claimed value of the works under the Works Order alone does not exceed \$1,000;
- (b) Works is carried out to walls or ceiling soffits, where the work is at a clear height over 10 m high (measured from the level on which the staging or the means of access is erected, or where the level is sloping, measured from the level immediately at the provision of the staging or the means of access) with no other means of access available;
- (c) Submission of reports and photographic records to justify such payment; and
- (d) The provision of the staging or means of access is made by the Contractor himself.

**SPECIAL CONDITIONS****PAYMENT FOR SPECIAL ATTENDANCES****Measurement of  
Payment  
for Special  
Attendances  
(Cont'd)****SC01.11  
(Cont'd)**

Where works under more than one Works Orders of incidental minor maintenance and repair nature are carried out at the same location at or around the same period of time by the Contractor or his Specialist Sub-contractors, the Contractor shall arrange for the full utilization of the means of access to be provided for these Works Orders. Subject to fulfilment of the conditions stated in sub-clauses (a) to (d) herein, payment for Special Attendances will only be made once irrespective of the number of Works Orders issued under such circumstance.

No measurement and payment shall be made for "Payment for Special Attendances" under either one of the following conditions : -

- (i) The claimed value of the works carried out under the above circumstances exceeds \$1,000 per Works Order.
- (ii) Where means of access is available or provided at the location by the owners, the Employer or other parties.
- (iii) The Contractor fails to submit the report and photographic records to justify the payment of the Special Attendances claimed, or the Maintenance Surveyor considers that the report submitted fails to provide adequate information to demonstrate satisfaction of the conditions as stated in sub-clauses (a) to (d) herein.
- (iv) Where works are carried out under separate Works Order with staging or means of access provided at the same location at or around the same period of time, and the estimated value of the works exceeds \$1,000 for that Works Order.

**Rates for  
Payment  
for Special  
Attendances****SC01.12**

The rates for "Payment for Special Attendances" shall further include for : -

- (a) Providing any means of access including but not be limited to scaffolding, screens, working platforms, staging, gondolas and the like; and erection, subsequent dismantling and removal of the same upon completion of the works;
- (b) Compliance with all safety requirements and certification from independent checking engineer, where required, and payment of all fees; and
- (c) Submission of all necessary records and reports in the format as approved by the Maintenance Surveyor.

| Item  |   | A<br>\$   | Item  |
|---|---|-----------|-------|
| <b>CONTRACT FACILITIES</b>  |   |           |       |
| Note : - The following Items 01001 to 01018 inclusive will only be paid for if the requirements as set out in the Contract and the conditions as set out in the Special Conditions are complied with. |   |           |       |
| <b>LAND TRANSPORT</b>   |   |           |       |
| <i>Per number-month</i>   |   |           |       |
| 01001   | Private car - fully air conditioned saloon car with seating capacity of not less than five seats (including driver) ..... | 23,800.00 | 01001 |
| 01002   | MPV - fully air conditioned saloon car with seating capacity of not less than seven seats (including driver) .....        | 25,500.00 | 01002 |
| <b>CONTRACT EQUIPMENT</b>   |   |           |       |
| <i>Per number-month</i>   |   |           |       |
| 01003   | Provision of facsimile machine (for A4 size).....   | 110.00    | 01003 |
| 01004   | Provision of mobile phone.....  | 240.00    | 01004 |
| 01005   | Provision of computer facilities .....  | 250.00    | 01005 |
| 01006   | Provision of monochrome laser-jet printer (for A4 size).....  | 160.00    | 01006 |
| 01007   | Provision of colour inkjet printer (for A3 size).....   | 220.00    | 01007 |
| 01008   | Provision of colour laser printer (for A3 size).....  | 340.00    | 01008 |
| 01009   | Provision of digital camera.....  | 50.00     | 01009 |
| <b>CONTRACT STAFF SERVICES</b>  |   |           |       |
| <i>Per number-month</i>   |   |           |       |
| 01010   | Clerical support staff .....  | 10,800.00 | 01010 |
| 01011   | Maintenance support officer.....  | 14,500.00 | 01011 |
| 01012   | Technical officer .....   | 15,600.00 | 01012 |
| 01013   | Works supervisor (builder's work) .....   | 20,300.00 | 01013 |
| 01014   | Works supervisor (building services).....   | 20,300.00 | 01014 |
| 01015   | Quality control assistant (builder's work) .....  | 15,600.00 | 01015 |
| 01016   | Quality control assistant (building services).....  | 15,600.00 | 01016 |
| 01017   | Customer services officer.....  | 12,000.00 | 01017 |
| 01018   | Senior customer services officer.....   | 13,000.00 | 01018 |



| Item  | Item  |   |    |          |
|---|---|---|----|----------|
| <b>PAYMENT FOR SPECIAL ATTENDANCES</b>  |   |   |    |          |
| Note : - Item 01019 will only be paid for if the requirements as set out in the Contract and the conditions as set out in the Special Conditions are complied with. |   |   |    |          |
| <i>Per item</i>   |   |   |    |          |
| 01019   | 01019   |   |    |          |
| Payment for Special Attendances.....  | <table border="1"> <tr> <td>A</td> </tr> <tr> <td>\$</td> </tr> <tr> <td>3,000.00</td> </tr> </table> | A | \$ | 3,000.00 |
| A   |   |   |    |          |
| \$  |   |   |    |          |
| 3,000.00  |   |   |    |          |

**Section 02**

**DEMOLITION**

## SECTION 02

### DEMOLITION

#### SPECIAL CONDITIONS

**Measurement  
generally**

**SC02.01**

All demolition works in this Section shall mean the demolition of the whole building or part of concrete or other structures irrespective of storey height including all partitions, fittings, finishes, services, etc. within the building.

Alteration and repairs other than demolition in this Section shall be measured and paid for at the appropriate rates under applicable Work Sections of this Schedule including but not limited to : -

- |     |   |                                      |
|-----|---|--------------------------------------|
| (a) | Taking down concrete for alteration                       | Section 04 - Concrete Work           |
| (b) | Taking down brickwork or blockwork walling for alteration | Section 05 - Brickwork and Blockwork |
| (c) | Taking down rubble walling for alteration                 | Section 06 - Masonry                 |
| (d) | Taking down structural steel for alteration               | Section 10 - Steel and Metal Work    |

**Measurement  
of demolition of  
whole building or  
part of structures**

**SC02.02**

Demolition of whole building shall be measured net on the covered floor area of the building to be demolished.

Covered floor area is measured from the outer face of the external walls of a fully covered structure and measured over all walls, partitions, columns, stair wells, lift wells, escalator openings, bay windows, covered balconies, pipe/drain/cable ducts and the like; and it excludes all projections beyond the outer face of external wall and uncovered trafficable areas such as external playground, landscaped areas and the like.

Demolition of canopies shall only be measured and valued separately where the width of the canopies exceeds 2 m (measured from the outer face of the external walls); and shall be measured the overall flat plan area of the canopy to be demolished. Vertical edge and sides of canopies shall not be measured separately but shall be deemed included as part of the canopies. Any canopy with width not exceeding 2 m shall be deemed to be included in the demolition of the whole building and shall not be measured separately.

Demolition of roof shall be measured the overall flat plan area of the roof to be demolished and shall be measured as either one of the following categories : -

- (i) Roof in concrete construction (including all structures above roof slab) of building or structure;
- (ii) Roof other than concrete construction (including all structures above roof slab) of building or structure.

**SPECIAL CONDITIONS**

|   |                         |   |
|---|-------------------------|---|
| <b>Measurement of demolition of whole building or part of structures (Cont'd)</b> | <b>SC02.02 (Cont'd)</b> | <p>Roof other than concrete construction refers to structure of timber, steel or other construction. Measurement of such demolition work shall not apply to structure built on top of concrete roof structure of which shall be held to be included under demolition of roof in concrete construction.</p> <p>When measuring “Demolish and clear away whole building at Ground Floor”, cockloft and the like where access is within the floor shall be measured separately. Break up and clear away existing slabs on grade, footings, foundations and the like and backfilling voids shall be measured and paid for at the appropriate rates in Section 03 - Excavation of this Schedule.</p> <p>When measuring “Demolish and clear away cockloft and the like”, it shall include area of staircase or any part of the access.</p> <p>Removal of asbestos containing materials shall be measured separately.</p> |
| <b>Measurement of single storey shed</b>  | <b>SC02.03</b>          | <p>Demolition of single storey sheds other than concrete or structural steel encased with concrete structures shall be measured separately. The covered floor area of the single storey structure to be demolished shall be measured. The rate shall be inclusive of the whole structure including roof, all internal structures, fixtures and the like but excluding slabs on grade which shall be measured in accordance with Special Conditions Clause SC02.02 of this Section.</p>  |
| <b>Measurement of asbestos containing corrugated sheeting</b>                     | <b>SC02.04</b>          | <p>Asbestos containing corrugated sheeting shall be measured flat (not girth on corrugations) over the net area covered. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>. Ridges, hips and the like shall be measured the net length times the average height as fixed. Sheeting of curved, sloped, circular on plan or vertical shall be measured flat. Taking down and clearing away existing metal or wooden framings shall be measured separately. In case where the whole building will be demolished, no separate measurement for framing shall be made.</p>   |
| <b>Measurement of asbestos containing plaster</b>                                 | <b>SC02.05</b>          | <p>Asbestos containing plaster shall be measured the net area. An allowance shall be made for walls and ceilings for additional area of moulded or carved work. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>.</p>   |
| <b>Measurement of asbestos containing plaster boards, etc.</b>                    | <b>SC02.06</b>          | <p>Asbestos containing plaster boards, ceiling tiles, particle boards, etc. and the like shall be measured over the area covered. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>. Taking down and clearing away existing metal or wooden framings shall be measured separately. In case where the whole building will be demolished, no separate measurement for framing shall be made.</p>   |
| <b>Rates for demolition of whole building or part of structures</b>               | <b>SC02.07</b>          | <p>The rates for demolition of whole building or part of structures shall include for : -</p> <p>(a) Carrying out survey of building or structures prior to demolition and preparation of record drawings and survey reports where required including taking photographic records and measurements.</p>   |

**SPECIAL CONDITIONS**

**Rates for  
demolition of  
whole building  
or part of  
structures  
(Cont'd)**

**SC02.07  
(Cont'd)**

- (b) Submission of demolition proposals, method statement, sequence of demolition, all necessary design and calculations for all temporary works, including certification and endorsement by Registered Structural Engineer for Maintenance Surveyor's approval before commencing demolition work.
- (c) Providing all precautionary and protective measures, scaffolding, canopy, netting, covering, dust-proof screens, heavy duty protective nettings, warning signs, and all other measures proposed by the Contractor in the method statement that are required for the execution of the demolition works.
- (d) In addition to Clause GR.10(p) of Section 00 - General Regulations of this Schedule, providing all enhanced and heavy duty precautionary protective measures including propping, shoring, strutting, special covered walkways, scaffolding, catch fans and platforms, dust-proof screens, heavy duty protective netting and all other measures proposed by the Contractor in the method statement that are required for the execution of the demolition work.
- (e) Provision of recording the entire demolition process in the form of CCTV of sufficient number of cameras to be installed at strategic location(s) to be agreed with the Maintenance Surveyor; and subsequent removal of the same upon completion of the demolition process.
- (f) Plain or reinforced concrete in case of concrete construction.
- (g) Provision of all necessary safety measures and taking all necessary measures to minimize nuisance caused by the demolition works to adjoining properties and occupants, the public in general, passing vehicles and workmen.
- (h) Giving notice to relevant utility undertaker(s) or Government departments and identify utilities that will be affected by the proposed demolition and arranging utilities undertaker(s) or Government department for disconnection of services. Disconnecting and sealing utilities, and marking and recording position of sealed utilities, including liaising with relevant utility undertaker(s) and Government department.
- (i) Taking down and clearing away all structures, finishes, fittings and the like from the structural floor level.
- (j) Demolition of canopies of width not exceeding 2 m as stated in Special Conditions Clause SC02.02.
- (k) Watering debris as necessary to reduce dust nuisance to a minimum.
- (l) Removing off site all materials, debris and other arisings which shall become the property of the Contractor, and complying with all relevant regulations and requirements relating to the sorting and removal etc. of all demolition materials.
- (m) Protecting areas adjacent to demolition works from damages resulting from such demolition.
- (n) Making good to buildings, structures, pavings, etc. and the like caused by the demolition of adjacent building or structure.

**SPECIAL CONDITIONS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for demolition of whole building or part of structures (Cont'd)</b> | <b>SC02.07 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(o) Provision of settlement monitoring points and reports as required.</li> <li>(p) Provision of full time safety officer and/or registered professional engineer when required for the demolition work.</li> <li>(q) Executing works to comply with statutory requirements.</li> </ul>  |
| <b>Rates for demolition of canopy of width exceeding 2 m</b>                 | <b>SC02.08</b>          | <p>The rates for demolition of canopy of width exceeding 2 m shall, in addition to the requirements of Special Conditions Clause SC02.07, include for : -</p> <ul style="list-style-type: none"> <li>(a) Cladding, covering and all supporting framings and suspension systems.</li> <li>(b) Vertical columns and/or suspended structures above the canopies.</li> <li>(c) Any provisions and/or work required for demolition of canopies where such canopies are projected beyond the Site boundary and/or at any heights.</li> </ul>  |
| <b>Rates for demolition of roof</b>  | <b>SC02.09</b>          | <p>The rates for demolition of concrete structural roof shall, in addition to the requirements of Special Conditions Clause SC02.07, include for : -</p> <ul style="list-style-type: none"> <li>(a) All parapets and rails.</li> <li>(b) All upper stairs, water tanks and all structures and fittings above roof slab.</li> </ul>  |
| <b>Rates for demolition of roof other than concrete structural roof</b>      | <b>SC02.10</b>          | <p>The rates for demolition of roof other than concrete structural roof shall, in addition to the requirements of Special Conditions Clause SC02.07, include for : -</p> <ul style="list-style-type: none"> <li>(a) Cladding, roof covering and all supporting framings, flashings, gutters and the like.</li> <li>(b) All associated features to the roof.</li> </ul>  |
| <b>Rates for removal of asbestos containing materials</b>                    | <b>SC02.11</b>          | <p>The rates for removal of asbestos containing materials shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Works carrying out by an approved Environmental Protection Department (EPD) Registered Asbestos Contractor in compliance with statutory requirements.</li> <li>(b) All preparation work, air monitoring by approved EPD Registered Asbestos Laboratory, safety precaution, giving statutory notices, disposal of waste and other works as required by the Asbestos Abatement Plan or relevant legislation and codes of practice issued under the Air Pollution Control Ordinance and Waste Disposal Ordinance.</li> <li>(c) Carrying out the works in accordance with the Code of Practice on the Preparation of Asbestos Investigation Reports, Asbestos Management Plans and Asbestos Abatement Plans.</li> <li>(d) Provision for taking personal air samples for the worker carrying out asbestos removal work as specified in G.S. Item 2.52.</li> </ul> |

**SPECIAL CONDITIONS**

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for removal of asbestos containing materials (Cont'd)</b>       | <b>SC02.11 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(e) Provision of respirator and protective clothing for use by Maintenance Surveyor's Representative for inspection of the removal work.</li> <li>(f) Where there is no Asbestos Abatement Plan, preparing and submission of a method statement of the removal works before commencement of the removal works.</li> <li>(g) Removal of asbestos-containing materials using glove bag method.</li> <li>(h) Conducting smoke test by a registered asbestos consultant before commencement of asbestos removal works to ensure the integrity of the full containment.</li> <li>(i) The opening up of pipe duct, etc., to gain access to asbestos containing material, and the subsequent reinstatement, the making good of disturbed surface and the application of non-asbestos substitute material.</li> </ul> |
| <b>Rates for asbestos survey</b>   | <b>SC02.12</b>          | <p>The rates for asbestos survey and Asbestos Investigation Report shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Designing, and directing bulk sampling and analysis work. (The work itself by an approved EPD Registered Asbestos Laboratory is measured separately.)</li> <li>(b) Carrying out the work in accordance with the Code of Practice on the Preparation of Asbestos Investigation Reports, Asbestos Management Plans and Asbestos Abatement Plans.</li> <li>(c) Providing labelling asbestos containing materials and obtaining endorsement from Environmental Protection Department on the Report.</li> </ul>   |
| <b>Rate for Asbestos Management Plan</b>                                 | <b>SC02.13</b>          | <p>The rate for Asbestos Management Plan shall include preparing an Asbestos Abatement Plan for materials to be removed and an Operation and Maintenance Plan for asbestos containing materials to be retained. The rate shall also include for obtaining endorsement on the plan from Environmental Protection Department.</p>  |
| <b>Rate for employing an approved EPD Registered Asbestos Consultant</b> | <b>SC02.14</b>          | <p>The rate for employing an approved EPD Registered Asbestos Consultant shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of the proposed Registered Asbestos Consultant to the approval of the Maintenance Surveyor.</li> <li>(b) Provision of supervision services of the Asbestos Contractor's work to ensure that the work is carried out in accordance with the relevant legislation and codes of practice, and to manage the implementation of the approved Asbestos Abatement Plan.</li> <li>(c) Provision of services for revision of the abatement method where necessary.</li> <li>(d) Liaising and co-ordinating with the Environmental Protection Department.</li> </ul>  |
| <b>G.S. clauses</b>  | <b>SC02.15</b>          | <p>G.S. clauses for demolition can be found in Demolition, Site Clearance and Alterations Section of the General Specification for Building.</p>   |

| Item   |   | Item      |       |
|--|---|-----------|-------|
| <b>DEMOLITION OF WHOLE BUILDING OR PART OF STRUCTURES</b>  |   |           |       |
| Demolish whole building or part of structures in any height including clearing away all materials arising from Site :-   |   |           |       |
| (Note :- The demolition of a whole building or part of structures shall be paid for on a floor-by-floor basis at the rates of the following Items 02001 to 02009 inclusive ) |   |           |       |
| <i>Per square metre</i>  |   | A<br>\$   |       |
| 02001  | Ground floor storey of building or structures (excluding slabs on grade).....   | 731.90    | 02001 |
| 02002  | Suspended ground slab or cockloft of building or structures including staircase.....  | 326.80    | 02002 |
| 02003  | Mezzanine floor of building or structures.....  | 739.40    | 02003 |
| 02004  | Canopies of building or structures exceeding 2 m wide.....  | 445.90    | 02004 |
| 02005  | First to fourth floor of building or structures.....  | 746.80    | 02005 |
| 02006  | Additional floor from fifth floor and above (except roof) of building or structures.....  | 754.30    | 02006 |
| 02007  | Roof (including all structures above roof slab) of building or structures.....  | 757.30    | 02007 |
| 02008  | Ditto but other than concrete construction (steel, timber or others construction).....  | 61.40     | 02008 |
| 02009  | Single storey shed, building, structure, etc. (other than concrete construction).....   | 112.30    | 02009 |
| <b>RELATED WORKS FOR REMOVAL OF ASBESTOS CONTAINING MATERIALS</b>  |   |           |       |
| <i>Each</i>  |   | A<br>\$   |       |
| 02010  | Set up total containment with 3-chamber decontamination unit, maintaining negative air pressure by using HEPA-filtered appliance throughout the course of asbestos abatement work, and taking down the containment on completion.....<br>(The work shall be carried out in accordance with the Asbestos Abatement Plan and the Code of Practice on Asbestos Control - Asbestos Work Using Full Containment and Mini-containment.) | 13,560.00 | 02010 |
| 02011  | Set up segregation between asbestos work area and external area using plastic sheets, and decontamination unit and debris port where specified, taking down the segregation on completion.....<br>(The work shall be carried out in accordance with the Code of Practice on Asbestos Control- Safe Handling of Low Risk Asbestos Containing Material.)  | 9,125.00  | 02011 |
| 02012  | Carry out bulk sampling of suspected asbestos containing material and conduct examination using polarized light microscopy method on the presence, content and type of asbestos by an approved EPD Registered Asbestos Laboratory.....  | 455.00    | 02012 |
| 02013  | Carry out further analysis (where the content of asbestos in a bulk sample cannot be determined by polarized light microscopy method) using point counting method by an approved EPD Registered Asbestos Laboratory.....  | 2,358.00  | 02013 |
| 02014  | Carry out environmental air sampling and analysis to measure the fibre concentration by an approved EPD Registered Asbestos Laboratory.....   | 316.00    | 02014 |
| 02015  | Dispose a collection of loose items with asbestos containing materials like fire blankets and bench mats, from one site .....<br>(The work shall be carried out in accordance with the Code of Practice on Handling, Transportation and Disposal of Asbestos Waste.)  | 2,825.00  | 02015 |



| Item  |   | A<br>\$   | Item  |
|---|---|-----------|-------|
| <b>REMOVAL OF ASBESTOS CONTAINING MATERIALS</b> |   |           |       |
| <i>Each</i>                                     |   |           |       |
| 02016   | Take down and clear away asbestos containing fire-stopping material around electric cable running through wall and floor.....   | 2,105.00  | 02016 |
| 02017   | Take down and clear away asbestos containing gasket and flexible joint in air duct of any size.....   | 2,105.00  | 02017 |
| 02018   | Take down and clear away asbestos containing arc chute in electric switch box, including attendance by a qualified electrician.....   | 633.00    | 02018 |
| <i>Per square metre</i>                         |   |           |       |
| 02019   | Take down and clear away from Site asbestos containing roof insulation tiles.....   | 277.80    | 02019 |
| 02020   | Ditto but asbestos containing corrugated or flat cement sheets fixed to a metal or timber frame.....  | 184.60    | 02020 |
| 02021   | Ditto but asbestos containing plaster.....  | 446.30    | 02021 |
| 02022   | Ditto but asbestos containing plaster boards, chalkboards, particle boards, etc. and the like fixed to wall or other structure.....   | 196.20    | 02022 |
| 02023   | Ditto but asbestos containing vinyl tile and tile adhesive by low VOC mastic remover, including degreasing agent if any as recommended by manufacturer.....   | 219.30    | 02023 |
| 02024   | Ditto but asbestos containing vinyl tile and adhesive including existing cement sand screeding.....   | 202.00    | 02024 |
| 02025   | Ditto but asbestos containing cement grille block wall and cement panel wall.....   | 286.30    | 02025 |
| 02026   | Ditto but asbestos containing insulation on calorifier or other surfaces.....   | 715.70    | 02026 |
| <i>Per linear metre</i>                         |   |           |       |
| 02027   | Take down and clear away from Site asbestos containing refuse chutes of any sizes.....  | 2,599.00  | 02027 |
| 02028   | Ditto but asbestos containing lagging or in-situ and pre-moulded insulation to pipework of any sizes.....   | 1,808.00  | 02028 |
| 02029   | Ditto but asbestos containing pipe or drain of any size.....  | 1,356.00  | 02029 |
| <b>ASBESTOS SURVEY</b>                          |   |           |       |
| <i>Per item</i>                                 |   |           |       |
| 02030   | Carry out asbestos survey for total floor area n.e. 200 m <sup>2</sup> of a building or structure and prepare an Asbestos Investigation Report by an approved EPD Registered Asbestos Consultant .....                    | 8,800.00  | 02030 |
| 02031   | Ditto but for total floor area 200 - 1,200 m <sup>2</sup> of a building or structure.....   | 17,000.00 | 02031 |
| 02032   | Extra over Item 02031 for each additional 200 m <sup>2</sup> or part thereof in total floor area of a building or structure in excess of 1,200 m <sup>2</sup> of a building or structure.....                             | 2,200.00  | 02032 |
| <b>ASBESTOS MANAGEMENT PLAN</b>                 |   |           |       |
| <i>Per item</i>                                 |   |           |       |
| 02033   | Prepare an Asbestos Management Plan by an approved EPD Registered Asbestos Consultant on premises where an Asbestos Investigation Report is already available .....   | 6,300.00  | 02033 |
| 02034   | Employ an approved EPD Registered Asbestos Consultant to manage the implementation of an Asbestos Abatement Plan. ....<br>(Note : - Item 02034 will only be paid for, if ordered by the Maintenance Surveyor in writing.) | 11,300.00 | 02034 |

**Section 03**

**EXCAVATION**

## SECTION 03

### EXCAVATION

#### SPECIAL CONDITIONS

#### Measurement generally

#### SC03.01

Excavation shall be measured net with no increase for working space or bulkage of material, allowance for both having been made in the rates. Blasting will not be permitted. Should occasion ever occur when blasting is permitted, no adjustment will be made to the rates in this Schedule.

Where excavation oversite to areas exceeds an average of 200 mm deep, it shall be measured as reduced level excavation from existing ground level (i.e. no top soil or surface excavation item shall first be measured). Trench for foundation, manholes, pits, etc. and other excavation items shall be measured from the reduced levels or ground levels, whichever is the lower. The definitions of trench excavation and bulk excavation shall be in accordance with G.S. Item 3.01(xi) and (xii).

Excavation for pipes and cables shall be measured to the nearest 0.25 m average depth.

When measuring "Extra over pipe or cable trench excavation for excavating in brickwork, concrete, solid rock etc.", the net width of trench excavation measured shall be in accordance with the trench widths as specified in the Specification for Plumbing and Drainage Installations adopted in the Contract.

Measurements for spreading or removal of spoil arising from the Contractor's excavation shall be made net on the basis of the solid contents before excavation and no allowance shall be made for increase in bulk. Where the spoil to be removed has not been excavated by the Contractor, as in the case of landslips, debris or rubbish, etc., the actual cubic contents shall be measured.

Soil, hardcore, granular or graded granular filling items shall be measured net after completion.

#### Measurement of steel sheet piling

#### SC03.02

Throughout this Schedule, rates for all Sections shall include for all temporary preventive, protective and supporting measures to the faces of excavation. No payment will be made for steel sheet piling and the likes under any circumstances, except where specifically ordered by the Maintenance Surveyor in writing.

Steel sheet piling including non-standard make up piles shall be measured net on the area of the piling driven. The measurement of the calculated weight shall be the length along the centre line of the alignment of completed sheet pile multiplied by the average depth from the ground level or reduced level, whichever the lower to the toe edge of the pile driven.

Extra over steel sheet piling for corner piles and junction piles shall be the net length measured from the ground level or reduced level, whichever is the lower, to the toe edge of the piles driven.

The measurement of burning off the tops of steel piles shall be the length along the centre line of the alignment of piles driven. This item will only be paid for, if ordered by the Maintenance Surveyor in writing.

All temporary strutting and shoring to sheet piling including waling, strutting, bracing, posts and connecting members shall be found in Section 10 - Steel and Metal Work of this Schedule.

**SPECIAL CONDITIONS**

|  |                |  |
|--|----------------|--|
| <b>Measurement of earth, granular and hardcore filling</b> | <b>SC03.03</b> | The measurement shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deduction shall be made for voids not exceeding 1.00 m <sup>3</sup> .  |
| <b>Measurement of filter membrane</b>                      | <b>SC03.04</b> | Filter membrane shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m <sup>2</sup> .   |
| <b>Rates for excavation items</b>                          | <b>SC03.05</b> | <p>The rates for all excavation items shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Mobilization, maintenance and demobilization of excavator, roller, compaction plant, moving plant and the like.</li> <li>(b) Allowance for working space and increase in bulk of all materials arising from excavation, down taking, alteration or demolition.</li> <li>(c) Excavating in any type of level or sloping ground encountered including earth, clay, sand, gravel, loose boulders not exceeding 0.20 m<sup>3</sup>, etc. (Note : - "Extra over general excavation or pipe or cable trench excavation for excavating in solid rock" as defined in Special Conditions Clause SC03.09 herein below, will be paid in addition).</li> <li>(d) Setting out the work and all profiles, rods, etc., and work straight or circular on plan.</li> <li>(e) Cutting down shrubs, undergrowth, etc., including trees not exceeding 95 mm diameter at breast height, grubbing up roots and clearing away.</li> <li>(f) Removing old drains and sealing off connections.</li> <li>(g) Getting out excavated material by any means necessary and deposit excavated material in heaps including multi-handling within Site area.</li> <li>(h) Keeping excavations free from water by baling, pumping, temporary diversion channels or other means. All contaminated water arising from excavation shall be treated in accordance with the requirements of Environmental Protection Department (EPD) before disposing into the public drainage system. All additional expenses incurred shall be included in the rates.</li> <li>(i) Trimming sides, vertical or battered as required, and trimming, levelling, grading and ramming bottoms, and trimming slopes and banks.</li> <li>(j) Protecting the exposed surfaces of excavation by any means necessary.</li> <li>(k) Strutting, shoring, supporting and protecting measures for the faces of excavation. (Note : - Timbering/Steel works required to be left-in shall be paid for, if ordered by the Maintenance Surveyor in writing, at the rates contained in Section 08 - Carpentry and Joinery and Section 10 - Steel and Metal Work of this Schedule.)</li> </ul> |

**SPECIAL CONDITIONS**

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for excavation items (Cont'd)</b>   | <b>SC03.05 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(l) Steel plates or other approved coverings to trenches or pits where required to provide crossings for pedestrian and vehicular traffic, shall comply with all regulations and requirements including providing traffic lights, warning lights, signs etc. and payment of all charges incurred.</li> <li>(m) All multi-handling and temporary spoil heaps, on or off-site between excavation and final position.</li> <li>(n) Temporarily supporting drain pipes, cables, etc., during excavation and making good any damage that may be caused to the same.</li> <li>(o) Filling with concrete or backfilling and compacting strictly in accordance with G.S. to "over excavation" areas or as a result of the Contractor's proposed method of excavation or where additional concrete is placed in lieu of trimming rock bottoms to exact level.</li> <li>(p) Making good with lean concrete to any surface irregularities under the formation of rock cuttings which remain after trimming of rock excavation.</li> <li>(q) Preparation of record survey including an over Site topographical survey by a registered surveyor when ordered by the Maintenance Surveyor in writing.</li> <li>(r) Design of Temporary Works associated with earthworks, including temporary slopes, stockpiles and drainage by Registered Structural Engineers. Submit the design and calculations of the Temporary Works for the approval of the Maintenance Surveyor. Prepare and submit method statement for the erection and removal of Temporary Works as required.</li> <li>(s) Settlement monitoring points.</li> </ul> |
| <b>Rates for "Extra over excavation for excavating in brickwork, concrete, etc."</b> | <b>SC03.06</b>          | The rates for "Extra over general excavation or pipe or cable trench excavation for excavating in brickwork, concrete, solid rock, etc." shall further include for trimming the faces or edges of the work remaining.  |
| <b>Rates for soil filling and removal</b>  | <b>SC03.07</b>          | The rates for soil filling and removal shall further include for all multi-handling to final position.   |
| <b>Rates for soil, hardcore, granular and graded granular filling</b>                | <b>SC03.08</b>          | <p>The rates for all soil, hardcore, granular and graded granular filling items shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Mobilization, maintenance and demobilization of earth moving plant, rollers, compaction plant and other plant necessary for the works.</li> <li>(b) Deposition and compaction including compaction in layers to the required density.</li> <li>(c) Finishing surfaces level or to falls, gradients, crowns and cambers to exact profile required, with each successive surface finished parallel to the final finished surface.</li> </ul>  |

## SPECIAL CONDITIONS

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for soil, hardcore, granular and graded granular filling (Cont'd)</b> | <b>SC03.08 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(d) Additional bulk of material required to allow for compaction and consolidation.</li> <li>(e) All wheeling and multi-handling of material from temporary spoil heaps to place of final incorporation in the work.</li> <li>(f) Forming and trimming banks and slopes.</li> <li>(g) Temporary retaining boards to edges and slopes and any necessary handpacking at stepping and the like.</li> <li>(h) Removing, replacing or making good placed or compacted filling material as required where filling material subsequently becomes damaged or unsuitable.</li> <li>(i) Protecting the exposed surfaces of filling by any means necessary.</li> <li>(j) Keeping and maintaining the exposed surfaces clean.</li> <li>(k) Preparation of record survey when ordered by the Maintenance Surveyor in writing.</li> <li>(l) Carrying out soil tests and in-situ tests.</li> </ul> |
| <b>Rates for rock excavation</b>   | <b>SC03.09</b>          | <p>Solid rock shall be defined as "Rock, which in the opinion of the Maintenance Surveyor can only be excavated by means of wedging and splitting, the use of pneumatic tools or stitch core, cut, drill, core hydraulic splitter, and shall only be allowed when the net quantity to be actually cut, split and excavated in any isolated individual portion exceeds 0.20 m<sup>3</sup>, except that in the case of excavating post holes the net quantity excavated shall be paid for". For the purposes of this Schedule, excavation in solid rock has been assumed based on excavation by hand or with tools. Should occasion ever occur when blasting is permitted, no adjustment will be made to these rates but the Contractor shall submit method statement for approval, provide blast screens as necessary and take all other precautions and make good any damage caused at his own expense.</p>                |
| <b>Brick, concrete, rock, etc., to become property of the Contractor</b>       | <b>SC03.10</b>          | <p>Any brick, concrete, rock, etc., arising from the excavations shall become the property of the Contractor, and may if required, and approved by the Maintenance Surveyor, be broken and used for hardcore filling. For the purposes of removal, these materials shall be paid for as ordinary soils but if they are subsequently used as hardcore filling on the Site, no removal from the Site will be measured.</p>   |
| <b>Rates for steel sheet piling</b>  | <b>SC03.11</b>          | <p>The rates for steel sheet piling shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Welding, jointing and splicing.</li> <li>(b) Fabrication of non-standard make up piles.</li> <li>(c) Initial trenching and guide frames.</li> <li>(d) Temporary strutting and waling for driving.</li> </ul>  |

**SPECIAL CONDITIONS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for steel sheet piling (Cont'd)</b>               | <b>SC03.11 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(e) Preparing and submitting details and drawings with method statement all in accordance with G.S. Section 4 - Steel Sheet Piling Work and by Registered Structural Engineer if required.</li> <li>(f) Additional work and cost related to obstructions in accordance with G.S. Items 4.12 and 4.13.</li> <li>(g) Preparing and applying protective coating or other surface treatment to sheet pile.</li> <li>(h) Extraction of sheet piles.</li> <li>(i) Left-in position sheet pile when ordered by the Maintenance Surveyor in writing.</li> </ul>  |
| <b>Rates for burning off tops of sheet pile</b>            | <b>SC03.12</b>          | <p>The rates for burning off tops of sheet pile shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision, maintenance and removal from Site tools and equipment necessary for the works.</li> <li>(b) Disposal of surplus length of piles.</li> <li>(c) Cleaning the affected area and applying protective coatings or other surface treatment.</li> </ul>  |
| <b>Payment for "Utility Connection And Pavement Works"</b> | <b>SC03.13</b>          | <p>For payment purpose, the lump sum fee payment for "Utility Connection And Pavement Works" shall not be payable, unless the Contractor has demonstrated and substantiated by : -</p> <ul style="list-style-type: none"> <li>(a) A copy of successfully granted Excavation Permit for the work.</li> <li>(b) Relevant approval forms and drawings from utility companies or Government departments.</li> <li>(c) Contractor's prior written notice to the Maintenance Surveyor of the name of the specialist contractors employed for the Utility Connection And Pavement Works when the Contractor is not included in the relevant List of Approved Contractors for Public Works to carry out the Utility Connection And Pavement Works.</li> </ul> |
| <b>Specification for drain trench excavation</b>           | <b>SC03.14</b>          | <p>Specification for drain trench excavation can be found in the Specification for Plumbing and Drainage Installations adopted in the Contract.</p>   |
| <b>G.S. clauses for steel sheet piling</b>                 | <b>SC03.15</b>          | <p>G.S. clauses for steel sheet piling can be found in Steel Sheet Piling Work Section of the General Specification for Building.</p>   |

| Item              |   |  | Item              |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|-------------------|---|--|-------------------|-----------|--|---------|---------|----------|-----------|-----------|-----------|-----------|----|----|------|------|------|----|----|----|----|----|-------|--------|--------|--------|--------|--|
|                   | <b>STEEL SHEET PILING TO EXCAVATION</b>   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | (Note : - The following Items 03001 to 03006 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.) |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | Plant : -   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | <i>Per item</i>   | A<br>\$  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03001             | Mobilization, maintenance and demobilization of piling plant, crane, compressor and other equipment necessary for the work.....   | 22,400.00  | 03001             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | Supplying, handling, transporting, pitching, driving and withdrawing / left in sheet piles as G.S. Item 4.01 : -                  |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | <i>Per kg</i>   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Design length (m)</th> </tr> <tr> <th>n.e. 10</th> <th>10 - 20</th> <th>20 - 30</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">8.30</td> <td style="text-align: center;">9.10</td> <td style="text-align: center;">9.50</td> </tr> </tbody> </table>   | Design length (m) |           |  | n.e. 10 | 10 - 20 | 20 - 30  | A         | B         | C         | \$        | \$ | \$ | 8.30 | 9.10 | 9.50 |    |    |    |    |    |       |        |        |        |        |  |
| Design length (m) |   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| n.e. 10           | 10 - 20   | 20 - 30  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| A                 | B   | C  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| \$                | \$  | \$   |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 8.30              | 9.10  | 9.50   |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03002             | Steel sheet piles.....  |  | 03002             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | <i>Per linear metre</i>   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03003             | Extra over Item 03002 for corner piles.....   | 635.00   | 03003             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03004             | Extra over Item 03002 for junction piles.....   | 635.00   | 03004             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | Sundries : -  |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | <i>Per linear metre</i>   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03005             | Burning off tops of sheet piles.....  | 255.20   | 03005             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   | <i>Each</i>   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
|                   |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="5">Diameter (mm)</th> </tr> <tr> <th>n.e. 100</th> <th>100 - 200</th> <th>200 - 300</th> <th>300 - 400</th> <th>400 - 500</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">E</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="text-align: center;">51.50</td> <td style="text-align: center;">103.00</td> <td style="text-align: center;">154.00</td> <td style="text-align: center;">233.00</td> <td style="text-align: center;">284.00</td> </tr> </tbody> </table> | Diameter (mm)     |           |  |         |         | n.e. 100 | 100 - 200 | 200 - 300 | 300 - 400 | 400 - 500 | A  | B  | C    | D    | E    | \$ | \$ | \$ | \$ | \$ | 51.50 | 103.00 | 154.00 | 233.00 | 284.00 |  |
| Diameter (mm)     |   |  |                   |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| n.e. 100          | 100 - 200   | 200 - 300  | 300 - 400         | 400 - 500 |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| A                 | B   | C  | D                 | E         |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| \$                | \$  | \$   | \$                | \$        |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 51.50             | 103.00  | 154.00   | 233.00            | 284.00    |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |
| 03006             | Cutting or burning holes through sheet piling.....  |  | 03006             |           |  |         |         |          |           |           |           |           |    |    |      |      |      |    |    |    |    |    |       |        |        |        |        |  |



Item

Item

**GENERAL EXCAVATION**

*Per square metre*

A  
\$

03007 Excavate over Site n.e. 200 mm deep.....

29.00

03007

*Per cubic metre*

03008 Excavate over Site to reduce levels average exceeding 200 mm deep.....

167.30

03008

| That portion of excavation |                          |                          |                          |
|----------------------------|--------------------------|--------------------------|--------------------------|
| n.e.<br>1.50 m<br>deep     | 1.50 -<br>3.00 m<br>deep | 3.00 -<br>4.50 m<br>deep | 4.50 -<br>6.00 m<br>deep |
| A<br>\$                    | B<br>\$                  | C<br>\$                  | D<br>\$                  |
| 174.20                     | 178.10                   | 207.30                   | 272.60                   |
| 176.80                     | 185.90                   | 239.60                   | 332.00                   |

*Per cubic metre*

03009 Excavate trenches for foundation.....

174.20

178.10

207.30

272.60

03009

03010 Excavate for foundations, manholes, pits, cesspits, etc., and the like.....

176.80

185.90

239.60

332.00

03010

*Each*

03011 Excavate for post holes n.e. 0.30 m³ including return, fill in and compact and remove surplus excavated material from Site.....

111.00

03011

A  
\$

| Item  |  |            |            |            |              |                |                |                                      |  |        | Item   |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
|---|--|------------|------------|------------|--------------|----------------|----------------|--------------------------------------|--|--------|--------|-------------------|------------|------------|------------|------------|--------------|----------------|----------------|--------------------------------------|--|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|-------|--|-------|-------|---|---|---|---|---|-------|-------|-------|-------|--------------------------------|-------|-------|-------|--------|---|---|---|-------|-------|-------|-------|--------------------------------|-------|-------|--------|--------|--------|---|---|-------|--------|-------|-------|--------------------------------|-------|--------|--------|--------|--------|--------|---|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|-------|-------|--|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|----------|----------|----------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|----------|----------|----------|--------|--------|-------|-------|--------------------------------|--------|--------|--------|--------|--------|----------|----------|----------|--------|--------|-------|
| <b>PIPE OR CABLE TRENCH EXCAVATION</b>  |  |            |            |            |              |                |                |                                      |  |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| Excavate trench for pipe or cable with concrete bed (if any), including return, fill in, compact and remove surplus excavated material from Site :-   |  |            |            |            |              |                |                |                                      |  |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| Pipe bore or cable diameter (mm)  |  |            |            |            |              |                |                |                                      |  |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Not exceeding 150</th> <th style="width: 10%;">150 to 300</th> <th style="width: 10%;">300 to 450</th> <th style="width: 10%;">450 to 600</th> <th style="width: 10%;">600 to 900</th> <th style="width: 10%;">900 to 1,200</th> <th style="width: 10%;">1,200 to 1,500</th> <th style="width: 10%;">1,500 to 1,800</th> <th style="width: 10%;">Two pipes side by side each n.e. 150</th> <th style="width: 10%;">Three pipes side by side each n.e. 150</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> <th style="text-align: center;">C</th> <th style="text-align: center;">D</th> <th style="text-align: center;">E</th> <th style="text-align: center;">F</th> <th style="text-align: center;">G</th> <th style="text-align: center;">H</th> <th style="text-align: center;">I</th> <th style="text-align: center;">J</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td>03012</td> <td>Trench n.e. 1.50 m deep and average 0.25 m deep.....</td> <td>23.60</td> <td>34.50</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>36.10</td> <td>48.70</td> <td>03012</td> </tr> <tr> <td>03013</td> <td>Ditto average 0.50 m deep.....</td> <td>42.90</td> <td>62.10</td> <td>84.40</td> <td>115.80</td> <td>-</td> <td>-</td> <td>-</td> <td>66.10</td> <td>89.20</td> <td>03013</td> </tr> <tr> <td>03014</td> <td>Ditto average 0.75 m deep.....</td> <td>65.10</td> <td>84.10</td> <td>112.30</td> <td>152.70</td> <td>198.40</td> <td>-</td> <td>-</td> <td>92.60</td> <td>124.60</td> <td>03014</td> </tr> <tr> <td>03015</td> <td>Ditto average 1.00 m deep.....</td> <td>95.20</td> <td>110.30</td> <td>140.10</td> <td>182.80</td> <td>236.30</td> <td>307.60</td> <td>-</td> <td>119.20</td> <td>160.10</td> <td>03015</td> </tr> <tr> <td>03016</td> <td>Ditto average 1.25 m deep.....</td> <td>120.20</td> <td>143.50</td> <td>172.10</td> <td>213.30</td> <td>278.70</td> <td>363.50</td> <td>443.40</td> <td>155.70</td> <td>191.30</td> <td>03016</td> </tr> <tr> <td>03017</td> <td>Ditto average 1.50 m deep.....</td> <td>143.10</td> <td>169.60</td> <td>202.50</td> <td>250.20</td> <td>323.40</td> <td>418.20</td> <td>505.70</td> <td>598.60</td> <td>169.40</td> <td>207.20</td> <td>03017</td> </tr> <tr> <td>03018</td> <td>Trench 1.50 - 3.00 m deep and average 1.75 m deep.....</td> <td>167.00</td> <td>196.80</td> <td>234.20</td> <td>288.80</td> <td>370.50</td> <td>475.90</td> <td>571.50</td> <td>671.70</td> <td>215.70</td> <td>264.30</td> <td>03018</td> </tr> <tr> <td>03019</td> <td>Ditto average 2.00 m deep.....</td> <td>191.30</td> <td>224.30</td> <td>266.40</td> <td>327.80</td> <td>418.30</td> <td>534.80</td> <td>638.10</td> <td>746.10</td> <td>244.20</td> <td>299.20</td> <td>03019</td> </tr> <tr> <td>03020</td> <td>Ditto average 2.25 m deep.....</td> <td>219.60</td> <td>256.30</td> <td>303.00</td> <td>371.50</td> <td>470.90</td> <td>598.50</td> <td>710.00</td> <td>825.80</td> <td>284.60</td> <td>347.00</td> <td>03020</td> </tr> <tr> <td>03021</td> <td>Ditto average 2.50 m deep.....</td> <td>252.50</td> <td>292.90</td> <td>344.30</td> <td>420.10</td> <td>528.00</td> <td>667.30</td> <td>787.40</td> <td>910.80</td> <td>322.30</td> <td>392.10</td> <td>03021</td> </tr> <tr> <td>03022</td> <td>Ditto average 2.75 m deep.....</td> <td>277.50</td> <td>321.50</td> <td>377.80</td> <td>460.80</td> <td>578.10</td> <td>728.60</td> <td>857.40</td> <td>977.40</td> <td>354.40</td> <td>431.60</td> <td>03022</td> </tr> <tr> <td>03023</td> <td>Ditto average 3.00 m deep.....</td> <td>302.90</td> <td>350.80</td> <td>412.20</td> <td>502.90</td> <td>629.70</td> <td>792.60</td> <td>930.20</td> <td>1,069.60</td> <td>387.80</td> <td>472.50</td> <td>03023</td> </tr> <tr> <td>03024</td> <td>Trench 3.00 - 4.50 m deep and average 3.25 m deep.....</td> <td>337.20</td> <td>388.70</td> <td>455.30</td> <td>553.70</td> <td>690.50</td> <td>865.40</td> <td>1,012.00</td> <td>1,160.10</td> <td>429.40</td> <td>522.10</td> <td>03024</td> </tr> <tr> <td>03025</td> <td>Ditto average 3.50 m deep.....</td> <td>363.30</td> <td>418.80</td> <td>490.90</td> <td>597.30</td> <td>744.00</td> <td>931.60</td> <td>1,087.50</td> <td>1,244.00</td> <td>463.70</td> <td>564.30</td> <td>03025</td> </tr> <tr> <td>03026</td> <td>Ditto average 3.75 m deep.....</td> <td>389.80</td> <td>449.60</td> <td>526.90</td> <td>641.40</td> <td>798.10</td> <td>998.80</td> <td>1,164.20</td> <td>1,329.70</td> <td>498.50</td> <td>607.20</td> <td>03026</td> </tr> <tr> <td>03027</td> <td>Ditto average 4.00 m deep.....</td> <td>420.70</td> <td>484.60</td> <td>567.50</td> <td>690.30</td> <td>857.60</td> <td>1,071.20</td> <td>1,246.30</td> <td>1,420.80</td> <td>537.70</td> <td>654.60</td> <td>03027</td> </tr> <tr> <td>03028</td> <td>Ditto average 4.25 m deep.....</td> <td>448.00</td> <td>516.00</td> <td>604.70</td> <td>735.80</td> <td>913.70</td> <td>1,140.70</td> <td>1,325.60</td> <td>1,509.20</td> <td>573.30</td> <td>698.80</td> <td>03028</td> </tr> <tr> <td>03029</td> <td>Ditto average 4.50 m deep.....</td> <td>480.00</td> <td>552.70</td> <td>647.10</td> <td>787.50</td> <td>976.30</td> <td>1,217.50</td> <td>1,412.80</td> <td>1,606.00</td> <td>614.50</td> <td>748.70</td> <td>03029</td> </tr> </tbody> </table> |  |            |            |            |              |                |                |                                      |  |        |        | Not exceeding 150 | 150 to 300 | 300 to 450 | 450 to 600 | 600 to 900 | 900 to 1,200 | 1,200 to 1,500 | 1,500 to 1,800 | Two pipes side by side each n.e. 150 | Three pipes side by side each n.e. 150 | A | B | C | D | E | F | G | H | I | J | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | 03012 | Trench n.e. 1.50 m deep and average 0.25 m deep..... | 23.60 | 34.50 | - | - | - | - | - | 36.10 | 48.70 | 03012 | 03013 | Ditto average 0.50 m deep..... | 42.90 | 62.10 | 84.40 | 115.80 | - | - | - | 66.10 | 89.20 | 03013 | 03014 | Ditto average 0.75 m deep..... | 65.10 | 84.10 | 112.30 | 152.70 | 198.40 | - | - | 92.60 | 124.60 | 03014 | 03015 | Ditto average 1.00 m deep..... | 95.20 | 110.30 | 140.10 | 182.80 | 236.30 | 307.60 | - | 119.20 | 160.10 | 03015 | 03016 | Ditto average 1.25 m deep..... | 120.20 | 143.50 | 172.10 | 213.30 | 278.70 | 363.50 | 443.40 | 155.70 | 191.30 | 03016 | 03017 | Ditto average 1.50 m deep..... | 143.10 | 169.60 | 202.50 | 250.20 | 323.40 | 418.20 | 505.70 | 598.60 | 169.40 | 207.20 | 03017 | 03018 | Trench 1.50 - 3.00 m deep and average 1.75 m deep..... | 167.00 | 196.80 | 234.20 | 288.80 | 370.50 | 475.90 | 571.50 | 671.70 | 215.70 | 264.30 | 03018 | 03019 | Ditto average 2.00 m deep..... | 191.30 | 224.30 | 266.40 | 327.80 | 418.30 | 534.80 | 638.10 | 746.10 | 244.20 | 299.20 | 03019 | 03020 | Ditto average 2.25 m deep..... | 219.60 | 256.30 | 303.00 | 371.50 | 470.90 | 598.50 | 710.00 | 825.80 | 284.60 | 347.00 | 03020 | 03021 | Ditto average 2.50 m deep..... | 252.50 | 292.90 | 344.30 | 420.10 | 528.00 | 667.30 | 787.40 | 910.80 | 322.30 | 392.10 | 03021 | 03022 | Ditto average 2.75 m deep..... | 277.50 | 321.50 | 377.80 | 460.80 | 578.10 | 728.60 | 857.40 | 977.40 | 354.40 | 431.60 | 03022 | 03023 | Ditto average 3.00 m deep..... | 302.90 | 350.80 | 412.20 | 502.90 | 629.70 | 792.60 | 930.20 | 1,069.60 | 387.80 | 472.50 | 03023 | 03024 | Trench 3.00 - 4.50 m deep and average 3.25 m deep..... | 337.20 | 388.70 | 455.30 | 553.70 | 690.50 | 865.40 | 1,012.00 | 1,160.10 | 429.40 | 522.10 | 03024 | 03025 | Ditto average 3.50 m deep..... | 363.30 | 418.80 | 490.90 | 597.30 | 744.00 | 931.60 | 1,087.50 | 1,244.00 | 463.70 | 564.30 | 03025 | 03026 | Ditto average 3.75 m deep..... | 389.80 | 449.60 | 526.90 | 641.40 | 798.10 | 998.80 | 1,164.20 | 1,329.70 | 498.50 | 607.20 | 03026 | 03027 | Ditto average 4.00 m deep..... | 420.70 | 484.60 | 567.50 | 690.30 | 857.60 | 1,071.20 | 1,246.30 | 1,420.80 | 537.70 | 654.60 | 03027 | 03028 | Ditto average 4.25 m deep..... | 448.00 | 516.00 | 604.70 | 735.80 | 913.70 | 1,140.70 | 1,325.60 | 1,509.20 | 573.30 | 698.80 | 03028 | 03029 | Ditto average 4.50 m deep..... | 480.00 | 552.70 | 647.10 | 787.50 | 976.30 | 1,217.50 | 1,412.80 | 1,606.00 | 614.50 | 748.70 | 03029 |
| Not exceeding 150   | 150 to 300   | 300 to 450 | 450 to 600 | 600 to 900 | 900 to 1,200 | 1,200 to 1,500 | 1,500 to 1,800 | Two pipes side by side each n.e. 150 | Three pipes side by side each n.e. 150 |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| A   | B  | C          | D          | E          | F            | G              | H              | I                                    | J                                      |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| \$  | \$   | \$         | \$         | \$         | \$           | \$             | \$             | \$                                   | \$                                     |        |        |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03012   | Trench n.e. 1.50 m deep and average 0.25 m deep.....   | 23.60      | 34.50      | -          | -            | -              | -              | -                                    | 36.10                                  | 48.70  | 03012  |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03013   | Ditto average 0.50 m deep.....                         | 42.90      | 62.10      | 84.40      | 115.80       | -              | -              | -                                    | 66.10                                  | 89.20  | 03013  |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03014   | Ditto average 0.75 m deep.....                         | 65.10      | 84.10      | 112.30     | 152.70       | 198.40         | -              | -                                    | 92.60                                  | 124.60 | 03014  |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03015   | Ditto average 1.00 m deep.....                         | 95.20      | 110.30     | 140.10     | 182.80       | 236.30         | 307.60         | -                                    | 119.20                                 | 160.10 | 03015  |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03016   | Ditto average 1.25 m deep.....                         | 120.20     | 143.50     | 172.10     | 213.30       | 278.70         | 363.50         | 443.40                               | 155.70                                 | 191.30 | 03016  |                   |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03017   | Ditto average 1.50 m deep.....                         | 143.10     | 169.60     | 202.50     | 250.20       | 323.40         | 418.20         | 505.70                               | 598.60                                 | 169.40 | 207.20 | 03017             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03018   | Trench 1.50 - 3.00 m deep and average 1.75 m deep..... | 167.00     | 196.80     | 234.20     | 288.80       | 370.50         | 475.90         | 571.50                               | 671.70                                 | 215.70 | 264.30 | 03018             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03019   | Ditto average 2.00 m deep.....                         | 191.30     | 224.30     | 266.40     | 327.80       | 418.30         | 534.80         | 638.10                               | 746.10                                 | 244.20 | 299.20 | 03019             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03020   | Ditto average 2.25 m deep.....                         | 219.60     | 256.30     | 303.00     | 371.50       | 470.90         | 598.50         | 710.00                               | 825.80                                 | 284.60 | 347.00 | 03020             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03021   | Ditto average 2.50 m deep.....                         | 252.50     | 292.90     | 344.30     | 420.10       | 528.00         | 667.30         | 787.40                               | 910.80                                 | 322.30 | 392.10 | 03021             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03022   | Ditto average 2.75 m deep.....                         | 277.50     | 321.50     | 377.80     | 460.80       | 578.10         | 728.60         | 857.40                               | 977.40                                 | 354.40 | 431.60 | 03022             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03023   | Ditto average 3.00 m deep.....                         | 302.90     | 350.80     | 412.20     | 502.90       | 629.70         | 792.60         | 930.20                               | 1,069.60                               | 387.80 | 472.50 | 03023             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03024   | Trench 3.00 - 4.50 m deep and average 3.25 m deep..... | 337.20     | 388.70     | 455.30     | 553.70       | 690.50         | 865.40         | 1,012.00                             | 1,160.10                               | 429.40 | 522.10 | 03024             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03025   | Ditto average 3.50 m deep.....                         | 363.30     | 418.80     | 490.90     | 597.30       | 744.00         | 931.60         | 1,087.50                             | 1,244.00                               | 463.70 | 564.30 | 03025             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03026   | Ditto average 3.75 m deep.....                         | 389.80     | 449.60     | 526.90     | 641.40       | 798.10         | 998.80         | 1,164.20                             | 1,329.70                               | 498.50 | 607.20 | 03026             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03027   | Ditto average 4.00 m deep.....                         | 420.70     | 484.60     | 567.50     | 690.30       | 857.60         | 1,071.20       | 1,246.30                             | 1,420.80                               | 537.70 | 654.60 | 03027             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03028   | Ditto average 4.25 m deep.....                         | 448.00     | 516.00     | 604.70     | 735.80       | 913.70         | 1,140.70       | 1,325.60                             | 1,509.20                               | 573.30 | 698.80 | 03028             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |
| 03029   | Ditto average 4.50 m deep.....                         | 480.00     | 552.70     | 647.10     | 787.50       | 976.30         | 1,217.50       | 1,412.80                             | 1,606.00                               | 614.50 | 748.70 | 03029             |            |            |            |            |              |                |                |                                      |  |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |       |  |       |       |   |   |   |   |   |       |       |       |       |                                |       |       |       |        |   |   |   |       |       |       |       |                                |       |       |        |        |        |   |   |       |        |       |       |                                |       |        |        |        |        |        |   |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |  |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |        |        |        |       |       |                                |        |        |        |        |        |        |        |          |        |        |       |       |  |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |        |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |       |                                |        |        |        |        |        |          |          |          |        |        |       |

| Item  | Item              |
|---|-------------------|
| <b>EXCAVATING IN BRICKWORK, CONCRETE, ROCK, ETC.</b>  |                   |
| <i>Per cubic metre</i>  |                   |
| 03030 Extra over either of Items 03007 to 03029 inclusive for excavating in chunam surfacing, cement rendering, masonry, brickwork, blockwork, bituminous surfacing, etc. and the like.....   | A<br>\$<br>45.40  |
| 03031 Ditto for excavating in plain concrete foundations, surface beds, etc.....  | 159.30            |
| 03032 Ditto for excavating in reinforced concrete foundations, surface beds, etc., including cutting reinforcement.....   | 269.50            |
| 03033 Ditto for excavating in solid rock as described in Special Conditions Clause SC03.09.....   | 325.30            |
| 03034 Ditto for excavating in solid rock with non-explosive demolition agent.....<br>(Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)   | 510.40            |
| <b>SOIL FILLING</b>   |                   |
| <i>Per cubic metre</i>  |                   |
| 03035 Return, fill in and compact suitable excavated materials around foundations, etc., and the like.....  | A<br>\$<br>45.80  |
| 03036 Wheel, spread, level and compact suitable excavated materials in layers as filling to make up level.....  | 44.70             |
| 03037 Approved suitable filling materials including both general filling material or special filling material as G.S. Items 3.01(vii), (viii) and (ix) brought to Site from Contractor's own source, wheel, spread, level and compact in layers as filling around foundations, etc. and the like..... | 114.30            |
| 03038 Ditto but as filling to make up level.....<br>(Note : - The above Items 03037 to 03038 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   | 101.30            |
| <b>REMOVAL</b>  |                   |
| <i>Per cubic metre</i>  |                   |
| 03039 Load surplus or unsuitable excavated material and remove from Site.....   | A<br>\$<br>165.70 |
| 03040 Load spoil, debris, rubbish, etc., and the like not arising from the works and remove from Site.....<br>(Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing and the quantity agreed before removal commences.)   | 183.50            |
| <b>GRANULAR FILLING</b>   |                   |
| <i>Per cubic metre</i>  |                   |
| 03041 Wheel, spread, level and compact sand / fine aggregate in layers including blinding top surface with approved fine filling material.....  | A<br>\$<br>151.60 |
| 03042 Wheel, spread, level and compact granular filling of size 75 - 150 mm coarse aggregate in layers including blinding top surface with approved fine filling material.....  | 208.80            |
| 03043 Ditto but filling behind retaining walls.....   | 220.10            |

| Item   | Item   |
|--|--------|
| <b>HARDCORE FILLING</b>  |        |
| Hardcore size : not exceeding 150 mm in single or multi-graded size(s)   |        |
| <i>Per cubic metre</i>   |        |
| 03044  | 03044  |
| Wheel, spread, level and compact hardcore in beds under floors, pavings, etc., and the like in layers n.e. 150 mm thick including blind top surface with approved fine filling material.....   | 288.60 |
| 03045  | 03045  |
| Ditto but in layers filled in behind retaining walls including hand packing where necessary.....   | 301.80 |
| <b>FILTER MEMBRANE</b>   |        |
| Supply and lay thermally bonded non-woven filter membrane complying with the following specification : -   |        |
| <i>Per square metre</i>  |        |
| 03046  | 03046  |
| Filter membrane with pore size $\leq 300\mu\text{m}$ ; permeability (at 5cm head) $\leq 150 \text{ l/m}^2.\text{s}$ ; wide width strip tensile strength $\geq 3.0 \text{ kN/m}$ .....  | 15.80  |
| 03047  | 03047  |
| Ditto but with pore size $\leq 180\mu\text{m}$ ; permeability (at 5cm head) $\leq 130 \text{ l/m}^2.\text{s}$ ; wide width strip tensile strength $\geq 6.0 \text{ kN/m}$ .....  | 17.40  |
| 03048  | 03048  |
| Ditto but with pore size $\leq 150\mu\text{m}$ ; permeability (at 5cm head) $\leq 100 \text{ l/m}^2.\text{s}$ ; wide width strip tensile strength $\geq 8.0 \text{ kN/m}$ .....  | 21.10  |
| 03049  | 03049  |
| Ditto but with pore size $\leq 125\mu\text{m}$ ; permeability (at 5cm head) $\leq 75 \text{ l/m}^2.\text{s}$ ; wide width strip tensile strength $\geq 12.5 \text{ kN/m}$ .....  | 23.10  |
| 03050  | 03050  |
| Ditto but with pore size $\leq 110\mu\text{m}$ ; permeability (at 5cm head) $\leq 65 \text{ l/m}^2.\text{s}$ ; wide width strip tensile strength $\geq 14.5 \text{ kN/m}$ .....  | 28.00  |
| <b>MISCELLANEOUS ITEMS</b>   |        |
| <i>Per linear metre</i>  |        |
| 03051  | 03051  |
| Clear and clean out mud, debris and the like from rainwater channel, earth ditch and/or culvert with waterway in sectional area n.e. 0.10 m <sup>2</sup> including raising and afterward replacing any channel cover, cutting back any vegetation alongside and removing all debris from Site..... | 7.40   |
| 03052  | 03052  |
| Ditto but 0.10 to 0.20 m <sup>2</sup> .....  | 11.10  |
| 03053  | 03053  |
| Add to Item 03052 for each additional 0.10 m <sup>2</sup> or part thereof sectional area.....  | 2.20   |
| 03054  | 03054  |
| Clean out eaves gutter at any height and removing all debris from Site.....<br>(Note : - This item will not be paid for if the gutter is required to be painted.)  | 4.40   |

| Item   | Item                |
|--|---------------------|
| <b>MISCELLANEOUS ITEMS (CONT'D)</b>  |                     |
| <i>Each</i>  |                     |
| 03055 Clear out mud, vegetation, debris and the like from weep hole approximately 600 mm deep from slopes, retaining walls, etc. and removing all debris from Site.....  | A<br>\$<br>4.40     |
| 03056 Rod out, clear and clean choked drain run including trap, gully, or manhole at either end, raising and afterward replacing any covers and removing all debris from Site.....   | 71.30               |
| 03057 Ditto but choked soil, waste or rainwater down pipe including heads, bends and other fittings.....   | 72.60               |
| 03058 Ditto but choked trap or soil or waste branch pipe to bath, W.C., basin, sink and other sanitary fittings.....   | 37.30               |
| 03059 Clear out mud, vegetation, debris and the like from catch pit n.e. 0.30 m <sup>3</sup> internally, raising and afterward replacing any covers and removing all debris from Site.....   | 50.70               |
| 03060 Add to Item 03059 for each additional 0.15 m <sup>3</sup> or part thereof internally.....  | 22.10               |
| 03061 Supply sackcloth or nylon sandbag n.e. 0.10 m <sup>3</sup> and excavate ordinary dry earth free from stones, etc., on Site and filled bag with dry earth or clean sand either from Site or from Contractor's own source and place in position..... | 22.10               |
| 03062 Add to Item 03061 for mixing 10% cement with the dry earth or sand before filling into the bag.....  | 7.10                |
| <b>UTILITY CONNECTION AND PAVEMENT WORKS</b>   |                     |
| <i>Per item</i>  |                     |
| 03063 Lump sum fee for Utility Connection And Pavement Works.....<br>(Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)  | A<br>\$<br>9,300.00 |

**Section 04**

**CONCRETE WORK**

## SECTION 04

### CONCRETE WORK

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Measurement of concrete</b>                                  | <b>SC04.01</b> | <p>Concrete shall be measured net as laid or cast.</p> <p>No deduction shall be made for : -</p> <p>(a) Voids not exceeding 0.05 m<sup>3</sup>.</p> <p>(b) The volume of reinforcement, steel joists, stanchions and the like cast in.</p> <p>(c) Openings in walls, floors, roof slabs and the like not exceeding 0.10 m<sup>2</sup>.</p>  |
| <b>Measurement of cutting and taking down existing concrete</b> | <b>SC04.02</b> | <p>Measurements of cutting and taking down existing concrete shall include the thickness of any plastering, rendering or other finish on the surface of concrete.</p> <p>The items contained in this Section shall only apply to alterations. Any demolition works with respect to whole or part of a building shall be measured separately and paid for at appropriate rates under Section 02 - Demolition of this Schedule.</p>   |
| <b>Measurement of formwork</b>                                  | <b>SC04.03</b> | <p>Formwork shall be measured as the actual surface in contact with concrete. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>. Boxing for opening exceeding 1.00 m<sup>2</sup> shall be measured as edges. Wrot formwork shall be measured only when a fair finished face to the concrete is specifically ordered by the Maintenance Surveyor in writing.</p>  |
| <b>Measurement of reinforcement</b>                             | <b>SC04.04</b> | <p>Reinforcement shall be measured net as fixed. No allowance shall be made in the weight for rolling margin. The weight of reinforcement shall be calculated in accordance with the weight per linear metre in Table 7 of Annex 'C' - Tables of Metal Weights, etc. to this Schedule (regardless of the actual weight).</p> <p>Fabric reinforcement shall be measured the net area covered excluding laps. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>.</p> |
| <b>Measurement of underlays</b>                                 | <b>SC04.05</b> | <p>Underlays shall be measured net as laid excluding laps. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>.</p>  |
| <b>Measurement of precast concrete</b>                          | <b>SC04.06</b> | <p>Precast concrete shall be measured the actual size of the item casted. Any plasterwork shall be excluded in the measurement and it will be separately measured and paid for at appropriate rates under relevant Sections of this Schedule.</p>   |
| <b>Measurement of movement joints</b>                           | <b>SC04.07</b> | <p>Movement joints for structural concrete works, including concrete roads and pavings, shall be separately measured.</p>   |

### SPECIAL CONDITIONS

**Measurement of movement joints (Cont'd)**

**SC04.07 (Cont'd)**

Movement joints for roofing, finishes and other non-structural elements, except repointing of movements joints for repair and replacement, shall be deemed to be included in the rates of the items in the respective Sections.

Repointing of movement joints for roofing, finishes and other non-structural elements for repair and replacement shall be separately measured.

**Rates for concrete generally**

**SC04.08**

The rates for all concrete shall generally include for : -

- (a) Mobilization, maintenance and demobilization of concrete mixer, tower crane, mobile crane, hoist, concrete pump, vibrator and other plant necessary for the works.
- (b) Conveying, lowering, hoisting, pumping, placing in position, compacting with vibrator, curing and protection.
- (c) Formwork to sides or edges of plain concrete.
- (d) Construction joints including formwork, water bars and waterstops.
- (e) Laying beds level or to falls, and laying beds or slabs in alternative bays including necessary formwork to joints between bays.
- (f) Finishing surfaces level or to falls, currents and cambers as required, and to receive pavings unless otherwise specifically stated.
- (g) Casting kickers monolithically with base slab where these are required at base of walls and columns.
- (h) Forming all necessary sinkings in or handpacking of hardcore.
- (i) Forming or cutting all chases, grooves, notches, rebates, mortices, holes, grouting in ends with cement mortar including making good to match existing.
- (j) Forming all angles, ends, junctions, intersections, outlets and similar labours to curbs, channels and the like.
- (k) Casting in, building in and grouting in work to concrete inserts, puddle flanges, water stops, ducts and pipes, bolts and cramps, dowels, baluster ends and the like and making good.
- (l) Giving adequate notice to the Maintenance Surveyor to permit inspection of relevant part of the structure before concrete is placed and prior to commencing concreting after approval has been obtained from the Maintenance Surveyor.
- (m) Submission of samples and testing of materials before trial mix or making concrete for use in the works.
- (n) Carrying out trial mixes, sampling and testing on the same.
- (o) Carrying out tests including making concrete cubes and testing on the same including all necessary security handling of concrete cube.



## SPECIAL CONDITIONS

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for concrete generally (Cont'd)</b> | <b>SC04.08 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(p) Sampling of fresh concrete and finished concrete including taking core samples as required from the finished concrete works and tests on the same including all necessary security handling of core samples.</li> <li>(q) Filling core hole, tie bar holes with cement mortar or concrete of same strength to the parent concrete and making good.</li> <li>(r) Providing method statement for the replacement of condemned concrete and any remedial works which may be supervised by a Registered Structural Engineer.</li> <li>(s) All labours and equipment required at the specified locations including any necessary hoisting, craneage, scaffolding and temporary platforms, etc. for making test cores.</li> <li>(t) Removing from Site any concrete work failed to conform to the Specification.</li> <li>(u) Recording and submitting records for ready-mixed concrete.</li> <li>(v) Submitting details of mix design.</li> <li>(w) Control of alkali-aggregate reaction in concrete.</li> <li>(x) Use of recycled aggregate and/or recycled water in concrete, when required.</li> </ul> |
| <b>Rates for plain concrete</b>              | <b>SC04.09</b>          | <p>The rates for plain concrete shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Erecting, maintaining and removing formwork or falsework as required.</li> <li>(b) Additional volume of concrete for filling over-break or working space.</li> </ul>   |
| <b>Rates for reinforced concrete</b>         | <b>SC04.10</b>          | <p>The rates for reinforced concrete shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Tamping around reinforcement.</li> </ul>  |
| <b>Rates for reinforcement</b>               | <b>SC04.11</b>          | <p>The rates for reinforcement shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Cleaning, cutting to length, bending (including cranks and hooked ends), hoisting, fixing and securely supporting in the required position.</li> <li>(b) Plastic cover spacers, spacer blocks, steel spacer rods, steel clips, steel chairs and annealed iron tying wire or tack welding.</li> <li>(c) Sampling and testing including stock management on Site and removal of non-compliant re-bars.</li> <li>(d) Extra fabric reinforcement at laps.</li> <li>(e) Provision of test certificates.</li> <li>(f) Submission of bar bending schedule.</li> </ul>  |

**SPECIAL CONDITIONS**

|   |                |   |
|---|----------------|---|
| <b>Rates for epoxy coating to reinforcement</b> | <b>SC04.12</b> | The rates for epoxy coating to reinforcement shall further include for compliance with the Specification.   |
| <b>Rates for formwork</b>                       | <b>SC04.13</b> | <p>The rates for formwork shall include for : -</p> <ul style="list-style-type: none"><li>(a) Submission of design on formwork and falsework including supports and foundations, and where required, by a Registered Structural Engineer.</li><li>(b) Erecting, maintaining and striking formwork and falsework.</li><li>(c) Preventing loss of grout between joints.</li><li>(d) Fixing inserts and chases.</li><li>(e) Boxing out to form holes not exceeding 1.00 m<sup>2</sup>.</li><li>(f) Preparing and applying surface retarders and release agents as required.</li><li>(g) Multi-handling of removing formwork and falsework when striking without overloading the finished concrete work.</li><li>(h) Preparing and applying wood preservatives to all surfaces of left-in timber formwork.</li><li>(i) Forming cambers and falls.</li><li>(j) Individual fillets, chambers, splays, drips, rebates, recesses, grooves and the like, not exceeding 100 mm total girth measured on the faces in contact with the concrete.</li><li>(k) Strutting to soffits at any height.</li><li>(l) Soffits of solid slabs in any thickness.</li><li>(m) Sides and soffits of beams in any depth.</li><li>(n) In case of formwork materials proposed by the Contractor, all necessary preparation work other than spatterdash.</li></ul> |
| <b>Rates for precast concrete</b>               | <b>SC04.14</b> | <p>The rates for precast concrete items shall include for : -</p> <ul style="list-style-type: none"><li>(a) Conveying, lowering, hoisting and multi-handling within the Site or other locations as required.</li><li>(b) All moulds, formwork, etc. including chamfers, throats, weathering, splayed edges, rounded tops and the like.</li><li>(c) Fixing or laying, jointing and pointing in position including cement mortar.</li><li>(d) Providing and fixing of steel reinforcement.</li></ul>  |

**SPECIAL CONDITIONS**

**Rates for surface treatment to concrete**

- SC04.15** The rates for surface treatment to concrete surface shall include for : -
- (a) Preparing plastered or unplastered surfaces ready to receive surface treatment including making good cracks with cement mortar.
  - (b) Cleaning grease or other contaminations.
  - (c) Forming fillets with cement mortar at junction between slabs and walls.
  - (d) Carrying out the works all in accordance with the manufacturer's instructions.

**Rates for cutting and taking down existing concrete**

- SC04.16** The rates for cutting and taking down existing concrete shall include for : -
- (a) Cutting, saw cutting, taking down and clearing away existing concrete by hand or mechanical plant or both.
  - (b) Providing all necessary supports, props, struts and shores during taking down period or until the stability of the affected works is approved by the Maintenance Surveyor.
  - (c) Providing all necessary protection as required.
  - (d) Trimming, bending, straightening and cleaning of reinforcement for connection of new reinforcement as required.
  - (e) Providing keys for bonding of new surface.
  - (f) Preparing and applying bonding agent or primer as required.
  - (g) Making good all structures, surfaces and finishings disturbed to match existing.
  - (h) Submission of method statements for approval.
  - (i) Submission of records as required.

**Rates for cutting chases, sinking, etc.**

- SC04.17** The rates for cutting chases, sinking, grooves, holes and the like shall include for : -
- (a) Cutting and clearing away from Site existing concrete by hand or mechanical plant or both.
  - (b) Making good all structures, surfaces and finishings disturbed to match existing.

**Rates for diamond coring to existing concrete**

- SC04.18** The rates for diamond coring to existing concrete shall include for : -
- (a) Mobilization, maintenance and demobilization of coring plant and other mechanical plants necessary for the works.
  - (b) Coring through existing concrete or reinforced concrete walls, floors, slabs, roofs and the like including any finishes.
  - (c) Providing temporary water and power supplies and working platform as required.

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for diamond coring to existing concrete (Cont'd)</b> | <b>SC04.18 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(d) Making good all structures, surfaces and finishings disturbed to match existing.</li> <li>(e) Clearing away all debris arose.</li> </ul>  |
| <b>Rates for underlay</b>                                     | <b>SC04.19</b>          | <p>The rates for underlay shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Allowance for laps.</li> </ul>  |
| <b>Rates for forming movement joints generally</b>            | <b>SC04.20</b>          | <p>The rates for movement joints shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Supply of movement joint components including but not be limited to water stops, joint filler, bond breaker, back-up materials and sealants, all of which shall be of an approved proprietary make, as stated in G.S. Item 6.61.</li> <li>(b) Provision of non-acidic and anti-mould sealants.</li> <li>(c) Installation of movement joints strictly as specified in the Contract and in accordance with the manufacturer's recommendations.</li> <li>(d) Prior to applying joint sealants, keeping the edges of the joints true and free from cracks, spalling and other imperfections, and keeping the joints clean, dry and free from dust or grease.</li> <li>(e) Fixing joint filler to concrete with a bituminous adhesive prior to casting adjoining bay.</li> <li>(f) Pressing and finishing all sealants with a smooth regular surface.</li> <li>(g) Provision of warranty as specified in the Contract.</li> </ul> |
| <b>Rates for rebound hammer tests</b>                         | <b>SC04.21</b>          | <p>The rates for rebound hammer tests shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Mobilization, maintenance and demobilization of all necessary mechanical plants and instruments necessary for the works.</li> <li>(b) Preparing test areas including removing loose mortar and the like before test.</li> <li>(c) Providing temporary working platform and protection as required.</li> <li>(d) Recording and submitting records and test reports.</li> </ul>   |
| <b>Quality assurance for structural concrete</b>              | <b>SC04.22</b>          | <p>All structural concrete shall be produced and supplied in accordance with the Quality Assurance requirement for Structural Concrete as stated in the Contract.</p>  |

| Item   |   |          |          |          |          |                 | Item            |                 |                 |                 |                 |
|--|---|----------|----------|----------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>PLAIN CONCRETE</b>  |   |          |          |          |          |                 |                 |                 |                 |                 |                 |
|  |   |          |          |          |          | Concrete Grade  |                 |                 |                 |                 |                 |
|  |   |          |          |          |          | 10P             | 20P             | 30P             |                 |                 |                 |
|  |   |          |          |          |          | A               | B               | C               |                 |                 |                 |
|  |   |          |          |          |          | \$              | \$              | \$              |                 |                 |                 |
| <i>Per cubic metre</i>   |   |          |          |          |          |                 |                 |                 |                 |                 |                 |
| 04001  | Mass filling, packing, thickening and the like.....         |          |          |          |          | 1,090.70        | 1,107.30        | 1,118.50        | 04001           |                 |                 |
| 04002  | Foundations.....  |          |          |          |          | 1,112.10        | 1,128.80        | 1,139.90        | 04002           |                 |                 |
| 04003  | Beds, paving slabs and the like.....                        |          |          |          |          | 1,112.10        | 1,128.80        | 1,139.90        | 04003           |                 |                 |
| 04004  | Blinding under foundations.....                             |          |          |          |          | 1,112.10        | 1,128.80        | 1,139.90        | 04004           |                 |                 |
| 04005  | Curbs, upstands, plinths and the like.....                  |          |          |          |          | 1,169.70        | 1,186.30        | 1,197.40        | 04005           |                 |                 |
| <b>REINFORCED CONCRETE</b>   |   |          |          |          |          |                 |                 |                 |                 |                 |                 |
|  |   |          |          |          |          | Concrete Grade  |                 |                 |                 |                 |                 |
|  |   |          |          |          |          | 20MPa<br>or 20D | 25MPa<br>or 25D | 30MPa<br>or 30D | 35MPa<br>or 35D | 40MPa<br>or 40D | 45MPa<br>or 45D |
|  |   |          |          |          |          | A               | B               | C               | D               | E               | F               |
|  |   |          |          |          |          | \$              | \$              | \$              | \$              | \$              | \$              |
| <i>Per cubic metre</i>   |   |          |          |          |          |                 |                 |                 |                 |                 |                 |
| 04006  | Foundations, isolated and attached bases and the like ..... | 1,196.70 | 1,197.80 | 1,225.30 | 1,269.30 | 1,311.90        | 1,360.60        |                 |                 |                 | 04006           |
| 04007  | Ground beams, tie beams and the like.....                   | 1,212.70 | 1,213.80 | 1,241.30 | 1,285.30 | 1,328.00        | 1,376.70        |                 |                 |                 | 04007           |
| 04008  | Machine bases, thrust blocks and the like.....              | 1,220.80 | 1,221.90 | 1,249.40 | 1,293.40 | 1,336.00        | 1,384.70        |                 |                 |                 | 04008           |
| 04009  | Ground slabs or suspended slabs.....                        | 1,227.50 | 1,228.60 | 1,256.10 | 1,300.10 | 1,342.70        | 1,391.40        |                 |                 |                 | 04009           |
| 04010  | Sloping suspended slabs.....                                | 1,236.90 | 1,238.00 | 1,265.50 | 1,309.50 | 1,352.10        | 1,400.80        |                 |                 |                 | 04010           |
| 04011  | Walls.....  | 1,222.10 | 1,223.20 | 1,250.70 | 1,294.70 | 1,337.30        | 1,386.00        |                 |                 |                 | 04011           |
| 04012  | Retaining walls.....  | 1,234.20 | 1,235.30 | 1,262.80 | 1,306.80 | 1,349.40        | 1,398.10        |                 |                 |                 | 04012           |
| 04013  | Piers and columns.....                                      | 1,259.60 | 1,260.70 | 1,288.20 | 1,332.20 | 1,374.80        | 1,423.50        |                 |                 |                 | 04013           |
| 04014  | Beams.....  | 1,227.50 | 1,228.60 | 1,256.10 | 1,300.10 | 1,342.70        | 1,391.40        |                 |                 |                 | 04014           |
| 04015  | Fins and the like.....                                      | 1,227.50 | 1,228.60 | 1,256.10 | 1,300.10 | 1,342.70        | 1,391.40        |                 |                 |                 | 04015           |
| 04016  | Casings to structural steelwork.....                        | 1,259.60 | 1,260.70 | 1,288.20 | 1,332.20 | 1,374.80        | 1,423.50        |                 |                 |                 | 04016           |
| 04017  | Stairs.....   | 1,306.50 | 1,307.60 | 1,335.10 | 1,379.10 | 1,440.70        | 1,470.40        |                 |                 |                 | 04017           |
| 04018  | Curbs, upstands and the like.....                           | 1,227.50 | 1,228.60 | 1,256.10 | 1,300.10 | 1,342.70        | 1,391.40        |                 |                 |                 | 04018           |
| Extra over either of Items 04006 to 04018 inclusive for concrete in liquid retaining structures.....   |   |          |          |          |          |                 |                 |                 |                 |                 | 9%              |
| Extra over either of Items 04006 to 04018 inclusive for concrete with use of pulverized fuel ash ..... |   |          |          |          |          |                 |                 |                 |                 |                 | 2%              |
| Extra over either of Items 04006 to 04018 inclusive for concrete with recycled coarse aggregates.....  |   |          |          |          |          |                 |                 |                 |                 |                 | 9%              |

| Item  | Item  |     |    |          |
|---|---|-----|----|----------|
| <b>"NO FINES" CONCRETE</b>  |   |     |    |          |
| <i>Per cubic metre</i>  |   |     |    |          |
| 04019   | 04019   |     |    |          |
| No-fines concrete filling.....  | <table border="1"> <tr> <td>A</td> </tr> <tr> <td>\$</td> </tr> <tr> <td>973.80</td> </tr> </table>   | A   | \$ | 973.80   |
| A   |   |     |    |          |
| \$  |   |     |    |          |
| 973.80  |   |     |    |          |
| <b>LIGHTWEIGHT CONCRETE</b>   |   |     |    |          |
| <i>Per cubic metre</i>  |   |     |    |          |
| 04020   | 04020   |     |    |          |
| Cement and vermiculite (1:6) by volume or other approved lightweight concrete filling, thickening, insulation slabs and the like.....                       | <table border="1"> <tr> <td>A</td> </tr> <tr> <td>\$</td> </tr> <tr> <td>1,593.70</td> </tr> </table> | A   | \$ | 1,593.70 |
| A   |   |     |    |          |
| \$  |   |     |    |          |
| 1,593.70  |   |     |    |          |
| <b>STEEL REINFORCEMENT</b>  |   |     |    |          |
| <i>Per kg</i>   |   |     |    |          |
| 04021   | 04021   |     |    |          |
| Plain steel reinforcing bars n.e. 16 mm diameter.....   | <table border="1"> <tr> <td>A</td> </tr> <tr> <td>\$</td> </tr> <tr> <td>9.80</td> </tr> </table>     | A   | \$ | 9.80     |
| A   |   |     |    |          |
| \$  |   |     |    |          |
| 9.80  |   |     |    |          |
| 04022   | 04022   |     |    |          |
| Ditto exceeding 16 mm diameter.....   | 9.80  |     |    |          |
| 04023   | 04023   |     |    |          |
| Ribbed steel reinforcing bars 10 - 40 mm diameter.....  | 9.10  |     |    |          |
| 04024   | 04024   |     |    |          |
| Fabric reinforcement lapped at joints.....  | 13.00   |     |    |          |
| Extra over either of Items 04021 to 04024 inclusive for epoxy coating including handling, cutting and bending, sampling and testing (as Specification)..... |   |     |    |          |
| (Note : - The above item will only be paid for, if ordered by Maintenance Surveyor in writing.)   |   |     |    |          |
| <table border="1"> <tr> <td>60%</td> </tr> </table>   |   | 60% |    |          |
| 60%   |   |     |    |          |

| Item  |  |                  | Item             |
|-------|--|------------------|------------------|
|       | <b>FORMWORK</b>  |                  |                  |
|       |  | Sawn<br>formwork | Wrot<br>formwork |
|       |  | A<br>\$          | B<br>\$          |
|       | <i>Per square metre</i>  |                  |                  |
| 04025 | Vertical surfaces of foundations, ground beams, tie beams and the like.....  | 377.00           | -                |
| 04026 | Ditto but to casing of structural steelwork.....   | 411.30           | 418.30           |
| 04027 | Ditto but to machine base, thrust blocks and the like.....   | 403.40           | 410.40           |
| 04028 | Ditto but to piers, columns, stanchions and the like.....  | 416.60           | 423.60           |
| 04029 | Ditto but to fins and the like.....  | 411.30           | 418.30           |
| 04030 | Soffits of suspended slabs.....  | 385.20           | 392.20           |
| 04031 | Sloping soffits of suspended slabs.....  | 427.40           | 434.40           |
| 04032 | Vertical surfaces of walls.....  | 371.90           | 378.90           |
| 04033 | Battered surfaces of walls.....  | 411.30           | 418.30           |
| 04034 | Sides and soffits of beams.....  | 387.70           | 394.70           |
| 04035 | Casing of steel beams.....   | 385.20           | 392.20           |
| 04036 | Sloping soffits of stairs.....   | 427.40           | 434.40           |
| 04037 | Edges of curbs, upstands, slabs and the like exceeding 300 mm high.....  | 297.70           | 304.80           |
| 04038 | Forming upper surfaces sloping exceeding 15 degrees from horizontal.....   | 231.70           | 238.70           |
|       | <i>Per linear metre</i>  |                  |                  |
| 04039 | Edges, open strings or risers n.e. 100 mm wide.....  | 46.90            | 47.90            |
| 04040 | Ditto, 100 - 200 mm wide.....  | 82.00            | 84.00            |
| 04041 | Ditto, 200 - 300 mm wide.....  | 109.20           | 112.20           |
|       | Extra over either of Items 04025 to 04041 inclusive for formwork to produce rough board finish (as G.S. Item 6.73) ordered by the Maintenance Surveyor in writing..... | -                | 50%              |
|       | Extra over either of Items 04025 to 04041 inclusive for formwork to be left in position ordered by the Maintenance Surveyor in writing.....                            | 20%              | -                |
|       | Extra over either of Items 04025 to 04041 inclusive for formwork curved on plan or elevation to a radius on face n.e. 3.00 m.....                                      | 30%              | 30%              |
|       | Ditto but 3.00 - 15.00 m.....  | 15%              | 15%              |

| Item   |  | Concrete Grade                   |  | Item        |       |
|--|--|----------------------------------|--|-------------|-------|
|  |  | 20MPa<br>or 20D                  | 30MPa<br>or 30D                            |             |       |
|  |  | A<br>\$                          | B<br>\$                                    |             |       |
| <b>PRECAST REINFORCED CONCRETE</b>   |  |                                  |  |             |       |
| Precast reinforced concrete placed in position with mortar or cast into concrete : - |  |                                  |  |             |       |
|  |  |                                  |  |             |       |
|  | <i>Per cubic metre</i>   |                                  |  |             |       |
| 04042  | Cooking shelf, sink, partition, slabs and the like.....  | 3,011.30                         | 3,050.50                                   | 04042       |       |
| 04043  | Lintols, beams, rafters, struts and columns, cills, strings, copings, cornices, kerbs, pier caps, pit covers and the like..... | 2,742.20                         | 2,781.40                                   | 04043       |       |
| 04044  | Planters, refuse bins and the like.....  | 2,125.60                         | 2,164.80                                   | 04044       |       |
| 04045  | Fencing components, posts and the like.....  | 3,076.40                         | 3,115.50                                   | 04045       |       |
| 04046  | Ventilators, grilles, grille panelled walls and the like.....  | 2,876.80                         | 2,915.90                                   | 04046       |       |
|  |  |                                  |  |             |       |
|  |  | Take out<br>and<br>clear<br>away | Take out<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|  |  | A<br>\$                          | B<br>\$                                    | C<br>\$     |       |
| 04047  | Precast item laid or placed in position.....   | 147.70                           | 132.80                                     | 221.40      | 04047 |
| 04048  | Ditto but cast into concrete (measured separately) .....   | 206.70                           | 186.00                                     | 310.00      | 04048 |
| 04049  | Ditto built in or bedded in cement mortar .....  | 184.60                           | 166.80                                     | 277.50      | 04049 |
| <b>SURFACE TREATMENT TO CONCRETE</b>   |  |                                  |  |             |       |
|  |  |                                  |  |             |       |
|  | <i>Per square metre</i>  |                                  |  |             |       |
| 04050  | Treat surfaces with an approved liquid hardener to horizontal surfaces.....  |                                  |  | 27.20       | 04050 |
| 04051  | Ditto but to vertical or sloping surfaces.....   |                                  |  | 28.40       | 04051 |
| 04052  | Treat surfaces with carborundum grains to horizontal surfaces.....   |                                  |  | 14.10       | 04052 |
| 04053  | Ditto but vertical or sloping surfaces.....  |                                  |  | 15.20       | 04053 |



| Item  |   |                       | Item                |
|---|---|-----------------------|---------------------|
| <b>FINISHINGS AND SUNDRY LABOURS ON NEW CONCRETE</b>  |   |                       |                     |
| <i>Per square metre</i>   |   | A<br>\$               |                     |
| 04054   | Float surface fair and even with a wood float including any additional cement required .....  | 15.50                 | 04054               |
| 04055   | Trowel surface hard and smooth with a steel trowel including ditto .....  | 21.20                 | 04055               |
| 04056   | Score surface with parallel anti-slip grooves approximately 15 mm wide x 15 mm deep at 100 mm centres .....   | 28.40                 | 04056               |
| 04057   | Punch small anti-slip holes in surface approximately 15 mm deep at 150 mm centres staggered .....   | 12.70                 | 04057               |
| 04058   | Heavily tamp surface to form corrugated non-slip finish .....   | 11.30                 | 04058               |
| 04059   | Damp proof course of bitumen sprayed or brushed on surface at the rate of 0.50 litre/m <sup>2</sup> .....   | 26.50                 | 04059               |
| <i>Per linear metre</i>   |   |                       |                     |
| 04060   | Form channel n.e. 150 mm girth with rounded bottom finished to falls including angles, ends junctions, outlets, and similar labours and trowelling smooth ..... | 22.70                 | 04060               |
| 04061   | Ditto 150 - 300 mm girth .....  | 46.80                 | 04061               |
|   | Extra over either of Items 04060 and 04061 for forming channel curved on plan to a radius n.e. 3.00 m.....  | 15%                   |                     |
| <b>TAKING DOWN CONCRETE FOR ALTERATION WORKS</b>  |   |                       |                     |
| Note :-   |   |                       |                     |
| (i) The following Items 04062 and 04063 shall only apply to alteration works. All demolition works in respect of a whole or part of a building shall be measured and priced under Section 02 - Demolition of this Schedule. |   |                       |                     |
| (ii) Diamond coring shall only be measured separately if specifically ordered in writing by the Maintenance Surveyor.   |   |                       |                     |
| <i>Per cubic metre</i>  |   | Concrete of any grade |                     |
|   |   | Plain concrete        | Reinforced concrete |
|   |   | A<br>\$               | B<br>\$             |
| 04062   | Take down or break out and clear away concrete structural elements in any position n.e. 150 mm thick .....  | 419.00                | 505.30              |
| 04063   | Ditto exceeding 150 mm thick .....  | 470.70                | 570.80              |

| Item  | CUTTING AND SUNDRY LABOURS ON EXISTING CONCRETE   | Concrete of any grade |                     | Item  |
|-------|---|-----------------------|---------------------|-------|
|       |   | Plain concrete        | Reinforced concrete |       |
|       |   | A<br>\$               | B<br>\$             |       |
|       | <i>Per cubic metre</i>  |                       |                     |       |
| 04064 | Cut through wall, floor slab or similar, exceeding 0.05 m <sup>3</sup> for new door, window or other opening, or to enlarge existing opening, including trimming surfaces to receive new plaster or other finish (finishes measured separately) (net size of required opening measured) ..... | 505.30                | 591.60              | 04064 |
|       | <i>Per square metre</i>   |                       |                     |       |
| 04065 | Hack surface or edge to provide key for new concrete .....  | 11.30                 | -                   | 04065 |
| 04066 | Cut parallel anti-slip grooves approximately 15 mm wide x 15 mm deep at 100 mm centres and make good .....  | 28.40                 | -                   | 04066 |
| 04067 | Cut small anti-slip holes in surface approximately 15 mm deep at 150 mm centres staggered and make good.....  | 17.00                 | -                   | 04067 |
| 04068 | Cut into concrete floor all over n.e. 25 mm deep, trim and level surface to receive screed .....  | 18.40                 | -                   | 04068 |
| 04069 | Ditto but 25 - 50 mm deep.....  | 35.40                 | 46.80               | 04069 |
| 04070 | Add to Item 04069 for each additional 25 mm depth or part thereof in excess of 50 mm.....   | 18.40                 | 24.10               | 04070 |
| 04071 | Cut sinking exceeding 0.10 m <sup>2</sup> but n.e. 25 mm deep into surface, including trimming and making good back face and edges (net size of required sinking measured) .....  | 25.60                 | -                   | 04071 |
| 04072 | Ditto but 25 - 50 mm deep.....  | 42.60                 | 56.70               | 04072 |
| 04073 | Add to Item 04072 for each additional 25 mm depth or part thereof in excess of 50 mm.....   | 18.40                 | 24.10               | 04073 |
|       | <i>Per linear metre</i>   |                       |                     |       |
| 04074 | Cut chase, groove or rebate n.e. 0.0005 m <sup>2</sup> sectional area and make good, including pinning in and bedding and pointing edges of slabs, cills, steps, pipes, and similar items .....   | 18.40                 | 21.30               | 04074 |
| 04075 | Ditto 0.0005 - 0.01 m <sup>2</sup> sectional area .....   | 35.40                 | 46.80               | 04075 |
| 04076 | Cut channel n.e. 150 mm girth with rounded bottom finished to falls, and make good including rendering with 15 mm cement and sand (1:3) and forming all angles, ends, junctions, outlets and similar labours .....  | 36.80                 | 48.40               | 04076 |
| 04077 | Ditto but 150 - 300 mm girth .....  | 62.40                 | 73.90               | 04077 |
|       | Extra over either of Items 04074 to 04077 inclusive for cutting chase, groove, rebate or channel curved on plan to a radius n.e. 3.00 m.....  | 20%                   | 20%                 |       |
|       | Extra over either of Items 04074 to 04077 inclusive for cutting chase, groove, rebate or channel curved on plan to a radius 3.00 - 15.00 m.....   | 10%                   | 10%                 |       |

| Item  | Concrete of any grade  | Item    |
|---|--|---------|
|   | Plain concrete   |         |
|   | Reinforced concrete  |         |
|   | A<br>\$  | B<br>\$ |
| <b>CUTTING AND SUNDRY LABOURS ON EXISTING CONCRETE (CONT'D)</b>   |  |         |
| <i>Each</i>   |  |         |
| 04078   | Cut sinking n.e. 0.01 m <sup>2</sup> and 25 mm deep into surface including trimming and making good back face and edges (net size of required sinking measured) .....  | 04078   |
| 04079   | Add to Item 04078 for each additional 25 mm or part of 25 mm in depth .....  | 04079   |
| 04080   | Cut sinking as Item 04078 but 0.01 - 0.10 m <sup>2</sup> .....   | 04080   |
| 04081   | Add to Item 04080 for each additional 25 mm or part of 25 mm in depth .....  | 04081   |
| 04082   | Cut hole through concrete for pipe, air brick, access panel or similar article n.e. 0.0001 m <sup>3</sup> (net size of pipe or article measured) and grout or render around reveals in cement mortar (1:2) and make good one or both sides .....   | 04082   |
| 04083   | Ditto 0.0001 - 0.0002 m <sup>3</sup> .....   | 04083   |
| 04084   | Ditto 0.0002 - 0.002 m <sup>3</sup> .....  | 04084   |
| 04085   | Ditto 0.002 - 0.01 m <sup>3</sup> .....  | 04085   |
| 04086   | Ditto 0.01 - 0.05 m <sup>3</sup> .....   | 04086   |
| 04087   | Cut or drill mortice in existing concrete structure for dowel, end of baluster, bracket, fixing cramp, or similar article n.e. 0.0001 m <sup>3</sup> (net size of article for end measured) and grout in cement and sand (1:2) and make good ..... | 04087   |
| 04088   | Ditto 0.0001 - 0.0002 m <sup>3</sup> .....   | 04088   |
| <b>DIAMOND CORING ON EXISTING CONCRETE</b>  |  |         |
| <i>Per linear centimetre</i>  |  |         |
| 04089   | Core diameter n.e. 25 mm.....  | 04089   |
| 04090   | Ditto 25 - 50 mm.....  | 04090   |
| 04091   | Ditto 50 - 75 mm.....  | 04091   |
| 04092   | Ditto 75 - 100 mm.....   | 04092   |
| 04093   | Ditto 100 - 125 mm.....  | 04093   |
| 04094   | Ditto 125 - 150 mm.....  | 04094   |
| 04095   | Ditto 150 - 175 mm.....  | 04095   |
| 04096   | Ditto 175 - 200 mm.....  | 04096   |
| 04097   | Ditto 200 - 225 mm.....  | 04097   |
| 04098   | Ditto 225 - 250 mm.....  | 04098   |
| 04099   | Ditto 250 - 275 mm.....  | 04099   |
| 04100   | Ditto 275 - 300 mm.....  | 04100   |
| (Note : - The above Items 04089 to 04100 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.) |  |         |

| Item   |  |         | Item  |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
|--|--|---------|-------|-----------------------|--|--|--|------|-------|-------|-------|---|---|---|---|----|----|----|----|
| <b>MOVEMENT JOINTS</b>   |  |         |       |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| <i>Per linear metre</i>  |  | A<br>\$ |       |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04101  | Form horizontal or vertical movement joint through full thickness of slab or wall n.e. 75 mm thick including formwork to one edge, providing approved centre bulb type plastic water stop 150 mm (minimum) wide and casting in one edge, coating concrete edge with bitumen at the rate of 0.50 litre/m <sup>2</sup> or with approved proprietary primer at rate recommended by the manufacturer when formwork removed, supporting and casting in the other edge of the water stop to the abutting slab or wall, and forming cut and welded joints at all junctions of the water stop in accordance with the manufacturer's instructions ..... | 163.40  | 04101 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04102  | Add to Item 04101 for each additional 75 mm thickness, or part thereof, of slab or wall .....  | 14.90   | 04102 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04103  | Cover movement joint with approved "T" or "Y" section P.V.C. or rubber cover strip pressed firmly into the joint including forming groove in concrete or wall plaster and fixing clips at 300 mm centres .....   | 133.90  | 04103 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04104  | Thoroughly rake out existing mastic or sealant pointing to movement joint and enlarge groove in plaster, paving, concrete, etc., as necessary ready for re-pointing (measured separately) .....  | 6.80    | 04104 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="4">Filler thickness (mm)</th> </tr> <tr> <th>9.50</th> <th>12.50</th> <th>19.00</th> <th>25.00</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </tbody> </table> |  |         |       | Filler thickness (mm) |  |  |  | 9.50 | 12.50 | 19.00 | 25.00 | A | B | C | D | \$ | \$ | \$ | \$ |
| Filler thickness (mm)  |  |         |       |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 9.50   | 12.50  | 19.00   | 25.00 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| A  | B  | C       | D     |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| \$   | \$   | \$      | \$    |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| <i>Per linear metre</i>  |  |         |       |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04105  | Proprietary preformed rigid joint filler placed and supported in position against horizontal or vertical slab edge, wall end, etc., n.e. 75 mm thick, including splitting into two widths if necessary to accommodate plastic water stop (measured separately).....  | 6.60    | 04105 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04106  | Ditto 75 - 150 mm thick.....   | 10.80   | 04106 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04107  | Ditto 150 - 225 mm thick.....  | 15.00   | 04107 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |
| 04108  | Ditto 225 - 300 mm thick.....  | 16.50   | 04108 |                       |  |  |  |      |       |       |       |   |   |   |   |    |    |    |    |

Item

Item

**MOVEMENT JOINTS (CONT'D)**

Point horizontal or vertical joint with one of the following joint sealants as ordered or approved proprietary made including cleaning and preparing surfaces of joint to receive the sealant :-

*Per linear metre*

|   | Joint size (mm) |        |         |         |         |         |         |       |
|---|-----------------|--------|---------|---------|---------|---------|---------|-------|
|   | 5 x 15          | 5 x 25 | 15 x 15 | 15 x 25 | 15 x 50 | 25 x 25 | 25 x 50 |       |
|   | A               | B      | C       | D       | E       | F       | G       |       |
|   | \$              | \$     | \$      | \$      | \$      | \$      | \$      |       |
| 04109 General purpose, oil based standard grade mastic joint sealant of strong adhesion property and high durability, body of sealant to remain flexible under paintable skin which forms between 24-48 hours, sealant to give weathertight seal and for general pointing, bedding and joint sealant up to 20 mm wide.....  | 10.40           | 14.80  | 23.60   | 36.90   | 69.90   | -       | -       | 04109 |
| 04110 Cold applied, two part elastomeric polyurethane black sealant for joint in concrete paved area, self levelling, resistant to fuel, oil and hydraulic fluid spillage, to BS5212, tack free and accept traffic after 16-24 hours of application.....  | 8.80            | 12.30  | 19.10   | 29.50   | 54.90   | 45.80   | 90.30   | 04110 |
| 04111 Thermoplastic bitumen based black putty joint sealant, hot applied, for joint in water retaining structures including vertical and inclined joints of width up to 40 mm wide, weather resistant seal, resistant to bacteriological attack, for permanent immersion in water, joint surfaces to be primed with compatible primer from the same manufacturer and allowed to dry.....                                  | 11.30           | 15.70  | 24.60   | 38.50   | 72.40   | 61.00   | 118.20  | 04111 |
| 04112 Hot poured, black rubber bitumen horizontal joint sealant, for movement and construction joints of width up to 65 mm (non trafficking) in concrete pavements and floor slabs including water retaining structures, potable water tanks, strong adhesion to concrete and asphalt surfaces, resistant to grit, porous surfaces to be primed with compatible primer from the same manufacturer and allowed to dry..... | 8.70            | 11.60  | 17.00   | 25.20   | 45.80   | 38.90   | 73.30   | 04112 |
| 04113 Liquid polysulphide polymer joint sealant for sealing joints of 5-50 mm wide in brickwork, floors, retaining walls, basements and subways, with or without backing rod, including strong adhesion to most common substrates, to ISO11600:1993, BS4254 and ASTM C920-87, Type M, Class 25, surfaces to be primed with compatible primer from the same manufacturer as required.....                                  | 16.70           | 24.30  | 38.60   | 61.30   | 98.50   | 87.90   | 140.90  | 04113 |

Item

Item

**MOVEMENT JOINTS (CONT'D)**

| Joint size (mm) |        |         |         |         |         |         |
|-----------------|--------|---------|---------|---------|---------|---------|
| 5 x 15          | 5 x 25 | 15 x 15 | 15 x 25 | 15 x 50 | 25 x 25 | 25 x 50 |
| A               | B      | C       | D       | E       | F       | G       |
| \$              | \$     | \$      | \$      | \$      | \$      | \$      |
| 10.90           | 15.90  | 19.70   | 25.90   | 42.00   | 38.50   | 63.80   |

*Per linear metre*

|       |  |       |       |       |       |       |       |       |       |
|-------|--|-------|-------|-------|-------|-------|-------|-------|-------|
| 04114 | Point horizontal or vertical joint with approved epoxy mortar including cleaning and preparing surfaces of joint and priming surfaces with approved epoxy primer before applying epoxy mortar..... | 10.90 | 15.90 | 19.70 | 25.90 | 42.00 | 38.50 | 63.80 | 04114 |
|-------|--|-------|-------|-------|-------|-------|-------|-------|-------|

**REBOUND HAMMER TEST***Per item*

|       |  |  |  |  |  |  |  |                   |       |
|-------|--|--|--|--|--|--|--|-------------------|-------|
| 04115 | Carry out rebound hammer test on existing concrete surface in accordance with BS EN 12504-2 including setting up equipment, calibrating, carrying out test and submitting reports..... |  |  |  |  |  |  | A<br>\$<br>283.00 | 04115 |
|-------|--|--|--|--|--|--|--|-------------------|-------|

**UNDERLAYS***Per square metre*

|       |  |  |  |  |  |  |  |                 |       |
|-------|--|--|--|--|--|--|--|-----------------|-------|
| 04116 | Reinforced waterproof building paper laid on surfaces.....                         |  |  |  |  |  |  | A<br>\$<br>6.70 | 04116 |
| 04117 | Ditto but fixed to edges of slabs or tops of walls with and including mastic ..... |  |  |  |  |  |  | 12.20           | 04117 |
| 04118 | 0.08 mm Thick polythene sheet laid on surfaces.....                                |  |  |  |  |  |  | 8.10            | 04118 |
| 04119 | Ditto but fixed to edges of slabs or tops of walls with and including mastic ..... |  |  |  |  |  |  | 14.60           | 04119 |

**SUPPLY ONLY OF MATERIALS***Per cubic metre*

|       |                              |  |  |  |  |  |  |                   |       |
|-------|------------------------------|--|--|--|--|--|--|-------------------|-------|
| 04120 | 40 mm Granite aggregate..... |  |  |  |  |  |  | A<br>\$<br>119.20 | 04120 |
| 04121 | 20 mm Ditto.....             |  |  |  |  |  |  | 119.20            | 04121 |
| 04122 | Granite fines.....           |  |  |  |  |  |  | 152.20            | 04122 |
| 04123 | Sand.....                    |  |  |  |  |  |  | 184.00            | 04123 |

*Per 100 kg*

|       |                               |  |  |  |  |  |  |        |       |
|-------|-------------------------------|--|--|--|--|--|--|--------|-------|
| 04124 | Ordinary Portland cement..... |  |  |  |  |  |  | 79.30  | 04124 |
| 04125 | Coloured cement.....          |  |  |  |  |  |  | 156.00 | 04125 |

**Section 05**

**BRICKWORK AND BLOCKWORK**

## SECTION 05

### BRICKWORK AND BLOCKWORK

#### SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Measurement of brickwork and blockwork generally</b> | <b>SC05.01</b> | <p>Brickwork and blockwork shall generally be measured net as built. Where exceeding 225 mm or one brick thick, it shall be measured in cubic metres, and where 225 mm or one brick thick or less, it shall be measured in square metres. Flues and chimney breasts shall be measured solid. Apertures and voids for ranges, boilers, grates, cookers etc., shall be deducted. Deductions shall also be made for string courses, cills, lintols, etc., but only to the extent of a full brick course in height.</p> <p>No deduction shall be made for : -</p> <ul style="list-style-type: none"> <li>(a) Openings not exceeding 0.10 m<sup>2</sup>.</li> <li>(b) Flues not exceeding 0.25 m<sup>2</sup> in sectional area.</li> <li>(c) String courses, cills, lintols, etc., less than a full brick course in height.</li> </ul> <p>Apart from face work, no additional rate will be allowed for brickwork or blockwork curved on plan or built battered.</p> |
| <b>Measurement of facing brickwork</b>                  | <b>SC05.02</b> | <p>Facing brickwork shall be measured net over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like. Exposed surfaces of all fair axed arches shall not be deducted from the area of general facings and measured separately as "Extra over" general brickwork for arches.</p> <p>On no account will facing be measured where the work is to be plastered, rendered or otherwise covered up, or left rough as in trenches, backs, retaining walls and the like.</p>   |
| <b>Measurement of fair face to blockwork</b>            | <b>SC05.03</b> | <p>Fair face work shall be measured net as "Extra over" the general blockwork over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like.</p> <p>On no account will fair face work be measured where the work is to be plastered, rendered or otherwise covered up, or left rough as in trenches, backs, retaining walls and the like.</p>   |



## SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Measurement for cutting and sundry labours on existing brickwork and blockwork</b> | <b>SC05.04</b> | Measurement for cutting, etc., and sundry labours on existing brickwork and blockwork shall include the thickness of any plastering, rendering, or other finishes on both sides. In the case of taking down walls 300 mm thick and less, the net thickness of the brickwork or blockwork shall be stated.  |
| <b>Rates for brickwork and blockwork</b>  | <b>SC05.05</b> | <p>The rates for brickwork, blockwork and facings shall include for : -</p> <ul style="list-style-type: none"><li>(a) Rough and fair cuttings and bonding at angles, intersections, etc..</li><li>(b) Oversailing and receding courses.</li><li>(c) Rough relieving and discharging arches.</li><li>(d) Wedging and pinning.</li><li>(e) Raking out joints to form key.</li><li>(f) Raking out and enlarging joints, and cement or lime mortar pointing to flashings and the like.</li><li>(g) Bedding and pointing frames, plates and the like in cement or lime mortar.</li><li>(h) Eaves filling.</li><li>(i) Plumbing angles.</li><li>(j) Forming square or rebated reveals.</li><li>(k) Cutting squints, birdsmouths, splays, chamfers and the like.</li><li>(l) Leaving or cutting chases, notches, holes, mortices and the like, and grouting in ends, pipes and the like, and making good.</li><li>(m) Cutting and pinning ends and making good.</li><li>(n) Mild steel rod reinforcement or bonding rods painted with two coats of bituminous paint, galvanised mild steel fabric reinforcement and the like.</li><li>(o) Special bonding and tying for conduit installation.</li><li>(p) Bonding to existing work.</li></ul> |

## SPECIAL CONDITIONS

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for brickwork and blockwork (Cont'd)</b>                             | <b>SC05.05 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(q) Bonding to walls of different construction.</li> <li>(r) Protection to faced and fair faced work until completion of the Works.</li> <li>(s) Sundry items of like nature to any of the above.</li> <li>(t) Facing brickwork in all types of bond.</li> </ul>  |
| <b>Rates for blockwork</b>  | <b>SC05.06</b>          | <p>The rates for blockwork shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Special quoin blocks, plain reveal blocks, closers and the like.</li> <li>(b) In the case of hollow blocks, filling cavities solid with cement mortar at ends, opening reveals, intersections and similar positions if necessary.</li> </ul>   |
| <b>Rates for fire resisting lightweight concrete blocks</b>                   | <b>SC05.07</b>          | <p>The rates for fire resisting lightweight concrete blocks shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of test certificates and manufacturer's guarantee.</li> </ul>  |
| <b>Rates for recycled glass blocks</b>  | <b>SC05.08</b>          | <p>The rates for recycled glass blocks shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of test certificates.</li> </ul>  |
| <b>Rates for cutting and sundry labour on existing brickwork or blockwork</b> | <b>SC05.09</b>          | <p>The rates for cutting and sundry labour on existing brickwork or blockwork shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Cutting opening, cutting chase or rebate, cutting hole or sinking, cutting or drilling mortice and similar labour through all types of brickwork and/or blockwork.</li> <li>(b) Removal from the Site of all debris and materials arising from the cutting and labour operations.</li> <li>(c) Removal of all related plastering, rendering or other finishes on one or both sides of brickwork or blockwork.</li> <li>(d) Making good any disturbed surfaces and existing surfaces.</li> </ul> |
| <b>Rates for cutting chases, sinkings, etc.</b>                               | <b>SC05.10</b>          | <p>The rates for cutting chases, sinkings, grooves, rebates, holes and the like shall include for removing debris and making good any existing finish.</p>   |
| <b>Glass blocks</b>   | <b>SC05.11</b>          | <p>Glass block panelling can be found in Section 14 - Glazing of this Schedule.</p>  |

| Item   | A<br>S   | Item  |
|--|----------|-------|
| <b>GENERAL BRICKWORK</b>   |          |       |
| Note : - The nominal size of standard brick is 225 x 112.5 x 75 mm.<br>Thus nominal thickness of : - One brick wall is 225 mm thick.<br>Half brick wall is 112.5 mm thick.<br>Brick on edge wall is 75 mm thick. |          |       |
| Brickwork built in cement/lime mortar or cement mortar : -   |          |       |
| <i>Per cubic metre</i>   |          |       |
| 05001  | 1,055.10 | 05001 |
| Solid brickwork exceeding one brick thick.....   |          |       |
| <i>Per square metre</i>  |          |       |
| 05002  | 98.90    | 05002 |
| Brick-on-edge wall.....  |          |       |
| 05003  | 79.80    | 05003 |
| Ditto built honeycomb.....   |          |       |
| 05004  | 106.70   | 05004 |
| Half brick wall.....   |          |       |
| 05005  | 88.80    | 05005 |
| Ditto built honeycomb.....   |          |       |
| 05006  | 194.30   | 05006 |
| One brick wall.....  |          |       |
| 05007  | 244.70   | 05007 |
| One brick staining to wall.....  |          |       |
| 05008  | 241.70   | 05008 |
| Ditto with mortar bed joints but open vertical joints.....   |          |       |
| 05009  | 107.60   | 05009 |
| Half brick lining to stone or concrete wall bonded to same with and including flushing up solid between the brick wall and stone or concrete with mortar.....  |          |       |
| 05010  | 196.40   | 05010 |
| One brick lining ditto.....  |          |       |
| <i>Per linear metre</i>  |          |       |
| 05011  | 45.70    | 05011 |
| Brick-on-edge coping, upstand kerb or similar 75 mm wide including angles and ends.....  |          |       |
| 05012  | 70.80    | 05012 |
| Ditto but 225 mm wide.....   |          |       |
| <i>Per square metre</i>  |          |       |
| 05013  | 15.90    | 05013 |
| Form cavity between brick walls, including providing and building in wall ties in accordance with G.S. items 9.11 and 9.36.....  |          |       |

| Item                    |  | Internal girth (m) |                |                | Item  |
|-------------------------|--|--------------------|----------------|----------------|-------|
|                         |  | n.e.<br>0.90       | 0.90 -<br>1.35 | 1.35 -<br>1.80 |       |
|                         |  | A<br>\$            | B<br>\$        | C<br>\$        |       |
| <b>BRICK PITS</b>       |  |                    |                |                |       |
|                         | <i>Each</i>  |                    |                |                |       |
| 05014                   | Small pit for stop-cock, etc., n.e. 300 mm deep internally constructed of 75 mm thick concrete Grade 10P base extending to outside face of sides and trowelled smooth and half brick sides in cement mortar finished fair and pointed, or rendered in 15 mm cement and sand (1:3) internally, including all excavation, disposal and formwork (cover measured separately)..... | 78.70              | 106.00         | 127.00         | 05014 |
| 05015                   | Ditto 300 - 600 mm deep internally.....  | 100.00             | 141.00         | 173.00         | 05015 |
| 05016                   | Ditto 600 - 900 mm deep internally.....  | 194.00             | 275.00         | 357.00         | 05016 |
| 05017                   | Add to either of Items 05014 to 05016 inclusive for 75 mm thick precast concrete Grade 20P cover slab extending to outside face of sides, reinforced with and including expanded mesh fabric, finished fair and placed in position including all moulds and additional excavation.....   | 22.20              | 28.20          | 43.20          | 05017 |
| <b>FACING BRICKWORK</b> |  |                    |                |                |       |
|                         | <i>Per square metre</i>  |                    |                |                |       |
| 05018                   | Extra over brickwork exceeding one brick thick in any type of bonds for facing and pointing with a neat struck or flush joint as the work proceeds.....  |                    |                | 117.00         | 05018 |
| 05019                   | Ditto but battered.....  |                    |                | 112.00         | 05019 |
| 05020                   | Half brick wall in any type of bonds faced and pointed with a neat struck or flush joint as the work proceeds one side.....  |                    |                | 192.80         | 05020 |
| 05021                   | Ditto both sides.....  |                    |                | 250.40         | 05021 |
| 05022                   | One brick wall in any type of bonds faced and pointed with a neat struck or flush joint as work proceeds one side.....   |                    |                | 372.30         | 05022 |
| 05023                   | Ditto both sides.....  |                    |                | 375.30         | 05023 |
|                         | Add to either of Items 05018 to 05023 inclusive for work built circular on plan to a radius n.e. 1.50 m.....   |                    |                | 15%            |       |
|                         | Add to ditto for work built circular on plan to a radius 1.50 - 15.00 m.....   |                    |                | 10%            |       |

| Item   |   | Item     |       |
|--|---|----------|-------|
| <b>FACING BRICKWORK (CONT'D)</b>   |   |          |       |
| <i>Per linear metre</i>  |   | A<br>\$  |       |
| 05024  | Brick-on-edge coping, upstand kerb or similar 75 mm wide including angles and ends.....   | 54.90    | 05024 |
| 05025  | Ditto but 225 mm wide.....  | 89.10    | 05025 |
| 05026  | Extra over brickwork for one brick axed arch in facing (or arch of purpose made bricks) jointing and pointing.....  | 107.00   | 05026 |
| Add to either of Items 05024 to 05026 inclusive for work built circular on plan to a radius n.e. 1.50 m.....   |   | 15%      |       |
| Add to ditto for work built circular on plan to radius 1.50 - 15.00 m.....   |   | 10%      |       |
| <b>GENERAL FIRE BRICKWORK AND SUNDRY WORK TO FLUES</b>   |   |          |       |
| Brickwork in approved imported firebricks set and jointed in approved fire cement or in a mortar composed of one part of high-alumina cement to two parts of finely crushed firebrick by volume :- |   |          |       |
| <i>Per cubic metre</i>   |   | A<br>\$  |       |
| 05027  | Solid brickwork exceeding one brick thick in lining to flues, boilers, grates, cookers, and similar positions.....  | 4,311.70 | 05027 |
| <i>Per square metre</i>  |   |          |       |
| 05028  | Brick-on-edge wall.....   | 329.70   | 05028 |
| 05029  | Half brick wall.....  | 466.00   | 05029 |
| 05030  | One brick wall.....   | 1,010.80 | 05030 |
| 05031  | Rendering to flues in approved fire cement or in mortar composed of one part of high-alumina cement to two parts of finely crushed firebrick by volume 25 mm thick..... | 333.50   | 05031 |

| Item  |   |   | Item  |
|-------|---|---|-------|
|       | <b>BLOCKWORK</b>  |   |       |
|       | <i>Per cubic metre</i>  | A<br>\$   |       |
| 05032 | Solid concrete block walling exceeding 225 mm thick in cement mortar.....   | 1,070.80  | 05032 |
| 05033 | Hollow concrete block walling ditto.....  | 1,294.20  | 05033 |
|       |   |   |       |
|       |   | <b>Thickness of wall (mm)</b>                                 |       |
|       |   | n.e 75    75 - 150    150 - 225                               |       |
|       | <i>Per square metre</i>   | A            B            C<br>\$            \$            \$ |       |
| 05034 | Solid concrete block walling in cement mortar.....  | 105.80    120.60    146.30                                    | 05034 |
| 05035 | Hollow concrete block ditto.....  | 107.60    142.20    180.20                                    | 05035 |
| 05036 | Solid vermiculite or other approved lightweight aggregate concrete block walling in cement/lime/sand (1:2:9) by volume.....                                 | 101.40    135.90    169.80                                    | 05036 |
|       |   |   |       |
|       | <i>Per square metre</i>   | A<br>\$   |       |
| 05037 | Extra over either of Items 05032 to 05036 inclusive for finishing with a fair face and pointing with a neat flush or struck joint as the work proceeds..... | 10.00   | 05037 |
|       | Add to Item 05037 for work built circular on plan to a radius n.e. 1.50 m.....  | 15%   |       |
|       | Add to ditto for work built circular on plan to a radius 1.50 - 15.00 m.....  | 10%   |       |
|       |   |   |       |
|       | <b>FIRE RESISTING LIGHTWEIGHT CONCRETE BLOCKS</b>   |   |       |
|       | Fire resisting lightweight concrete blocks in any size and thickness : -  | <b>FRR (hours)</b>  |       |
|       |   | 1            2            4                                   |       |
|       | <i>Per square metre</i>   | A            B            C<br>\$            \$            \$ |       |
| 05038 | Fire resisting lightweight concrete block walling bedded and pointed in fireproof mortar.....   | 136.50    140.10    151.80                                    | 05038 |
|       |   |   |       |
|       | <i>Per square metre</i>   | A<br>\$   |       |
| 05039 | Extra over Item 05038 for sealing one side of wall with moisture sealer.....  | 29.70   | 05039 |
|       | (Note : - The above Items 05038 and 05039 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)                              |   |       |

| Item  |  |                              |  | Item                 |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
|---|--|------------------------------|--|----------------------|-----------|--|--|--|--|--|------------------------|--|-----|-----|---------|---------|--------|--------|
| <b>PERFORATED CONCRETE BLOCKWORK</b>  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Per square metre</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05040   | 90 mm Perforated concrete block walling laid in standard pattern in cement mortar pointed with neat flush or struck joint both sides as the work proceeds.....   | 128.20                       | A<br>\$  | 05040                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05041   | 90 mm Ditto but built honeycomb.....   | 85.40                        |  | 05041                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <b>RECYCLED GLASS BLOCKS</b>  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| Recycled glass blocks complying with the following : -  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <table border="1" style="width: 100%;"> <tr> <td style="width: 30%;">Major Components (By weight)</td> <td>Not less than 60 % recycled aggregates from local source<br/>Not less than 20 % recycled glass sand from local source<br/>Not less than 7 % cement as binder</td> </tr> <tr> <td>Compressive Strength</td> <td>≥ 6.0 Mpa</td> </tr> <tr> <td>Fire Resistance Rating according to BS 476 Part 22</td> <td>Insulation : ≥ 120 minutes<br/>Integrity : ≥ 120 minutes (no failure)</td> </tr> </table> |  | Major Components (By weight) | Not less than 60 % recycled aggregates from local source<br>Not less than 20 % recycled glass sand from local source<br>Not less than 7 % cement as binder | Compressive Strength | ≥ 6.0 Mpa | Fire Resistance Rating according to BS 476 Part 22 | Insulation : ≥ 120 minutes<br>Integrity : ≥ 120 minutes (no failure) | <table border="1" style="width: 100%;"> <tr> <th colspan="2">Thickness of wall (mm)</th> </tr> <tr> <th>100</th> <th>150</th> </tr> <tr> <td>A<br/>\$</td> <td>B<br/>\$</td> </tr> <tr> <td>168.50</td> <td>221.10</td> </tr> </table> |  |  | Thickness of wall (mm) |  | 100 | 150 | A<br>\$ | B<br>\$ | 168.50 | 221.10 |
| Major Components (By weight)  | Not less than 60 % recycled aggregates from local source<br>Not less than 20 % recycled glass sand from local source<br>Not less than 7 % cement as binder   |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| Compressive Strength  | ≥ 6.0 Mpa  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| Fire Resistance Rating according to BS 476 Part 22  | Insulation : ≥ 120 minutes<br>Integrity : ≥ 120 minutes (no failure)   |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| Thickness of wall (mm)  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 100   | 150  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| A<br>\$   | B<br>\$  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 168.50  | 221.10   |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Per square metre</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05042   | Recycled glass block walling in cement mortar.....   |                              |  | 05042                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <b>SUNDRIES</b>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Per square metre</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05043   | Hack off and clear away existing glass bottling bonded in mortar and make good in cement mortar.....   | 43.70                        | A<br>\$  | 05043                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Per linear metre</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| (Note : - The following Items 05044 and 05045 inclusive will not be paid for, if working on new works item.)  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05044   | Fillet in cement/lime mortar or cement mortar n.e. 0.002 m <sup>2</sup> sectional area.....  | 8.90                         |  | 05044                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05045   | Add to Item 05044 for each additional 0.001 m <sup>2</sup> or part thereof in sectional area.....  | 4.50                         |  | 05045                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Each</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05046   | Glass or cement "tell-tale" executed complete including inscribing in legible figures the date of fixing, and removing old "tell-tale" where necessary.....  | 19.80                        |  | 05046                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05047   | Add to Item 05046 if cutting is necessary on stone or concrete wall for fixing.....  | 10.00                        |  | 05047                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <b>DAMP PROOF COURSE</b>  |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| <i>Per square metre</i>   |  |                              |  |                      |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |
| 05048   | One course bituminous felt damp proof course laid on, under, or to vertical face of, walls, lapped 150 mm at joints, and including cement mortar levelling bed on wall or concrete under (measured net)..... | 120.30                       | A<br>\$  | 05048                |           |  |  |  |  |  |                        |  |     |     |         |         |        |        |

| Item  | A<br>\$ | Item  |
|---|---------|-------|
| <b>CUTTING AND SUNDRY LABOURS ON EXISTING BRICKWORK OR BLOCKWORK IN CEMENT OR CEMENT/LIME MORTAR</b>  |         |       |
| (Note : - The following Items 05049 to 05079 inclusive will not be paid for, if working on new works item.)   |         |       |
| <i>Per cubic metre</i>  |         |       |
| 05049   | 896.60  | 05049 |
| Cut through wall exceeding 0.05 m <sup>3</sup> for new door, window or other opening, or to enlarge existing opening including any necessary strutting and shoring required, levelling for cills, cutting toothings and providing and bonding in any new bricks required, and making out jambs and heads ready to receive new plaster or other finish, cutting and pinning in ends of new cills, lintols, fixing lugs, cramps, bolts, etc., and clearing away all debris (net size of required opening including allowance for lintol or arch and cill but excluding pockets for fixing lugs, cramps, bolts, etc., measured. New lintol, arch, plastering, decoration or facing all measured separately)..... |         |       |
| <i>Per square metre</i>   |         |       |
| 05050   | 39.80   | 05050 |
| Rake out joints 10 mm deep and re-point in cement or cement/lime mortar with a neat struck weathered or flush joint.....  |         |       |
| 05051   | 44.80   | 05051 |
| Level and prepare top of wall for raising.....  |         |       |
| 05052   | 64.80   | 05052 |
| Cut sinking exceeding 0.10 m <sup>2</sup> but n.e. 25 mm deep into surface, including trimming and making good back face and edges (net size of required sinking measured).....   |         |       |
| 05053   | 54.70   | 05053 |
| Add to Item 05052 for each additional 25 mm or part of 25 mm in depth.....  |         |       |
| 05054   | 159.30  | 05054 |
| Wedge and pin up top of wall to new soffit.....   |         |       |
| 05055   | 99.60   | 05055 |
| Bed corrugated roof sheeting on top of wall in cement mortar including pointing edges if required.....  |         |       |
| 05056   | 129.50  | 05056 |
| Make good end or face of wall where existing wall which was bonded in has been removed including providing selected bricks or blocks and jointing in and pointing if required to match existing (any new plaster, etc. measured separately).....  |         |       |
| 05057   | 229.10  | 05057 |
| Cut out decayed or broken bricks or blocks of any thickness and replace with new selected bricks or blocks and joint in and point, if required, to match existing (in areas where more than seven adjacent bricks or one block are replaced) (any new plaster, etc. measured separately).....   |         |       |
| <i>Per linear metre</i>   |         |       |
| 05058   | 14.10   | 05058 |
| Bed frame, plate or similar item n.e. 150 mm wide, when fixing in existing opening or position, in cement mortar and point one or both sides if required.....   |         |       |
| 05059   | 19.20   | 05059 |
| Ditto 150 - 300 mm wide.....  |         |       |
| 05060   | 5.60    | 05060 |
| Rake out defective joint, at least 10 mm deep around door frame or window, or to flashing or similar, and re-point in cement mortar.....  |         |       |
| 05061   | 5.30    | 05061 |
| Rake out crack in wall, beam, slab or other position and point in cement mortar (Note : - Repairs of minor cracks included in preparation for painting, refer to Section 15 of this Schedule).....  |         |       |
| 05062   | 12.60   | 05062 |
| Rake out and enlarge joint for turn in of new lead or asphalt flashing or similar, and point in cement mortar including lead or teak wedging if necessary.....  |         |       |
| 05063   | 10.80   | 05063 |
| Add to either of Items 05058 to 05062 inclusive of pointing in non-acidic and anti-mould mastic or coloured cement mortar in lieu of cement mortar (per side pointed).....  |         |       |
| 05064   | 11.60   | 05064 |
| Point joint of all sizes with non-acidic and anti-mould silicone sealant to metal/wood frames or sanitary appliance, etc.....   |         |       |
| 05065   | 15.40   | 05065 |
| Cut chase or rebate n.e. 0.0005 m <sup>2</sup> section area (net size of chase or rebate required measured) in brickwork or blockwork and make good including pinning in and bedding and pointing in cement mortar to edges of slabs, cills, steps, pipes and similar items.....  |         |       |
| 05066   | 22.70   | 05066 |
| Ditto 0.0005 - 0.010 m <sup>2</sup> sectional area.....   |         |       |
| 05067   | 30.40   | 05067 |
| Ditto 0.010 - 0.030 m <sup>2</sup> sectional area.....  |         |       |



| Item  |  |         | Item  |
|---|--|---------|-------|
| <b>CUTTING AND SUNDRY LABOURS ON EXISTING BRICKWORK OR BLOCKWORK IN CEMENT OR CEMENT/LIME MORTAR (CONT'D)</b> |  |         |       |
|   | <i>Each</i>  | A<br>\$ |       |
| 05068   | Cut hole or sinking n.e. 0.01 m <sup>2</sup> and 25 mm deep into surface of brickwork or blockwork including trimming and making good back face and edges. (net size of required sinking measured).....  | 11.00   | 05068 |
| 05069   | Add to Item 05068 for each additional 25 mm or part of 25 mm deep.....   | 6.90    | 05069 |
| 05070   | Cut sinking as Item 05068 but 0.01 - 0.10 m <sup>2</sup> .....   | 21.90   | 05070 |
| 05071   | Add to Item 05070 for each additional 25 mm or part 25 mm deep.....  | 13.00   | 05071 |
| 05072   | Cut hole through brickwork or blockwork for pipe, airbrick or similar, n.e. 0.0001 m <sup>3</sup> (net size of pipe or article measured) and grout in or render round reveals in cement mortar (1:2) and make good one or both sides.....  | 6.90    | 05072 |
| 05073   | Ditto 0.0001 - 0.0002 m <sup>3</sup> .....   | 14.90   | 05073 |
| 05074   | Ditto 0.0002 - 0.002 m <sup>3</sup> .....  | 24.90   | 05074 |
| 05075   | Ditto 0.002 - 0.01 m <sup>3</sup> .....  | 34.80   | 05075 |
| 05076   | Ditto 0.01 - 0.05 m <sup>3</sup> .....   | 44.80   | 05076 |
| 05077   | Cut out decayed or broken brick or block of any thickness and replace with new selected brick or block and joint in and point if required to match existing (in area where not more than seven adjacent bricks or one block is replaced) (any new plaster, etc., measured separately)..... | 39.80   | 05077 |
|   | (Note : - Rates for ragbolts, rawbolts, etc., in Section 10 - Steel and Metal Work of this Schedule include for all mortices and grouting.)  |         |       |
| 05078   | Cut or drill mortice in brickwork or blockwork for dowel, baluster end, bracket end, fixing cramp, bolt or similar articles n.e. 0.0001 m <sup>3</sup> (net size of article or end measured) and grout in cement and sand (1:2) and make good.....   | 6.90    | 05078 |
| 05079   | Ditto 0.0001 - 0.0002 m <sup>3</sup> .....   | 14.90   | 05079 |
| <b>TAKING DOWN EXISTING BRICKWORK OR BLOCKWORK</b>  |  |         |       |
|   | <i>Per cubic metre</i>   | A<br>\$ |       |
| 05080   | Take down and clear away wall in any position exceeding 225 mm thick.....  | 236.20  | 05080 |
|   | <i>Per square metre</i>  |         |       |
| 05081   | Take down and clear away wall in any position n.e. 75 mm thick.....  | 22.10   | 05081 |
| 05082   | Ditto 75 - 150 mm thick.....   | 33.20   | 05082 |
| 05083   | Ditto 150 - 225 mm thick.....  | 59.00   | 05083 |



**Section 06**

**MASONRY**

## SECTION 06

### MASONRY

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Drawings for rubble walling</b>                  | <b>SC06.01</b> | The sketches for rubble walling as referred to in this Schedule are provided in G.S. Section 10 - Masonry and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule which can be viewed on the internet website via the pathway referred therein. The latest version of drawings posted shall be referred to when reading this Section.   |
| <b>Measurement generally</b>                        | <b>SC06.02</b> | <p>All unsquared random rubble walling, hearthing or backing to face of walls shall be measured net and grouped together irrespective of thickness.</p> <p>All squared rubble walling shall be measured net as fixed.</p> <p>No deduction shall be made for : -</p> <p>(a) Openings not exceeding 0.10 m<sup>2</sup>.</p> <p>(b) String courses, cills, lintols and the like not exceeding 100 mm high.</p> <p>Apart from fair facing, no additional rate will be allowed for random rubble walling built curved on plan or battered.</p> |
| <b>Measurement of squared rubble walls</b>          | <b>SC06.03</b> | Squared rubble walls as facing to brick, concrete or random rubble hearthing or backing, shall be measured net thickness. No addition shall be measured for the additional volume of the bond stones projecting into or through the hearthing or backing and no deduction shall be made from the hearthing or backing for the volume of such bond stones.   |
| <b>Measurement of extra over for fair face</b>      | <b>SC06.04</b> | <p>Fair facing shall be measured net as "Extra over" the random rubble walls over the whole exposed surface including additional girth of top and bottom returns of oversailing and receding courses, top of copings and the like.</p> <p>On no account will fair facing be measured where the work is to be plastered, rendered, or otherwise covered up or left rough as trenches, backs, retaining walls and the like.</p>   |
| <b>Measurement of battered face</b>                 | <b>SC06.05</b> | Battered faces shall be measured net over the exposed surface area on line of batter as "Extra over" stone wall. Battered faces shall not be measured on random rubble hearthing or backing.  |
| <b>Measurement of cutting opening through walls</b> | <b>SC06.06</b> | The measurement of cutting opening through walls shall be the net size required including allowance for lintel or arch. New lintel or arch shall be measured separately.  |

**SPECIAL CONDITIONS**

|  |                |  |
|--|----------------|--|
| <b>Measurement of fully dressed stone</b>  | <b>SC06.07</b> | Fully dressed stone shall be measured the smallest square or rectangular shaped block from which it can be worked.   |
| <b>Measurement for cutting, etc., or taking down existing stone</b>                                | <b>SC06.08</b> | Measurement for cutting mortices and the like, or taking down existing stone shall include the thickness of any rendering or other surfacing.  |
| <b>Rates for all random and squared rubble walling, facework and fully dressed stone generally</b> | <b>SC06.09</b> | <p>The rates for all random and squared rubble walling, facework and fully dressed stone shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Irregular shaped roughly cut random rubble or roughly squared rubble walling.</li> <li>(b) Preparing all existing beds and joints, hoisting, setting, jointing and pointing the work in any position including all joggles, templates, ties, dowels, cramps, other fixing devices and the like.</li> <li>(c) Oversailing and receding courses.</li> <li>(d) Rough and fair cutting and bonding at angles, intersections and the like.</li> <li>(e) Rough relieving and discharging arches.</li> <li>(f) Raking out joints for and pointing as the work proceeds.</li> <li>(g) Bedding and pointing frames, plates and the like.</li> <li>(h) Plumbing angles.</li> <li>(i) Forming reveals, returns, rounded, coved, moulded angles and the like.</li> <li>(j) Leaving or forming chases, notches, holes, grooves, rebates, throats, chamfers, arrises, splays, sinkings, margins, mortices and the like and building in ends, pipes and the like (work where cutting on the face involved shall be measured).</li> <li>(k) Casing or protecting work with slurry, cleaning off and rubbing down on completion if required.</li> <li>(l) Bonding into existing work.</li> <li>(m) Marking for identification and delivery in any matching sequence.</li> <li>(n) Temporary protection and subsequent removal.</li> </ul> |

**SPECIAL CONDITIONS**

|   |                |  |
|---|----------------|--|
| <b>Rates for extra over random rubble walling for fair face</b> | <b>SC06.10</b> | <p>The rates for extra over random rubble walling for fair face shall further include for : -</p> <ul style="list-style-type: none"><li>(a) Selected quality of random granite rubble in evenness, texture, stainless and sharpness of arrises.</li><li>(b) Cutting in, replacing with approved quality rubbles and removing inferiority from Site.</li></ul>  |
| <b>Rates for squared rubble walling</b>                         | <b>SC06.11</b> | <p>The rates for squared rubble walling shall further include for : -</p> <ul style="list-style-type: none"><li>(a) Preparation of joint faces of each stone to a square and true plane surfaces, free from hollow or rough area.</li><li>(b) Building quoins and jambs in selected stones each 175 to 250 mm high to bond in with the wall courses if required.</li><li>(c) Flushing up backing with cement mortar.</li><li>(d) Making good affected works to match existing.</li><li>(e) Removal from Site all arisings.</li></ul> |
| <b>Rates for take down and set aside for re-use</b>             | <b>SC06.12</b> | <p>The rates for take down and set aside for re-use shall include for : -</p> <ul style="list-style-type: none"><li>(a) Taking down stonework at any locations.</li><li>(b) Providing, maintaining and dismantling all necessary strutting, shoring and the like, and working platform.</li><li>(c) Cleaning stonework free from mortar or other contaminations.</li><li>(d) Multi-handling, storage and delivery of stoneworks to designated locations including that as directed by the Maintenance Surveyor.</li></ul>            |
| <b>Rates for fully dressed granite</b>                          | <b>SC06.13</b> | <p>The rates for fully dressed granite shall further include for : -</p> <ul style="list-style-type: none"><li>(a) Dressing and fine punching on all exposed surfaces accurately.</li><li>(b) Forming squared back and punching bed and other sides to produce joints not exceeding 3 mm thick.</li><li>(c) Setting, bedding, jointing and pointing with flush, struck or recessed joints in cement and granite fines (1:3) mortar.</li></ul>  |

**SPECIAL CONDITIONS****Rates for cutting opening through walls****SC06.14**

The rates for cutting opening through walls shall include for : -

- (a) Providing, maintaining and dismantling all necessary strutting, shoring and the like.
- (b) Levelling, cutting, cutting toothing, dressing and the like.
- (c) Providing and bonding in new stone, making out jambs, heads and facing and pointing the same to match existing.
- (d) Cutting and pinning in ends of new walls, lintels and the like.
- (e) Making good affected works to match existing.
- (f) Removal from Site all arisings.

**Rates for cutting toothings****SC06.15**

The rates for cutting toothings shall include for : -

- (a) Providing, maintaining and dismantling all necessary strutting, shoring and the like.
- (b) Cutting, dressing and the like.
- (c) Providing and bonding new stone as required.
- (d) Making good affected works to match existing.
- (e) Removal from Site all arisings.

**Rates for cutting holes****SC06.16**

The rates for cutting holes shall include for : -

- (a) Mobilization, maintenance and demobilization of coring plant and other mechanical plant necessary for the works.
- (b) Coring through existing stone works including any finishes.
- (c) Providing temporary water and power supplies and working platform as required.
- (d) Grouting in pipes or articles and rendering around reveals with cement mortar as required.
- (e) Making good disturbed surfaces to match existing.
- (f) Removal from Site all arisings.

| Item  |   |                      |                                      |  | Item        |       |
|-------|---|----------------------|--------------------------------------|--|-------------|-------|
|       | <b>RANDOM RUBBLE WALLING BUILT DRY</b>  |                      |                                      |  |             |       |
|       |   | Supply<br>and<br>lay | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Lay<br>only |       |
|       |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 06001 | Walling of any thickness.....   | 927.70               | 151.80                               | 193.80   | 392.50      | 06001 |
|       | <b>RANDOM RUBBLE WALLING SOLIDLY<br/>BEDDED AND JOINTED IN CEMENT MORTAR</b>  |                      |                                      |  |             |       |
|       | <i>Per cubic metre</i>  |                      |                                      |  |             |       |
| 06002 | Walling of any thickness.....   | 1,118.30             | 167.40                               | 225.90   | 542.00      | 06002 |
| 06003 | Hearthings or backing of any thickness to squared rubble face wall (measured separately).....                       | 1,118.30             | 167.40                               | 225.90   | 542.00      | 06003 |
|       | <i>Per square metre</i>   |                      |                                      |  |             |       |
| 06004 | Extra over either of Items 06002 to 06003 inclusive for fair face in the form as sketch "A".....                    | 13.00                | -                                    | -  | 6.40        | 06004 |
| 06005 | Extra over either of Items 06002 to 06003 inclusive for battered face.....  | 47.30                | -                                    | -  | 23.20       | 06005 |
|       | Add to either of Items 06002 to 06005 inclusive for work built circular on plan to radius n.e. 1.50 m.....          | 20%                  | -                                    | -  | 20%         |       |
|       | Ditto but 1.50 - 15.00 m.....   | 10%                  | -                                    | -  | 10%         |       |
|       | <b>UNCOURSED SQUARED RUBBLE WALLING (AS SKETCH "B")<br/>SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR</b>             |                      |                                      |  |             |       |
|       |   | Supply<br>and<br>lay | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Lay<br>only |       |
|       |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 06006 | Walling n.e. 75 mm thick.....   | 96.40                | 16.80                                | 25.60  | 62.40       | 06006 |
| 06007 | Ditto but as facing to brick, concrete or random rubble backing (measured separately) including bonding screed..... | 133.40               | 16.30                                | 23.60  | 83.90       | 06007 |
| 06008 | Add to either of Items 06006 to 06007 inclusive for each additional 25 mm or part thereof in thickness .....        | 33.60                | 5.40                                 | 8.10   | 25.80       | 06008 |
| 06009 | Extra over either of Items 06006 to 06007 inclusive for battered face.....  | 38.50                | -                                    | -  | 16.20       | 06009 |
|       | Add to either of Items 06006 to 06009 inclusive for work built circular on plan to radius n.e. 1.50 m.....          | 20%                  | -                                    | -  | 20%         |       |
|       | Ditto but 1.50 - 15.00 m.....   | 10%                  | -                                    | -  | 10%         |       |



| Item  |  |   |  |   | Item   |       |
|---|--|---|--|---|--|-------|
| <b>SQUARED RUBBLE WALLING BROUGHT UP TO COURSES<br/>(AS SKETCH "C") SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR</b> |  |   |  |   |  |       |
|   |  | Supply<br>and<br>lay                            | Take<br>down<br>and<br>clear<br>away           | Take<br>down<br>and set<br>aside for<br>re-use              | Lay<br>only  |       |
|   |  | A<br>\$   | B<br>\$  | C<br>\$   | D<br>\$  |       |
|   | <i>Per square metre</i>  |   |  |   |  |       |
| 06010   | Walling n.e. 75 mm thick.....  | 113.30  | 18.20  | 28.50   | 67.70  | 06010 |
| 06011   | Ditto but as facing to brick, concrete or random rubble hearthing or backing (measured separately).....                                    | 141.10  | 17.70  | 27.50   | 89.30  | 06011 |
| 06012   | Add to either of Items 06010 to 06011 inclusive for each additional 25 mm or part thereof in thickness.....                                | 36.30   | 5.90   | 9.00  | 28.00  | 06012 |
| 06013   | Extra over either of Items 06010 to 06011 inclusive for battered face.....   | 45.40   | -  | -   | 19.10  | 06013 |
|   | Add to either of Items 06010 to 06013 inclusive for work built circular on plan to radius n.e. 1.50 m.....                                 | 20%   | -  | -   | 20%  |       |
|   | Ditto but 1.50 - 15.00 m.....  | 10%   | -  | -   | 10%  |       |
| <b>SQUARED COURSED RUBBLE WALLING (AS SKETCH "D")<br/>SOLIDLY BEDDED AND JOINTED IN CEMENT MORTAR</b>               |  |   |  |   |  |       |
|   | <i>Per square metre</i>  |   |  |   |  |       |
| 06014   | Walling n.e. 75 mm thick.....  | 121.40  | 19.60  | 31.20   | 64.30  | 06014 |
| 06015   | Ditto but as facing to brick, concrete or random rubble hearthing (measured separately).....   | 146.70  | 21.40  | 33.70   | 96.50  | 06015 |
| 06016   | Add to either of Items 06014 to 06015 inclusive for each additional 25 mm or part thereof in thickness<br>(up to a maximum of 250 mm)..... | 39.70   | 7.40   | 11.80   | 24.10  | 06016 |
| 06017   | Extra over either of Items 06014 to 06015 inclusive for battered face.....   | 48.60   | -  | -   | 20.50  | 06017 |
|   | Add to either of Items 06014 to 06017 inclusive for work built circular on plan to radius n.e. 1.50 m.....                                 | 20%   | -  | -   | 20%  |       |
|   | Ditto but 1.50 - 15.00 m.....  | 10%   | -  | -   | 10%  |       |
| <b>PREPARATION OF SURFACING FINISH TO RUBBLE WALLING</b>  |  |   |  |   |  |       |
|   |  | Random<br>rubble<br>walling<br>as Sketch<br>"A" | Un-<br>coursed<br>squared<br>rubble<br>walling | Squared<br>rubble<br>walling<br>brought<br>up to<br>courses | Regular<br>coursed<br>squared<br>rubble<br>walling |       |
|   |  | A<br>\$   | B<br>\$  | C<br>\$   | D<br>\$  |       |
|   | <i>Per square metre</i>  |   |  |   |  |       |
| 06018   | Prepare surface to regular convex "rock faced" finish including allowance for additional thickening.....                                   | 91.40   | 48.90  | 48.90   | 48.90  | 06018 |
| 06019   | Prepare surface finish as G.S. item 10.18 including allowance for additional thickening.....   | 267.50  | 139.60   | 139.60  | 139.60   | 06019 |

| Item   |  |                       |                                   |  | Item                                   |                       |       |
|--|--|-----------------------|-----------------------------------|--|--|-----------------------|-------|
| <b>FULLY DRESSED GRANITE</b>   |  |                       |                                   |  |  |                       |       |
|  |  | Supply and lay        | Take down and clear away          | Take down and set aside for re-use           | Lay only                               |                       |       |
|  |  | A<br>\$               | B<br>\$                           | C<br>\$                                      | D<br>\$                                |                       |       |
| 06020  | Ashlar walling or facing n.e. 100 mm thick.....  | 141.50                | 14.80                             | 19.90  | 48.00                                  | 06020                 |       |
| 06021  | Ditto 100 mm to 300 mm thick.....  | 283.10                | 28.80                             | 40.60  | 95.90                                  | 06021                 |       |
|  | Add to either of Items 06020 to 06021 inclusive for work circular on plan to radius n.e. 1.50 m.....   | 20%                   | -                                 | -  | 20%                                    |                       |       |
|  | Ditto but 1.50 - 15.00 m.....  | 10%                   | -                                 | -  | 10%                                    |                       |       |
| <b>CUTTING AND SUNDRY LABOURS ON EXISTING STONE</b>  |  |                       |                                   |  |  |                       |       |
| (Note :- The following Items 06022 to 06033 inclusive will not be paid for, if working on new works item.) |  |                       |                                   |  |  |                       |       |
|  |  | Random rubble walling | Un-coursed squared rubble walling | Squared rubble walling brought up to courses | Regular coursed squared rubble walling | Fully dressed granite |       |
|  |  | A<br>\$               | B<br>\$                           | C<br>\$                                      | D<br>\$                                | E<br>\$               |       |
| 06022  | Rake out joints not less than 15 mm deep and re-point with flush, struck, recessed or keyed joint as required in cement mortar.....  | 63.10                 | 48.00                             | 48.00  | 48.00                                  | 40.80                 | 06022 |
| 06023  | Redress face to wall where discoloured or badly stained by fine punching (any re-pointing required measured separately).....   | -                     | 57.20                             | 57.20  | 57.20                                  | 79.40                 | 06023 |
| 06024  | Level and prepare top of wall for raising or to receive damp proof course.....   | 47.00                 | 47.00                             | 47.00  | 47.00                                  | -                     | 06024 |
| 06025  | Make good end or face of wall where existing wall which was bonded in has been removed including providing cutting and building in any new stone required and facing and pointing to match existing (vertical face in contact with old wall measured)..... | 144.70                | 195.30                            | 195.30                                       | 195.30                                 | 303.30                | 06025 |
| 06026  | Cut toothings not less than 100 mm deep and at not more than 300 mm centres vertically in face of existing wall.....   | 89.70                 | 90.40                             | 90.40  | 90.40                                  | 105.90                | 06026 |
| <b>Per linear metre</b>  |  |                       |                                   |  |  |                       |       |
| 06027  | Rake out single detached joint not less than 15 mm deep and re-point with flush, struck, recessed or keyed joint as required in cement mortar.....   | 11.80                 | 11.80                             | 11.80  | 11.80                                  | 11.80                 | 06027 |
| 06028  | Rake out from wall crack, etc., cut back edges as required and point with flush joint in cement mortar.....  | 15.90                 | 15.90                             | 15.90  | 15.90                                  | 15.90                 | 06028 |
| <b>Each</b>  |  |                       |                                   |  |  |                       |       |
| 06029  | Cut or drill mortice for dowel, baluster end, bracket end, fixing cramp, bolt or similar article n.e. 0.0001 m <sup>3</sup> (net size of article or end measured) and grout in cement and sand (1:2) and make good.....                                    |                       |                                   |  |  | 16.40                 | 06029 |
| 06030  | Ditto 0.0001 - 0.0002 m <sup>3</sup> .....   |                       |                                   |  |  | 27.50                 | 06030 |

| Item   |  |       |        |        | Item   |       |
|--|--|-------|--------|--------|--------|-------|
| <b>CUTTING AND SUNDRY LABOURS ON EXISTING STONE (CONT'D)</b>                           |  |       |        |        |        |       |
| <i>Each</i>  |  |       |        |        |        |       |
| <b>Thickness of stone (mm)</b>   |  |       |        |        |        |       |
| n.e. 150    150 - 300    300 - 450    450 - 600  |  |       |        |        |        |       |
| A            B            C            D   |  |       |        |        |        |       |
| \$            \$            \$            \$   |  |       |        |        |        |       |
| 06031  | Cut hole for pipe or similar article n.e. 0.004 m <sup>2</sup> .....                       | 34.60 | 69.60  | 103.00 | 138.00 | 06031 |
| 06032  | Ditto 0.004 - 0.008 m <sup>2</sup> .....   | 44.60 | 87.00  | 130.00 | 143.00 | 06032 |
| 06033  | Ditto 0.008 - 0.017 m <sup>2</sup> .....   | 69.60 | 140.00 | 210.00 | 280.00 | 06033 |
| <b>CUTTING LETTERS IN NEW OR EXISTING STONE</b>  |  |       |        |        |        |       |
| <i>Each</i>  |  |       |        |        |        |       |
| <b>Height of letter or number (mm)</b>   |  |       |        |        |        |       |
| n.e. 75    75 - 150    150 - 225    225 - 300  |  |       |        |        |        |       |
| A            B            C            D   |  |       |        |        |        |       |
| \$            \$            \$            \$   |  |       |        |        |        |       |
| 06034  | Cut plain block letter or number in face of stone including picking out with painting..... | 67.40 | 115.00 | 144.00 | 163.00 | 06034 |
| 06035  | Cut Chinese character ditto.....   | 80.30 | 139.00 | 177.00 | 200.00 | 06035 |
| Add to either of Items 06034 to 06035 inclusive for working on existing stonework..... |  |       |        |        | 10%    |       |

**Section 07**

**ROOFING AND WATERPROOFING**

## SECTION 07

### ROOFING AND WATERPROOFING

#### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Definition of whole roof slope</b>                | <b>SC07.01</b> | Whole roof slope shall mean an area extending from one gable wall to another, from gable wall to hip or valley between two hips, between two valleys, or between hip and valley in length, and from eaves to ridge in breath and shall include any subsidiary features such as roofs to dormers which may be contained within such area.  |
| <b>Particular Preamble</b>                           | <b>SC07.02</b> | Laying or re-laying of proprietary roofing system or floor waterproofing system apart from patch repairs shall be measured in accordance with this Section 07 - Roofing and Waterproofing. Patch repairs to proprietary roofing system or floor waterproofing system shall be measured in accordance with Section 16 - Repairs and Alterations to Specialty Works.  |
| <b>Rates for roofing and waterproofing generally</b> | <b>SC07.03</b> | <p>The rates for roofing and waterproofing shall generally include for :-</p> <ul style="list-style-type: none"> <li>(a) Works at any height and locations.</li> <li>(b) Works to new or existing surfaces in repairs.</li> <li>(c) All curved works when fixing roofing to timber and metal framing (measured separately).</li> <li>(d) Forming and including movement joints, expansion joints and the like, and allowing for laps including side and end laps when required.</li> <li>(e) Allowing for cutting, waste and breakage including those at abutments, top edges, verges, hips and valleys.</li> <li>(f) Preparing, cleaning and protection of surfaces to receive roofing or waterproofing materials.</li> <li>(g) Fixing or laying to falls and currents.</li> <li>(h) Sealing at edges, joints and around intersections and projections.</li> <li>(i) All narrow widths and small areas.</li> <li>(j) Cleaning and priming to surfaces prior to applying roofing or waterproofing materials all in accordance with the manufacturer's instructions.</li> <li>(k) Cutting back existing roofing or waterproofing materials to provide joints for new roofing or waterproofing when required.</li> <li>(l) Allowing all cutting, fitting, dressing and making good around rainwater outlets, pipes, flues, openings and the like.</li> <li>(m) Sampling and testing of roofing or waterproofing materials.</li> </ul> |

### SPECIAL CONDITIONS

**Rates for roofing and waterproofing generally (Cont'd)**

**SC07.03 (Cont'd)**

- (n) Providing shop drawings as necessary for the works.
- (o) Providing waterproofed rain shelter or any other covers completed with rigid framing when required throughout the progress of the work to roof areas to prevent the ingress of rain or other water.
- (p) Providing temporary drainage system throughout the progress of the work.
- (q) Making good affected areas to match existing.
- (r) Temporary protective measures, cleaning and removing all arisings.
- (s) Infra-red thermograph testing when required.
- (t) Keep a register of all dangerous substances including those hazardous to health, which are delivered to and stored on Site for use on the Works. The register include information physical and chemical properties, hazards, safe handling and storage, precautionary measures to be taken, first aid measures, disposal of containers and surplus of waste materials, and measures to be taken in case of accidents.
- (u) Leaving roof or floor clean, windproof and watertight on completion and cleaning out rainwater outlets and gutters.
- (v) Provision of manufacturer's guarantee and warranty.

### CORRUGATED OR PROFILED SHEET ROOFING

**Measurement of corrugated or profiled sheet roofing**

**SC07.04**

Corrugated or profiled sheet roofing shall be measured flat over the net area covered (girth of corrugations not measured) including ridges, hips, valleys, channels, gutters and the like. In the case of sloping roof, it shall be measured flat over the exposed surfaces (girth of corrugations not measured). No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.

**Rates for corrugated or profiled sheet roofing**

**SC07.05**

The rates for corrugated or profiled sheet roofing shall further include for :-

- (a) Allowing all notching and fitting edges of sheets and mitring corners as required, and all mitred angles, junctions and ends on ridges and hips.
- (b) Allowing all eaves, jambs, lintel filling pieces, barges boards, corner pieces and the like.
- (c) Spot, fillet or seam welding, brazing or soldering.
- (d) Drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.
- (e) Drilling holes to existing or new purlins or framing spaced at any interval for the fixing of corrugated or profiled sheet roofing as required.
- (f) Forming and including holes for pipes or articles.

### SPECIAL CONDITIONS

#### CORRUGATED OR PROFILED SHEET ROOFING

**Rates for corrugated or profiled sheet roofing (Cont'd)**

**SC07.05 (Cont'd)**

- (g) Recommended fixing method in accordance with the manufacturer's instructions.
- (h) Forming movement joints as required.
- (i) Forming sheets to required curvature on curved roofs.
- (j) In the case of proprietary steel/aluminium sheet roofing, provision of subgrit and purlin system to the roofing including design and submission of RSE calculations and shop drawings.
- (k) All necessary testing to ensure integrity and water-tightness of the whole roofing system.

#### PROPRIETARY GREEN ROOFING SYSTEM

**Measurement of proprietary green roofing system including green turf system**

**SC07.06**

Supply and installation of proprietary green roofing system including green turf system shall be measured as the net surface area of the face to be covered. No deduction shall be made for voids not exceeding 0.50 m<sup>2</sup>.

**Rates for proprietary green roofing system including green turf system**

**SC07.07**

The rates for proprietary green roofing system including green turf system shall further include for : -

- (a) Preparation and making good existing roof.
- (b) Condition and structural survey to existing roof including preparation and submission of records and reports.
- (c) Engagement of a Registered Structural Engineer for checking and verifying the imposed loading of the proprietary green roof system onto the existing structure including preparation and certification of all required structural submissions.
- (d) Including, but not limited to, roof barrier system, moisture retention layer, drainage layer, drainage inspection chamber, filter layer and light weight growing medium.
- (e) Ground covers of approved species and spacing including necessary fertilizers for green roofing system.
- (f) Green turf of approved species and density including necessary fertilizers for green turf system.
- (g) Submission of shop drawings, working drawings and as-built drawings.
- (h) Submission of samples with composition report for growing mediums and groundcovers.

**SPECIAL CONDITIONS**

**PROPRIETARY GREEN ROOFING SYSTEM**

**Rates for proprietary green roofing system including green turf system (Cont'd)**

**SC07.07 (Cont'd)**

- (i) Provision of irrigation system by licensed plumber.
- (j) Submission of photographic records.
- (k) Establishment works after completion for a period of 12 months including replacement of vegetation upon failure of vegetation for becoming established.
- (l) Provision of warranty as specified in the Contract.
- (m) Submission of working programme.
- (n) Submission of maintenance and operation manual.

**BITUMEN FELT BUILT-UP AND BITUMINOUS EMULSION ROOFING**

**Measurement of bitumen felt built-up and bituminous emulsion roofing**

**SC07.08**

Bitumen felt built-up and bituminous emulsion roofing shall be measured net over the whole exposed finished top surface, additional girth of vertical or sloping faces and sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.

**Rates for bitumen felt built-up and bituminous emulsion roofing**

**SC07.09**

The rates for bitumen felt built-up and bituminous emulsion roofing shall further include for : -

- (a) Roofing to flat, sloping or curved roofs.
- (b) Allowing for all laps, cutting and waste on felts and glass fibre membrane where applicable.
- (c) Dressing to sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like, including angles, junctions, turn-in edges, welted drips and the like.
- (d) Making good surfaces including filling cracks with bitumen or emulsion.
- (e) Checking the felt roofing works with infra-red thermo-scanning equipment or other testing equipment on water tightness as the work proceeds.
- (f) Replacement of roofing installation if failing in the non-destructive test.



**SPECIAL CONDITIONS****BITUMEN FELT BUILT-UP AND BITUMINOUS EMULSION ROOFING**

**Measurement of strip off existing bitumen felt built-up roofing and bituminous emulsion roofing**

**SC07.10**

Measurement of strip off existing bitumen felt built-up roofing and bituminous emulsion roofing shall not be measured when the backing screed, sheet roofing or insulation layer is also taking down simultaneously unless it is specifically ordered by the Maintenance Surveyor in writing.

**MASTIC ASPHALT (ROCK ASPHALT) ROOFING**

**Measurement of strip off existing mastic asphalt roofing**

**SC07.11**

Measurement of strip off existing mastic asphalt roofing shall not be measured when the backing screed, sheet roofing or insulation layer is also taking down simultaneously unless it is specifically ordered by the Maintenance Surveyor in writing.

**PROPRIETARY ROOFING SYSTEM AND FLOOR WATERPROOFING SYSTEM**

**Measurement of proprietary roofing system and floor waterproofing system**

**SC07.12**

Proprietary roofing system and floor waterproofing system shall be measured net over the whole exposed finished top surface, additional girth of vertical or sloping faces and sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof level and the like. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.

Drip flashing, fascia flashing, eave flashing, toothed plate, fascia corner flashing, ridge flashing, verge flashing, fascia capping, gutters and the like for the proprietary roofing system shall be measured the net length as fixed.

Proprietary roofing system or floor waterproofing system referred hereinafter shall mean the waterproof covering materials approved by the Maintenance Surveyor.

For avoidance of doubt, all rates in this sub-section shall deem to apply to works executed by the specialist contractors or applicators approved by the Maintenance Surveyor.

**Measurement of strip off existing proprietary roofing system and floor waterproofing system**

**SC07.13**

Measurement of strip off existing proprietary roofing system and floor waterproofing system shall not be measured when the backing screed, sheet roofing or insulation layer is also being taken down simultaneously unless it is specifically ordered by the Maintenance Surveyor in writing.

### SPECIAL CONDITIONS

#### PROPRIETARY ROOFING SYSTEM AND FLOOR WATERPROOFING SYSTEM

**Rates for proprietary roofing system and floor waterproofing system**

**SC07.14**

The rates for proprietary roofing system and floor waterproofing system shall further include for : -

- (a) Laying on flat, sloping or curved roofs or floors.
- (b) Inspection, preparing, cleaning and drying surfaces including removing all grease, contaminants, dust, loose stones, debris and the like.
- (c) Applying the proprietary roofing system or floor waterproofing system using spray, trowel or brush application all in accordance with the manufacturer's instructions.
- (d) Dressing to sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps in roof, floor and the like, including angles, junctions, turn-in edges, welted drips and the like all in accordance with the manufacturer's instructions.
- (e) Forming fillets with cement mortar at junction between slabs and walls.
- (f) Making good surfaces of substrate including filling cracks with bitumen emulsion or any other materials recommended by the manufacturer's recommendations.
- (g) Replacement of roofing or floor waterproofing installation if failing in the non-destructive test.
- (h) Providing protective boarding in accordance with the manufacturer's instructions, if required.
- (i) Submission of catalogues, technical literature and other documentation covering the materials supplied.
- (j) Providing all reports and maintenance manuals.
- (k) Providing deeds of warranty in compliance with the Contract requirements.

#### ROOF TILING AND INSULATION BOARD

**Measurement of roof tiling and insulation board generally**

**SC07.15**

Roof tiling and insulation board shall generally be measured as the net area covered when fixed or laid. No deduction shall be made for voids not exceeding 0.50 m<sup>2</sup>.

**Rates for roof tiling and insulation board generally**

**SC07.16**

The rates for roof tiling and insulation board shall generally include for : -

- (a) Working at any height and locations.
- (b) Working to new or existing surfaces in repairs.
- (c) All straight or raking cutting and waste.
- (d) Narrow widths and small quantities.

### SPECIAL CONDITIONS

#### ROOF TILING AND INSULATION BOARD

**Rates for roof tiling and insulation board generally (Cont'd)**

**SC07.16 (Cont'd)**

- (e) Forming and including all joints between new and existing materials.
- (f) Laying level or to slopes and finishing to falls and currents.
- (g) Mitred edges to external corners and the like.
- (h) Covering up and protecting where necessary.

**Rates for roofing tiles**

**SC07.17**

The rates for roofing tiles including "Canton" tiles, concrete tiles, insulating tiles and foam board tiles shall further include for forming expansion joints and fill with cold bitumen or all other approved non-acidic and anti-mould sealants to roofing tiles as provided in G.S. Items 6.61, 6.62 and 18.120.

**Screeds to roofing or tiling**

**SC07.18**

Screeds to roofing, flooring or tiling can be found in Section 11 - Plastering and Finishes of this Schedule.

#### NON-DESTRUCTIVE TEST

**Rates for non-destructive test**

**SC07.19**

The rates for non-destructive test shall include for : -

- (a) Constructing temporary dams to compartmentalize large roofs as required and subsequent removal.
- (b) Temporary blocking to all outlets flooding the roof, releasing water and subsequent removal of blockages.
- (c) Carrying out test of infra-red scanning by an approved independent specialist in accordance with the Specification as adopted in the Contract including providing all necessary labour, supervisory staff and equipment.
- (d) In the case of new roofing system, re-testing up to the satisfaction of the Maintenance Surveyor.
- (e) Submission of reports.

#### SPECIFICATION FOR ROOFING

**G.S. clauses**

**SC07.20**

G.S. clauses for "Canton" tiles and concrete roof tiles can be found in the Finishes Section of the General Specification for Building.

| Item  |  | Supply and fix | Fix only | Item  |
|-------|--|----------------|----------|-------|
|       | <b>PROFILED UNREINFORCED RIGID PVC SHEET ROOFING</b>   |                |          |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$  |       |
| 07001 | 0.80 mm Profiled unreinforced rigid PVC roofing sheet in any profile, colour and transparency fixed to timber or steel framing (measured separately).....            | 77.60          | 28.20    | 07001 |
|       | <b>PROFILED GLASS-FIBRE REINFORCED PLASTIC (GRP) SHEET ROOFING</b>   |                |          |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$  |       |
| 07002 | 6 mm Profiled glass-fibre reinforced plastic (GRP) sheet roofing in any profile, colour and transparency fixed to timber or steel framing (measured separately)..... | 146.50         | 59.70    | 07002 |
| 07003 | Ditto but 8 mm thick.....  | 188.70         | 62.70    | 07003 |
| 07004 | Ditto but 10 mm thick.....   | 230.80         | 65.70    | 07004 |
| 07005 | Ditto but 12 mm thick.....   | 273.00         | 68.70    | 07005 |
|       | <b>GALVANISED STEEL SHEET ROOFING</b>  |                |          |       |
|       | Steel sheet roofing as G.S. Item 12.72 :-  |                |          |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$  |       |
| 07006 | Corrugated steel sheet roofing n.e. 0.60 mm thick in any corrugation fixed to timber or steel framing (measured separately).....                                     | 82.50          | 22.40    | 07006 |
| 07007 | Ditto but 0.60 - 0.80 mm thick.....  | 87.60          | 23.10    | 07007 |
| 07008 | Ditto but 0.80 - 1.00 mm thick.....  | 101.90         | 24.50    | 07008 |

| Item  |   | Supply and fix | Fix only | Item  |
|-------|---|----------------|----------|-------|
|       | <b>PROPRIETARY PROFILED STEEL SHEET ROOFING</b>   |                |          |       |
|       | Proprietary steel profiled sheet cladding in concave or convex shapes, maximum length of sheet that can be curved is 12 m, to Australian Standard AS1397-1993 and Malaysian Standard MS1196, 0.42 mm BMT with minimum yield strength of 550 MPA, sheets coating shall comprise alloy of zinc, aluminium and silicon applied by hot dip process, thickness 0.05 mm thick to AS1397 for coating class AZ150, paint coating to AS2728 :- |                |          |       |
|       | <i>Per square metre</i>   | A<br>\$        | B<br>\$  |       |
| 07009 | 0.47 mm Thick steel profiled sheeting fixed to timber or steel framing.....   | 434.50         | 58.70    | 07009 |
|       | Proprietary steel profiled sheet cladding with concealed fastening, available in two thickness (0.48 mm & 0.6 mm BMT) with minimum yield strength of 550 MPA, metallic hot dip coated with alloy of zinc, aluminium and silicon, coating mass to be 150 g/m2 coated both sides, to Australian Standard AS1397-1993 and Malaysian Standard MS1196, wind pressure capacities to AS1562.1-1992 and AS4040.2-1992 :-                      |                |          |       |
|       | <i>Per square metre</i>   |                |          |       |
| 07010 | 0.53 mm Thick steel profiled sheeting fixed to timber or steel framing.....   | 485.30         | 60.40    | 07010 |
| 07011 | Ditto but 0.65 mm thick.....  | 536.90         | 61.60    | 07011 |
|       | <b>PROPRIETARY GALVANISED STEEL FLASHING, CAPPING, ETC.</b>   |                |          |       |
|       | Proprietary steel profiled sheeting with XRW colourbond finish matching with proprietary steel sheet roofing fixing in fasteners or screws in accordance with the manufacturer's recommendations :-   |                |          |       |
|       | <i>Per linear metre</i>   | A<br>\$        | B<br>\$  |       |
| 07012 | 0.60 mm Thick steel flashing or capping n.e. 200 mm girth.....  | 119.10         | 30.70    | 07012 |
| 07013 | Ditto 200 - 400 mm girth.....   | 178.20         | 46.10    | 07013 |
| 07014 | Ditto 400 - 600 mm girth.....   | 219.20         | 52.50    | 07014 |
| 07015 | Ditto 600 - 800 mm girth.....   | 273.90         | 57.70    | 07015 |
| 07016 | Ditto 800 - 1000 mm girth.....  | 313.10         | 61.40    | 07016 |

| Item  |  |                |          | Item  |
|-------|--|----------------|----------|-------|
|       | <b>GALVANISED STEEL SHEET RIDGING, GUTTERS, ETC.</b>   |                |          |       |
|       | 1 mm Thick galvanized mild steel sheet (painting measured separately) :-   | Supply and fix | Fix only |       |
|       | <i>Per linear metre</i>  | A \$           | B \$     |       |
| 07017 | Ridge or hip plain capping of approximately 450 mm girth with 75 mm roll, lapped 150 mm at end joints (measured net).....                        | 74.10          | 19.60    | 07017 |
| 07018 | Ditto but both edges corrugated, cut and scribed as necessary to suit sheet roofing (measured net).....  | 83.30          | 24.40    | 07018 |
| 07019 | Half-octagonal shaped valley gutter of approximately 300 x 175 mm deep, lapped 150 mm at end joints (measured net).....                          | 124.60         | 22.40    | 07019 |
|       | <b>ALUMINIUM SHEET ROOFING</b>   |                |          |       |
|       |  | Supply and fix | Fix only |       |
|       | <i>Per square metre</i>  | A \$           | B \$     |       |
| 07020 | Corrugated aluminium sheet roofing n.e. 0.60 mm thick in any corrugation and colour fixed to timber or steel framing (measured separately) ..... | 135.80         | 17.60    | 07020 |
| 07021 | Ditto but 0.60 - 0.80 mm thick.....  | 143.90         | 18.20    | 07021 |
| 07022 | Ditto but 0.80 - 1.00 mm thick.....  | 167.40         | 19.20    | 07022 |
|       | <b>ALUMINIUM FLASHING, CAPPING, ETC.</b>   |                |          |       |
|       | 0.60 mm Thick aluminium colorbond finish matching with aluminium sheet roofing fixing in fasteners or screws :-                                  | Supply and fix | Fix only |       |
|       | <i>Per linear metre</i>  | A \$           | B \$     |       |
| 07023 | 0.60 mm Thick steel flashing or capping n.e. 200 mm girth.....   | 31.80          | 4.90     | 07023 |
| 07024 | Ditto 200 - 400 mm girth.....  | 48.00          | 14.70    | 07024 |
| 07025 | Ditto 400 - 600 mm girth.....  | 71.60          | 22.40    | 07025 |
| 07026 | Ditto 600 - 800 mm girth.....  | 96.60          | 31.20    | 07026 |
| 07027 | Ditto 800 - 1000 mm girth.....   | 120.70         | 39.10    | 07027 |

| Item  |  |                |          | Item  |
|-------|--|----------------|----------|-------|
|       | <b>ALUMINIUM SHEET RIDGING, GUTTERS, ETC.</b>  |                |          |       |
|       | 1.00 mm Thick aluminium colorbond finish fixing in fasteners or screws :-  | Supply and fix | Fix only |       |
|       | <i>Per linear metre</i>  | A \$           | B \$     |       |
| 07028 | Ridge or hip plain capping of approximately 450 mm girth with 75 mm roll, lapped 150 mm at end joints (measured net).....  | 117.90         | 19.60    | 07028 |
| 07029 | Ditto but both edges corrugated, cut and scribed as necessary to suit sheet roofing (measured net).....  | 137.50         | 24.40    | 07029 |
| 07030 | Half-octagonal shaped valley gutter of approximately 300 x 175 mm deep, lapped 150 mm at end joints (measured net).....  | 162.50         | 26.40    | 07030 |
|       | <b>PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING</b>   |                |          |       |
|       | Proprietary sheet roofing system comprising 0.75 mm thick trapezoidal profiled steel shell with specialist coating 25 microns thick on visible sides and protective layer (RSL) 10 microns thick on the reverse side to DIN 18807 in any colour including subgrit, purlins and fixing with approved stainless steel fasteners to level or sloping framing all in accordance with the manufacturer's recommendations :-   | Supply and fix | Fix only |       |
|       | <i>Per square metre</i>  | A \$           | B \$     |       |
| 07031 | Roofing system.....  | 430.80         | 26.40    | 07031 |
|       | Proprietary sandwich roofing system, comprising 0.75 mm thick trapezoidal profiled steel outer shell and 0.55 mm thick slightly profiled inner shell with specialist coating 25 microns thick on visible sides and protective layer (RSL) 10 microns thick on the reverse side in any colour enclosing a continuous core of polyurethane rigid foam (HCFC -free), thermal resistance to 1.74 m <sup>2</sup> K/W heat transfer coefficient 0.52 W/m <sup>2</sup> K to EN ISO6946, including subgrit, purlins and concealed fixing with integral roof clamps in the longitudinal joint and approved stainless steel fasteners to level or sloping framing all in accordance with the manufacturer's recommendations :- |                |          |       |
|       | <i>Per square metre</i>  |                |          |       |
| 07032 | Roofing system.....  | 3,565.90       | 81.10    | 07032 |

| Item  |  | Supply<br>and<br>fix | Fix<br>only | Item  |
|-------|--|----------------------|-------------|-------|
|       | <b>PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)</b>  |                      |             |       |
|       | 0.75 mm Thick proprietary steel sheeting with proprietary coating (25 microns thick) on visible sides and proprietary protective layer on the reverse side (10 microns thick) in matching colour to the sandwich roofing system, including forming into any component shape and required girth including subgrit, purlins and fixing with all necessary clamps and approved stainless steel fasteners all in accordance with the manufacturer's recommendations :-   |                      |             |       |
|       | <i>Per linear metre</i>  | A<br>\$              | B<br>\$     |       |
| 07033 | Drip flashing.....   | 315.40               | 29.30       | 07033 |
| 07034 | Fascia flashing.....   | 423.10               | 31.20       | 07034 |
| 07035 | Eave flashing.....   | 277.00               | 26.40       | 07035 |
| 07036 | Toothed plate complete with foam filler at ridge.....  | 292.30               | 31.20       | 07036 |
| 07037 | Fascia corner flashing, ridge flashing, verge flashing and the like.....   | 353.10               | 31.20       | 07037 |
| 07038 | Fascia capping, ridge capping and the like.....  | 269.30               | 31.20       | 07038 |
|       | Proprietary profiled sheet roofing system of galvanized and plastic coated steel sheet, processed in roll to form trapezoidal profiles, comprising 0.75 mm thick steel (S280/S320 GD to EN 10326) with zinc galvanizing (Z275), with 25 microns polyester coating on the exterior surface and 10 microns reverse side coating (RSL) on the interior surface including subgrit, purlins and fixing with stainless steel self-tapping screws with stainless steel washer (with vulcanized EDPM layer) to level or sloping framing all in accordance with the manufacturer's recommendations :- |                      |             |       |
|       | <i>Per square metre</i>  |                      |             |       |
| 07039 | Roofing system.....  | 446.10               | 26.40       | 07039 |
|       | 0.75 mm Thick proprietary steel (S350 GD to EN 10326) flashing with zinc galvanizing (55% AlZn AZ 185 to EN 10326), with 25 microns polyester coating on the exterior surface with matching colour to cladding profile and 10 microns reverse side coating (RSL) on the interior surface including press-forming to the shape and girth including subgrit, purlins and fixing with all necessary stainless steel self-tapping screws all in accordance with the manufacturer's recommendations :-  |                      |             |       |
|       | <i>Per linear metre</i>  |                      |             |       |
| 07040 | Drip flashing.....   | 246.20               | 29.30       | 07040 |
| 07041 | Fascia flashing.....   | 369.30               | 31.20       | 07041 |
| 07042 | Eave flashing.....   | 277.00               | 26.40       | 07042 |
| 07043 | Toothed plate complete with foam filler at ridge.....  | 292.30               | 31.20       | 07043 |
| 07044 | Fascia corner flashing, ridge flashing, verge flashing and the like.....   | 316.90               | 31.20       | 07044 |
| 07045 | Fascia capping, ridge capping and the like.....  | 243.10               | 31.20       | 07045 |



| Item  |  | Supply<br>and<br>fix | Fix<br>only | Item  |
|-------|--|----------------------|-------------|-------|
|       | <b>PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)</b>  |                      |             |       |
|       | Proprietary sandwich roofing panel (concealed fixing type) comprising 0.75 mm thick coil-galvanized (S350 GD+Z275 to EN 10326) trapezoidal profile steel outer shell with 25 microns PVF2 coating, continuous core of rigid CFC- and HCFC-free polyurethane foam, 0.55 mm thick coil-galvanized slightly profiled steel inner shell with 10 microns polyester coating (RSL), proprietary factory-applied EDPM sealing profile along longitudinal joint including subgrit, purlins and fixing with all necessary stainless steel self-tapping screws with spherical cap, proprietary roll-formed steel concealed fixing capping with matching colour on every pitch of sandwich panel all in accordance with the manufacturer's recommendations : - |                      |             |       |
|       | <i>Per square metre</i>  | A<br>\$              | B<br>\$     |       |
| 07046 | Roofing panels.....  | 3,452.80             | 78.20       | 07046 |
|       | 0.75 mm Thick proprietary coil-galvanized (S350 GD+Z275 to EN 10326) steel flashing with 25 microns PVF2 coating on weather side with matching colour to sandwich roof panel and 10 microns protective coating (RSL) on the other side, including press-forming to the shape and girth including subgrit, purlins and all necessary stainless steel self-tapping screws all in accordance with the manufacturer's recommendations : -  |                      |             |       |
|       | <i>Per linear metre</i>  |                      |             |       |
| 07047 | Drip flashing.....   | 315.40               | 44.90       | 07047 |
| 07048 | Fascia flashing.....   | 423.10               | 31.20       | 07048 |
| 07049 | Eave flashing.....   | 277.00               | 26.40       | 07049 |
| 07050 | Toothed plate complete with foam filler at ridge.....  | 292.30               | 31.20       | 07050 |
| 07051 | Fascia corner flashing, ridge flashing, verge flashing and the like.....   | 353.10               | 31.20       | 07051 |
| 07052 | Fascia capping, ridge capping and the like.....  | 269.30               | 31.20       | 07052 |

| Item  |  |                      | Item        |
|-------|--|----------------------|-------------|
|       | <b>PROPRIETARY STEEL/ALUMINIUM SHEET ROOFING (CONT'D)</b>  |                      |             |
|       | Proprietary aluminium roofing system comprising 1.00 mm thick in 65/400 profile with PVDF 2 coats finish (23-25microns) on weather side for outer liner in one single sheet for the whole roof run (no end laps allowed) and 0.80 mm thick Kaibau TR 35/200 of the same material as the outer liner with polyester coating on underside as the inner liner infilled evenly with 100 mm thick mineral wool with fire performance complying BS476 Part compressed to 85 mm at a density of 40 kg/m3 with vapour barrier including subgirt, purlins and fixing with necessary ST-Clips and approved self-tapping screws all in accordance with manufacturer's recommendations, on site fabricated system to achieve a maximum thermal insulation U-value of 0.4W/m2K and minimum Weighted Sound Reduction Index of 31dB with test report showing the compliance to BS 5821 Part 3:1984 and minimum 10 years of material warranty is to be provided on completion :- | Supply<br>and<br>fix | Fix<br>only |
|       | <i>Per square metre</i>  | A<br>\$              | B<br>\$     |
| 07053 | Proprietary series insulated roofing system .....  | 2,630.90             | 97.80       |
|       | <i>Per linear metre</i>  |                      |             |
| 07054 | Flashing to fascia.....  | 277.00               | 31.20       |
| 07055 | Flashing to drip.....  | 361.60               | 28.40       |
| 07056 | Flashing to eave.....  | 281.50               | 26.40       |
| 07057 | Flashing to corner flashing, ridge flashing and verge flashing, etc.....   | 400.00               | 31.20       |
| 07058 | Flashing to capping, ridge capping and the like.....   | 300.00               | 31.20       |
| 07059 | Toothed plate complete with foam filler n.e. 1.00 m high.....  | 284.60               | 31.20       |
| 07060 | Gutter in any size.....  | 238.50               | 8.80        |
|       | <b>REPAIRS TO EXISTING ROOFING</b>   |                      |             |
|       | <i>Per square metre</i>  |                      | A<br>\$     |
| 07061 | Take down and clear away corrugated or profiled sheet roofing in any shape up to 6 mm thick.....   |                      | 5.20        |
| 07062 | Ditto but exceeding 6 mm thick.....  |                      | 9.10        |
| 07063 | Take down and clear away proprietary roofing system including sandwich and insulated roofing system in any shape.....  |                      | 13.00       |
| 07064 | Take down and set aside for re-use corrugated or profiled sheet roofing in any shape up to 6 mm thick .....  |                      | 6.50        |
| 07065 | Ditto but exceeding 6 mm thick.....  |                      | 11.70       |
| 07066 | Take down and set aside for re-use proprietary roofing system including sandwich and insulated roofing system in any shape.....  |                      | 14.30       |

| Item                     |   |          |  | Item                 |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|--------------------------|---|----------|--|----------------------|--|--------------------------|----------------|------------------|------------|------------------|-------------------------------------|----------------------|-------------------------------------|----------------------|--|---------|----------------------------|--|--|--|
|                          | <b>REPAIRS TO EXISTING ROOFING (CONT'D)</b>   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <i>Per linear metre</i>   |          | A<br>\$  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| 07067                    | Take down and clear away ridging, flashing, capping, toothed plate complete with foam filler, or gutter and the like of any type, size and shape.....   | 6.50     |  | 07067                |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| 07068                    | Take down and set aside for re-use ridging, flashing, capping, toothed plate complete with foam filler, or gutter and the like of any type, size and shape.....   | 9.10     |  | 07068                |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <i>Each</i>   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| 07069                    | Cut hole through existing sheet roofing for pipes or articles in any size and thickness.....  | 14.70    |  | 07069                |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <b>PROPRIETARY GREEN ROOFING SYSTEM</b>   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | Proprietary green roofing system comprising root barrier, moisture retention layer, drainage layer, drainage inspection chamber, filter layer, light weight growing medium, groundcovers of approved species and spacing, and including provision of irrigation system by licensed plumber, all in accordance with the manufacturer's recommendation :-   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <i>Per square metre</i>   |          | A<br>\$  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| 07070                    | Proprietary green roofing system .....  | 1,936.70 |  | 07070                |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | Proprietary green turf system comprising polyethylene protective sheet, 40 mm thick natural pumice and natural inorganic hardener BG powder, geo-fabric, 5-10 mm thick sand bedding, lawn or groundcovers of approved species and spacing, and including provision of irrigation system by licensed plumber, all in accordance with the manufacturer's recommendation :-  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | Proprietary natural pumice and natural inorganic hardener BG powder complying with the following :-   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Density</td> <td>905 kg / m<sup>3</sup> (dry), 1,220 kg / m<sup>3</sup> (wet)</td> </tr> <tr> <td>Weight (40 mm thick)</td> <td>356 N / m<sup>2</sup> (dry), 478 N / m<sup>2</sup> (wet)</td> </tr> <tr> <td>Water retention capacity</td> <td>30% dry weight</td> </tr> <tr> <td>Percolation rate</td> <td>1 mm / sec</td> </tr> <tr> <td>Bending strength</td> <td>JIS A 1106 1.54 N / mm<sup>2</sup></td> </tr> <tr> <td>Compressive strength</td> <td>JIS A 1108 2.84 N / mm<sup>2</sup></td> </tr> <tr> <td>Thermal conductivity</td> <td>ASTM C 518:04 0.300 W/m<sup>0</sup>K</td> </tr> <tr> <td>R-value</td> <td>0.184m<sup>20</sup>K / W</td> </tr> </table> | Density  | 905 kg / m <sup>3</sup> (dry), 1,220 kg / m <sup>3</sup> (wet) | Weight (40 mm thick) | 356 N / m <sup>2</sup> (dry), 478 N / m <sup>2</sup> (wet) | Water retention capacity | 30% dry weight | Percolation rate | 1 mm / sec | Bending strength | JIS A 1106 1.54 N / mm <sup>2</sup> | Compressive strength | JIS A 1108 2.84 N / mm <sup>2</sup> | Thermal conductivity | ASTM C 518:04 0.300 W/m <sup>0</sup> K | R-value | 0.184m <sup>20</sup> K / W |  |  |  |
| Density                  | 905 kg / m <sup>3</sup> (dry), 1,220 kg / m <sup>3</sup> (wet)  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Weight (40 mm thick)     | 356 N / m <sup>2</sup> (dry), 478 N / m <sup>2</sup> (wet)  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Water retention capacity | 30% dry weight  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Percolation rate         | 1 mm / sec  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Bending strength         | JIS A 1106 1.54 N / mm <sup>2</sup>   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Compressive strength     | JIS A 1108 2.84 N / mm <sup>2</sup>   |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| Thermal conductivity     | ASTM C 518:04 0.300 W/m <sup>0</sup> K  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| R-value                  | 0.184m <sup>20</sup> K / W  |          |  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
|                          | <i>Per square metre</i>   |          | A<br>\$  |                      |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |
| 07071                    | Proprietary green turf system .....   | 1,779.80 |  | 07071                |  |                          |                |                  |            |                  |                                     |                      |                                     |                      |  |         |                            |  |  |  |

| Item  |   |  |  |  |  |   | Item                                   |  |  |        |       |       |
|---|---|--|--|--|--|---|--|--|--|--------|-------|-------|
| <b>BITUMEN FELT BUILT-UP ROOFING</b>                      |   |  |  |  |  |   |  |  |  |        |       |       |
|   |   |  |  |  |  | Nominal weight                                  |  |  |  |        |       |       |
|   |   |  |  |  |  | 1.8 kg/m <sup>2</sup>                           | 2.5 kg/m <sup>2</sup>                  |  |  |        |       |       |
|   |   |  |  |  |  | A   | B                                      |  |  |        |       |       |
|   |   |  |  |  |  | \$  | \$                                     |  |  |        |       |       |
| <i>Per square metre</i>                                   |   |  |  |  |  |   |  |  |  |        |       |       |
| 07072   | Underlayer of bitumen felt fixed to timber roof including nails.....  |  |  |  |  | 40.00   | 55.50                                  | 07072  |  |        |       |       |
| 07073   | Ditto but laid on screed or concrete roof including primer and bonding.....   |  |  |  |  | 50.00   | 69.50                                  | 07073  |  |        |       |       |
| 07074   | Subsequent underlayer of bitumen bonded to underlayer including bonding compound.....   |  |  |  |  | 50.00   | 69.50                                  | 07074  |  |        |       |       |
| 07075   | Top layer bonded to underlayers with bonding compound.....  |  |  |  |  | -   | 69.50                                  | 07075  |  |        |       |       |
| <br>  |   |  |  |  |  |   |  |  |  |        |       |       |
|   |   |  |  |  |  | A   |  |  |  |        |       |       |
|   |   |  |  |  |  | \$  |  |  |  |        |       |       |
| <i>Per square metre</i>                                   |   |  |  |  |  |   |  |  |  |        |       |       |
| 07076   | Surface dressing with stone chippings on and including base coat of bitumen compound.....   |  |  |  |  | 100.00  |  | 07076  |  |        |       |       |
| <br>  |   |  |  |  |  |   |  |  |  |        |       |       |
| <b>REPAIRS TO EXISTING; BITUMEN FELT BUILT UP ROOFING</b> |   |  |  |  |  |   |  |  |  |        |       |       |
|   |   |  |  |  |  | A   |  |  |  |        |       |       |
|   |   |  |  |  |  | \$  |  |  |  |        |       |       |
| <i>Per square metre</i>                                   |   |  |  |  |  |   |  |  |  |        |       |       |
| 07077   | Strip off existing bitumen felt built-up roofing (any number of layers) fixed on timber battens.....  |  |  |  |  | 10.10   |  | 07077  |  |        |       |       |
| 07078   | Ditto but laid on screed or concrete surfaces.....  |  |  |  |  | 14.00   |  | 07078  |  |        |       |       |
| <br>  |   |  |  |  |  |   |  |  |  |        |       |       |
| <b>BITUMINOUS EMULSION ROOFING</b>                        |   |  |  |  |  |   |  |  |  |        |       |       |
|   |   |  |  |  |  | Concrete  |  |  |  |        |       |       |
|   |   |  |  |  |  | Concrete,<br>Canton<br>tiled<br>roof<br>surface | Corrugated<br>steel<br>roof<br>surface | Profiled<br>particle<br>sheet<br>roof<br>surface | Bitumen<br>felt built-<br>up roof<br>surface |        |       |       |
|   |   |  |  |  |  | roof<br>surface                                 | vertical<br>surface                    |  |  |        |       |       |
|   |   |  |  |  |  | A   | B                                      | C  | D  | E      | F     |       |
|   |   |  |  |  |  | \$  | \$                                     | \$   | \$   | \$     | \$    |       |
| <i>Per square metre</i>                                   |   |  |  |  |  |   |  |  |  |        |       |       |
| 07079   | Apply wash coat, priming coat, two coats of approved bitumen emulsion.....  |  |  |  |  | 40.50   | 48.60                                  | 56.60  | -  | 56.60  | -     | 07079 |
| 07080   | Ditto but with three coats of approved bitumen emulsion.....  |  |  |  |  | 52.70   | 60.70                                  | 68.80  | -  | 68.80  | -     | 07080 |
| 07081   | Apply wash coat, priming coat, one coat of approved bitumen emulsion, one layer of glass fibre membrane and two coats of approved bitumen emulsion as G.S. Item 12.32.....  |  |  |  |  | 72.90   | 81.00                                  | 97.10  | -  | 97.10  | -     | 07081 |
| 07082   | Ditto but with three coats of approved bitumen emulsion to last as G.S. Item 12.32.....   |  |  |  |  | 81.00   | 97.10                                  | 105.20   | -  | 105.20 | -     | 07082 |
| 07083   | Apply wash coat and primer to grooves, filling grooves with approved bitumen emulsion and sand (1:3) by volume, apply one coat of approved cover coating and two coats of approved bitumen emulsion including cutting out cracks exceeding 5 mm wide as G.S. Item 12.33 ..... |  |  |  |  | -   | -                                      | -  | -  | -      | 72.90 | 07083 |
| 07084   | Apply one coat of approved cover coating, one coat of approved bitumen emulsion, one layer of glass fibre membrane and two coats of approved bitumen emulsion as G.S. Item 12.34 .....  |  |  |  |  | -   | -                                      | -  | 81.00  | -      | -     | 07084 |

| Item  | Thickness of base coat |         | Item  |
|---|------------------------|---------|-------|
|   | 3 mm                   | 5 mm    |       |
|   | A<br>\$                | B<br>\$ |       |
| <b>BITUMINOUS EMULSION ROOFING (CONT'D)</b>             |                        |         |       |
| <i>Per square metre</i>                                 |                        |         |       |
| 07085   | 22.60                  | 27.00   | 07085 |
| 07086   | 40.50                  | 45.00   | 07086 |
| 07087   | 45.00                  | 49.50   | 07087 |
| <b>REPAIRS TO EXISTING; BITUMINOUS EMULSION ROOFING</b> |                        |         |       |
| <i>Per square metre</i>                                 |                        |         |       |
| 07088   |                        | 9.00    | 07088 |
| 07089   |                        | 12.50   | 07089 |
| <i>Per linear metre</i>                                 |                        |         |       |
| 07090   |                        | 27.00   | 07090 |
| <b>SOLAR PROTECTION</b>                                 |                        |         |       |
| <i>Per square metre</i>                                 |                        |         |       |
| 07091   |                        | 31.50   | 07091 |
| 07092   |                        | 27.00   | 07092 |
| 07093   |                        | 27.00   | 07093 |
| <b>REPAIRS TO EXISTING; MASTIC ASPHALT ROOFING</b>      |                        |         |       |
| <i>Per square metre</i>                                 |                        |         |       |
| 07094   |                        | 33.70   | 07094 |
| <i>Each</i>   |                        |         |       |
| 07095   |                        | 59.90   | 07095 |
| 07096   |                        | 14.60   | 07096 |

| Item  |   | Sheet material       |                          | Liquid applied material            |               | Item  |
|-------|---|----------------------|--------------------------|------------------------------------|---------------|-------|
|       |   | requiring protection | self finished            | requiring protection               | self finished |       |
|       |   | A                    | B                        | C                                  | D             |       |
|       |   | \$                   | \$                       | \$                                 | \$            |       |
|       | <b>PROPRIETARY ROOFING SYSTEM AND FLOOR WATERPROOFING SYSTEM</b>  |                      |                          |                                    |               |       |
|       | Apply sheet membrane or liquid applied proprietary roofing system or floor waterproofing system ordered to the following new or existing surfaces, all in accordance with the manufacturer's instructions :-  |                      |                          |                                    |               |       |
|       | <i>Per square metre</i>   |                      |                          |                                    |               |       |
| 07097 | Concrete, screed, asphalt/felt membrane roofing system or floor waterproofing system.....   | 115.40               | 142.30                   | 127.00                             | 153.80        | 07097 |
| 07098 | Corrugated steel/compressed particle sheet covering roof.....   | -                    | -                        | 169.30                             | 204.70        | 07098 |
| 07099 | Chinese tiled roof (measured flat over tiles) .....   | -                    | -                        | 169.30                             | 204.70        | 07099 |
| 07100 | Strip off and clean existing waterproofing roof coverings and associated skirtings, flashings, etc., and the like, remove from Site including making good surfaces to receive new surfacing if required.....  | 38.50                | 38.50                    | 38.50                              | 38.50         | 07100 |
|       | <i>Per square metre</i>   |                      |                          |                                    |               |       |
| 07101 | Proprietary spray applied waterproofing membrane system to required thickness including all primer and top coat(s), to existing or new surfaces, including all necessary preparation and protection required, all in accordance with the manufacturer's instructions..... |                      |                          |                                    | 550.10        | 07101 |
|       | <b>CANTON TILES AND CONCRETE ROOFING TILES</b>  |                      |                          |                                    |               |       |
|       | Canton tiles and concrete roofing tiles and fitting as BS EN 490 and BS EN 491 :-   |                      |                          |                                    |               |       |
|       | <i>Per square metre</i>   |                      |                          |                                    |               |       |
|       |   | Supply and fix       | Take down and clear away | Take down and set aside for re-use | Fix only      |       |
|       |   | A                    | B                        | C                                  | D             |       |
|       |   | \$                   | \$                       | \$                                 | \$            |       |
| 07102 | Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately) size 300 x 300 x 30 mm thick.....  | 95.20                | 7.40                     | 8.10                               | 14.70         | 07102 |
| 07103 | Ditto but bedded, jointed and pointed in hot bitumen.....   | 113.20               | 8.10                     | 8.90                               | 16.90         | 07103 |
| 07104 | Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately) size 400 x 400 x 35 mm thick.....  | 103.80               | 7.40                     | 8.10                               | 13.50         | 07104 |
| 07105 | Ditto but bedded, jointed and pointed in hot bitumen.....   | 121.70               | 7.40                     | 8.10                               | 14.70         | 07105 |

| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>INSULATING ROOFING TILES</b>  |                |                          |                                    |          |       |
|       | Insulating roofing tiles 300 or 400 mm square and 40 mm thick : -  |                |                          |                                    |          |       |
|       | <i>Per square metre</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 07106 | Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately).....  | 154.00         | 7.40                     | 8.10                               | 14.70    | 07106 |
| 07107 | Ditto but bedded, jointed and pointed in hot bitumen.....  | 166.30         | 8.10                     | 8.90                               | 16.90    | 07107 |
|       | <b>FOAM BOARD ROOFING TILES</b>  |                |                          |                                    |          |       |
|       | Approved concrete foam board roofing tiles of any size and minimum embedded with extruded cellular polystyrene foam which is free from halogenated hydrocarbon, CFCs, HCFCs or HFCs Burning behaviour is to be Class B1, non readily ignitable. Maximum compressive load shall not be less than 300 kN m <sup>-2</sup> . Temperature difference between both sides when tile is heated on one side for 1 hour shall not be greater than 15°C : - |                |                          |                                    |          |       |
|       | <i>Per square metre</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 07108 | Tiling laid with 15 mm wide open joints and bedded solid and pointed in cement mortar (1:4) on screed or roof covering (measured separately).....  | 203.00         | 7.40                     | 8.10                               | 22.60    | 07108 |
| 07109 | Ditto but bedded, jointed and pointed in hot bitumen.....  | 218.20         | 8.10                     | 8.90                               | 39.50    | 07109 |
|       | <b>EXTRUDED POLYSTYRENE FOAM BOARD</b>   |                |                          |                                    |          |       |
|       | Extruded cellular polystyrene foam board shall be free from halogenated hydrocarbon, CFCs, HCFCs or HFCs Burning behaviour is to be Class B1, non readily ignitable. Density is not less than 33 kg/m <sup>3</sup> . Thermal conductivities are 28, 27 and 27mW.m <sup>-1</sup> .k <sup>-1</sup> for 25 mm, 40 mm and 50 mm thick respectively : -   |                |                          |                                    |          |       |
|       | <i>Per square metre</i>  |                |                          |                                    |          |       |
|       |  |                | Thickness (mm)           |                                    |          |       |
|       |  |                | 25                       | 40                                 | 50       |       |
|       |  | A<br>\$        | B<br>\$                  | C<br>\$                            |          |       |
| 07110 | Extruded cellular polystyrene foam board laid on screed or concrete (measured separately).....   |                | 65.20                    | 91.50                              | 106.10   | 07110 |
|       | <b>NON-DESTRUCTIVE TEST</b>  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    | A<br>\$  |       |
| 07111 | Flooding test in accordance with G.S. Item 12.117.....   |                |                          |                                    | 4,530.00 | 07111 |
| 07112 | Ditto for inspection of existing roofing system.....   |                |                          |                                    | 5,120.00 | 07112 |

**Section 08**

**CARPENTRY AND JOINERY**



## SECTION 08

### CARPENTRY AND JOINERY

#### SPECIAL CONDITIONS

##### TEMPORARY BARRIERS

##### Temporary barriers

##### SC08.01

Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work, such as to protect new or existing works, and to protect the public from harm, dust or nuisance. No payment will be made for temporary barriers under any circumstance, with the following exception : -

- (a) Temporary barriers specifically ordered by the Maintenance Surveyor in writing and specifically stating that the temporary barriers are for the exclusive use of the Employer and other contractor employed directly by the Employer within the Works Order period.

In the event that the temporary barriers mentioned in sub-clause (a) above are subsequently used as preventive and protective measures by the Contractor themselves, no payment will be made.

The temporary barriers shall be measured the length on plan as fixed.

No measurement shall be made for anchor bolts.

##### Rates for temporary barriers

##### SC08.02

The rates for temporary barriers shall include for : -

- (a) Delivering to and erecting on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or clearing away.
- (b) Providing all materials including poles, struts, cover boarding and the like.
- (c) Preparing and applying or touching up paint to all surfaces including writings and logos in single or multi-colour paints.
- (d) Providing and fixing anchor bolts, nuts and washers.
- (e) Providing adequate lighting and warning lights and payment of all charges incurred.
- (f) Making good any damage caused to pavings and other surfaces during use, erection and taking down.

##### Measurement generally

##### SC08.03

All sizes and thicknesses shall be finished sizes and thicknesses.

### SPECIAL CONDITIONS

#### CARPENTRY AND JOINERY WORK

|   |                |   |
|---|----------------|---|
| <b>Measurement of carpentry and joinery timber</b>      | <b>SC08.04</b> | <p>Furniture and joinery fittings which are composite items that are fabricated off Site, in whole or substantially in whole, delivered and assembled on Site, shall be measured and paid for under Section 20 - Fixtures and Fittings of this Schedule; and shall not be broken down and measured as constituent components. The Schedule rates in this Section of the Schedule shall not be applied to furniture and joinery fittings, unless otherwise specifically confirmed by the Maintenance Surveyor in writing.</p> <p>Carpentry and joinery timber shall be measured as the net length or area fixed, of the smallest finished square or rectangular section from which the piece can be cut. Timber members shall be measured flush over joints, no allowance shall be made for tenon and housing, tongue and groove, and the like at joints.</p> <p>Fillets, shelving, lining and the like exceeding 150 mm wide and not exceeding 50 mm thick shall be measured as boarding.</p>   |
| <b>Measurement of boarding, flooring, plywood, etc.</b> | <b>SC08.05</b> | <p>Boarding, weather boarding, floor boarding, wood block, bamboo and parquet flooring, plywood and all other building boards, wood wool slabs, wood panels and the like shall all be measured as the net area covered when fixed or laid. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.</p> <p>Plywood, plasterboard, fibre insulation board, blockboard, medium density fibreboard, wood chipboard, laminated plastic decorative sheeting and/or other building boards as constituent components forming part of a composite item of joinery furniture and fittings shall not be measured separately.</p> <p>When stated, the width of boarding shall mean the exposed face width when fixed.</p> <p>Timber members shall be measured flush over joints, no allowance shall be made for tenon and housing, tongue and groove, and the like at joints.</p> <p>Timber boarding shall be measured and rounded up to the nearest 5 mm.</p> <p>Supply and installation of teak will only be paid when specifically ordered by the Maintenance Surveyor in writing.</p> |
| <b>Measurement of fibreglass quilts</b>                 | <b>SC08.06</b> | <p>Fibreglass insulating quilts shall be measured as the net area covered. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.</p>  |
| <b>Measurement of folding doors, etc.</b>               | <b>SC08.07</b> | <p>Each leaf of doors hung folding or in two heights shall be measured separately.</p> <p>Plastic folding doors shall be measured as the net area of the clear opening with reference to drawing or reference to manufacturer's catalogue excluding any linings, tracks, rails and the like.</p>  |

**SPECIAL CONDITIONS**

|   |                |   |
|---|----------------|---|
| <b>Ironmongery items</b>  | <b>SC08.08</b> | Ironmongery items can be found in Section 09 - Ironmongery of this Schedule.  |
| <b>Measurement of circular, semi-circular or segmental heads to doors and windows</b> | <b>SC08.09</b> | Circular windows shall be measured square, semi-circular or segmental portion of windows and doors with semi-circular or segmental heads shall be measured rectangular, i.e. net width by net height from springing.  |
| <b>Measurement of screen fabric and synthetic leather covering</b>                    | <b>SC08.10</b> | Measurement of screen fabric and synthetic leather covering shall be the net covered areas as fixed.  |
| <b>Measurement of proprietary compact laminate panel</b>                              | <b>SC08.11</b> | Proprietary compact laminate panel as constituent components forming part of a composite item like toilet cubicles, changing room benches, lockers, laboratory benches, fume cupboards and the like shall not be measured separately, unless otherwise specifically ordered by the Maintenance Surveyor in writing.   |
| <b>Measurement of proprietary solid surfacing material</b>                            | <b>SC08.12</b> | <p>Proprietary solid surfacing materials shall be measured as the net plane area inclusive of fittings, bull nose, inlay and the like. The area of backsplash and front apron shall be measured separately. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.</p> <p>Integral wash basin or sink bowls and the like shall be measured as "Extra over" solid surfacing material in which they occur. The rates for such items shall include the labour and material and other costs necessary for the items.</p>   |
| <b>Rates generally</b>  | <b>SC08.13</b> | <p>The rates shall generally include for any or all of the following as applicable : -</p> <ol style="list-style-type: none"> <li>(a) Setting out, framing up and straight, raking or circular cutting and waste.</li> <li>(b) Fixing items complete, true and level including scribing to new or existing work in any position, fixing in clips or to cramps, embedding in concrete, screeds and the like, or screwing or bolting to steel. (Special clips, bolts, cutting rebates in concrete or other surfaces and drilling steel, etc., all measured separately.)</li> <li>(c) Fixing items in piecing out and replacing existing defective material which has been cut out and removed. (Cutting out of defective material measured separately.)</li> <li>(d) Providing all nails, pins, tacks, screws, cups and screws, adhesive, mastics, white lead and any other fixing and jointing materials.</li> <li>(e) Notching, cutting and fitting, drilling for screws and boring for bolts including counter-sinking screw, bolt heads and nuts, and pelleting when required.</li> </ol> |

**SPECIAL CONDITIONS**

|  |                             |   |
|--|-----------------------------|---|
| <b>Rates generally<br/>(Cont'd)</b>                                  | <b>SC08.13<br/>(Cont'd)</b> | <ul style="list-style-type: none"> <li>(f) Executing all plugging required for fixing to new or existing concrete, brick, stone or other surfaces, with rawplugs or other approved proprietary plugs including all drilling and cutting mortices or alternatively using "Ramset" or other similar approved power operated fixing system.</li> <li>(g) Narrow widths and small quantities.</li> <li>(h) Gluing, forming splayed or rounded edges, holes, housing ends, ship-lap joints, mitres, ends and shaped ends, angles, junctions, heading joints, short lengths and the like.</li> <li>(i) Forming tongued angles, chamfers, rebates, grooves and the like.</li> <li>(j) Forming all mortices and tenons, housed, dovetailed and other framed joints and providing hardwood or teak pins, wedges, keys and the like when required.</li> <li>(k) Submission of an authenticated certificate from the Forest Stewardship Council (FSC) or other approved authority to substantiate the source of supply from a sustainable forest or plantation.</li> </ul> |
| <b>Rates for<br/>wrot<br/>timber</b>                                 | <b>SC08.14</b>              | <p>The rates for wrot timber shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Punching nail heads, counter sinking screws and the like.</li> <li>(b) Stopping and sanding to exposed surfaces.</li> <li>(c) Preparing surfaces for painting or polishing.</li> <li>(d) In the case of wrot softwood, notwithstanding the botanical classification, it shall include beech, birch, cherry, chestnut, maple, ash, oak, pine, zen, teak, mahogany, walnut, aneigre, citron, sapele or sycamore facing unless otherwise stated.</li> </ul>  |
| <b>Rates for<br/>boarding and<br/>flooring</b>                       | <b>SC08.15</b>              | <p>The rates for boarding and flooring shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Providing and fixing boards in matching widths of any face width required.</li> <li>(b) Cramping and wedging up if required.</li> <li>(c) Forming cross-tongued in lieu of tongued and grooved boarding if required.</li> <li>(d) In the case of tongued and grooved or cross-tongued boarding, ripping off tongue, cutting back grooves and planning edges flat and square exposed surfaces.</li> </ul>  |
| <b>Rates for<br/>opening<br/>sashes,<br/>jalousies<br/>and doors</b> | <b>SC08.16</b>              | <p>The rates for opening sashes, jalousies and doors shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Hanging on hinges, rising butts, sliding track, pivots and the like (ironmongery measured separately).</li> <li>(b) Glazing and glazing beads to framed, panelled and glazed doors.</li> </ul>  |

### SPECIAL CONDITIONS

**Rates for forming observation or vent openings in timber doors**

**SC08.17**

The rates for forming observation or vent openings in timber doors shall further include for : -

- (a) Hardwood or teak frames, lippings, fillets, glazing beads and louvre blades, glass and glazing, etc.

**Rates for flush doors**

**SC08.18**

The rates for flush doors shall further include for : -

- (a) The use of plywood shall be luan faced internal quality.
- (b) The use of beech, birch, cherry, chestnut, maple, ash, oak, pine, zen, teak, mahogany, walnut, aneigre, citron, sapele or sycamore facing, to flush doors where hardwood facing is specified.
- (c) The use of any thickness of laminated plastic sheet to flush doors where laminated plastic sheet is specified.

**Rates for proprietary fire resisting doors**

**SC08.19**

The rates for proprietary fire resisting doors shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions.
- (b) Doors with insulation property to match with the FRR of the doors if required.
- (c) Providing and fixing all accessories, ironmongeries (except emergency panic device with alarm system and digital locking device), intumescent materials for protection, etc. recommended by the manufacturer.
- (d) Providing and fixing door frames where required.
- (e) Sealing edges with door seals.
- (f) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (g) Grouting into new or existing mortice or holes.
- (h) Finishing all surfaces.
- (i) Making good disturbed surfaces.
- (j) Providing test certificate, operation manual and manufacturer's guarantee as required by the Maintenance Surveyor for approval or as stated in the Contract.

**Rates for acoustic doors**

**SC08.20**

The rates for acoustic doors shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions.
- (b) Providing and fixing all accessories, ironmongeries, sound proof / absorbing materials, etc. recommended by the manufacturer.
- (c) Providing and fixing door frames where required.

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for acoustic doors (Cont'd)</b>                      | <b>SC08.20 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(d) Sealing door edges with acoustic door seals.</li> <li>(e) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.</li> <li>(f) Grouting into new or existing mortice or holes.</li> <li>(g) Finishing all surfaces.</li> <li>(h) Making good disturbed surfaces.</li> <li>(i) Providing laboratory and field test certificates in compliance with GS Item 13.63, operation manual and manufacturer's guarantee as required by the Maintenance Surveyor for approval or as stated in the Contract.</li> </ul>   |
| <b>Rates for plastic folding doors</b>                        | <b>SC08.21</b>          | <p>The rates for plastic folding doors shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.</li> <li>(b) Grouting into new or existing mortice or holes.</li> <li>(c) Providing and fixing with nuts and washers.</li> <li>(d) Providing and fixing rail, locking device, lock and all necessary ironmongeries.</li> <li>(e) Making good disturbed surfaces.</li> </ul>  |
| <b>Rates for screen fabric and synthetic leather covering</b> | <b>SC08.22</b>          | <p>The rates for screen fabric and synthetic leather covering shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Compliance with flammability standard to BS 7176.</li> <li>(b) All straight or raking cutting and waste, holes and fittings.</li> <li>(c) Executing work in any position, at any height and on new or existing surfaces.</li> <li>(d) All staples, adhesive and the like.</li> <li>(e) Covering up and protecting.</li> </ul>   |
| <b>Rates for proprietary compact laminate panels</b>          | <b>SC08.23</b>          | <p>The rates for proprietary compact laminate panels shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Supply, fabrication and installation of a compact laminate panel complying with BS EN438 formed homogeneously under high pressure and high temperature with cellulose fibres or multiple layers of kraft paper of various colours and patterns, all in accordance with the manufacturer's instructions, to form wall panels, partitions, cladding or other usage to be approved by the Maintenance Surveyor in writing.</li> <li>(b) Assembling and erection work either carried out on Site or off-Site.</li> </ul> |

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for proprietary compact laminate panels (Cont'd)</b> | <b>SC08.23 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(c) Submission of certificates of origin, catalogues, technical literature and test certificates of the compact laminate panel.</li> <li>(d) Submission of the documentary proof from the manufacturer that the compact laminate panel to be constructed exhibits acceptable properties of fire resistance complying with BS 476, moisture resistance and/or damage resistance against scratches, graffiti and/or general wear and tear.</li> <li>(e) All necessary supporting framework and fixing accessories for completing the installation of the wall panels, partitions and cladding.</li> <li>(f) Pointing, jointing and sealing edges with approved non-acidic and anti-mould sealant, where required.</li> <li>(g) Submission of samples.</li> <li>(h) Submission of the manufacturer's warranty of not less than 3 years.</li> </ul> |
| <b>Rates for proprietary acoustic panels</b>                  | <b>SC08.24</b>          | <p>The rates for proprietary acoustic panels shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Fabric of any thickness complying with flame spread test to BS 476 Part 7 : Class 1.</li> <li>(b) Submission of shop drawings, certificates of origin, catalogues, technical literature and test certificates.</li> <li>(c) Provision of samples of acoustic panels showing complete range of colours and all components.</li> <li>(d) Preparing mock up as required by and to the approval of the Maintenance Surveyor.</li> <li>(e) Providing operation and maintenance manuals, manufacturer's guarantee and supplier's warranty.</li> </ul>  |
| <b>Rates for proprietary sport flooring system</b>            | <b>SC08.25</b>          | <p>The rates for proprietary sport flooring system shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of shop drawings, certificates of origin, catalogues, technical literature and test certificates.</li> <li>(b) Provision of samples of flooring showing complete range of colours and all components.</li> <li>(c) Preparing mock up as required by and to the approval of the Maintenance Surveyor.</li> <li>(d) Provision of operation and maintenance manuals, manufacturer's guarantee and supplier's warranty.</li> <li>(e) Applying and obtaining accreditation / certification from recognized international sports organizations when required.</li> </ul>  |

**SPECIAL CONDITIONS**

**Rates for recycled plastic lumbers**

**SC08.26**

The rates for recycled plastic lumbers shall further include for : -

- (a) Recycled plastic materials which do not contain in its finished state any substance which is known to be toxic or carcinogenic when in contact with skin, and that no such substances will be released as a vapour or dust during normal use.

**Rates for proprietary solid surfacing material**

**SC08.27**

The rates for proprietary solid surfacing materials shall further include for : -

- (a) All accessories necessary for the works.
- (b) Bullnose and inlay.
- (c) Pointing, jointing and sealing edges with approved non-acidic and anti-mould sealant.
- (d) Forming holes for pipes, water taps, building services installations, basin, sink and the like.
- (e) Providing and fixing all necessary brackets for sinks, basins and the like.
- (f) Submission of catalogues, technical literature, samples, shop drawings and supplier's warranty of not less than 5 years.

**Rates for proprietary anti-ricochet surfaces**

**SC08.28**

The rates for proprietary anti-ricochet surfaces shall further include for : -

- (a) Supply and installation including all necessary fixing accessories all in accordance with the manufacturer's instructions.
- (b) Provision of samples.
- (c) Provision of technical literature, test certificates, reports, maintenance manuals, manufacturer's guarantee and supplier's warranty.

**Rates for take down and clear away, take down and set aside for re-use and fix only**

**SC08.29**

Unless otherwise provided, the rates for take down and clear away, take down and set aside for re-use and fix only shall include the work to an existing or new article, fitting or material in all types of timber and finishes and in all thicknesses.



| Item  |   |                  |                  |                  |                  |   | Item   |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
|---|---|------------------|------------------|------------------|------------------|---|--|--------------------------------------|--------|-------|-------|-------|-------|-------|--|----------------|-------------------|------------------|------------------|------------------|------------------|---|--|---------|---------|---------|---------|---------|---------|---------|--|
| <b>TEMPORARY BARRIERS</b>   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
|   |   |                  |                  |                  |                  | Erect,<br>maintain,<br>take<br>down<br>and<br>clear<br>away   | Erect,<br>maintain<br>and<br>left-in<br>position | Take<br>down<br>and<br>clear<br>away |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
|   |   |                  |                  |                  |                  | A<br>\$   | B<br>\$  | C<br>\$                              |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <i>Per cubic metre</i>  |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08001   | Sawn hardwood in scantlings and boarding in temporary barriers..... |                  |                  |                  |                  |   | 5,562.10   | 5,377.60                             | 184.60 | 08001 |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <i>Per square metre</i>   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08002   | 25 mm Plywood covering.....   |                  |                  |                  |                  |   | 151.20   | 145.30                               | 5.90   | 08002 |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <b>SCANTLINGS</b>   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| (Note :- Timber not exceeding 50 mm thick and exceeding 150 mm wide shall be measured as boarding.)   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| Scantlings fixed in grounds, fillets, rafters, trusses, purlins, floor joists, unexposed wall and partition studs, frames, louvre blades, skirtings, architraves, beads, stops and the like :-  |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <b>Sectional area (m<sup>2</sup>)</b>   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> <th style="width: 12.5%;"></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">n.e.<br/>0.0005</td> <td style="text-align: center;">0.0005 -<br/>0.001</td> <td style="text-align: center;">0.001 -<br/>0.002</td> <td style="text-align: center;">0.002 -<br/>0.004</td> <td style="text-align: center;">0.004 -<br/>0.008</td> <td style="text-align: center;">0.008 -<br/>0.016</td> <td colspan="2" style="text-align: center;">Add to<br/>0.016 m<sup>2</sup><br/>for each<br/>additional<br/>0.008 m<sup>2</sup><br/>or part<br/>thereof<br/>in<br/>sectional<br/>area</td> </tr> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> <td style="text-align: center;">C<br/>\$</td> <td style="text-align: center;">D<br/>\$</td> <td style="text-align: center;">E<br/>\$</td> <td style="text-align: center;">F<br/>\$</td> <td colspan="2" style="text-align: center;">G<br/>\$</td> </tr> </tbody> </table> |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  | n.e.<br>0.0005 | 0.0005 -<br>0.001 | 0.001 -<br>0.002 | 0.002 -<br>0.004 | 0.004 -<br>0.008 | 0.008 -<br>0.016 | Add to<br>0.016 m <sup>2</sup><br>for each<br>additional<br>0.008 m <sup>2</sup><br>or part<br>thereof<br>in<br>sectional<br>area |  | A<br>\$ | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$ | F<br>\$ | G<br>\$ |  |
|   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| n.e.<br>0.0005  | 0.0005 -<br>0.001   | 0.001 -<br>0.002 | 0.002 -<br>0.004 | 0.004 -<br>0.008 | 0.008 -<br>0.016 | Add to<br>0.016 m <sup>2</sup><br>for each<br>additional<br>0.008 m <sup>2</sup><br>or part<br>thereof<br>in<br>sectional<br>area |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| A<br>\$   | B<br>\$   | C<br>\$          | D<br>\$          | E<br>\$          | F<br>\$          | G<br>\$   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| <i>Per linear metre</i>   |   |                  |                  |                  |                  |   |  |                                      |        |       |       |       |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08003   | Sawn hardwood scantlings.....                                       |                  |                  |                  |                  |   | 5.40   | 6.90                                 | 8.70   | 12.50 | 16.40 | 25.20 | 7.30  | 08003 |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08004   | Wrot hardwood scantlings.....                                       |                  |                  |                  |                  |   | 9.50   | 13.80                                | 19.40  | 30.60 | 42.70 | 70.50 | 23.10 | 08004 |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08005   | Wrot softwood scantlings.....                                       |                  |                  |                  |                  |   | 10.30  | 14.90                                | 21.10  | 33.20 | 46.40 | 76.40 | 25.00 | 08005 |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| 08006   | Wrot teak scantlings.....   |                  |                  |                  |                  |   | 22.60  | 31.60                                | 39.60  | 45.20 | 50.90 | 84.80 | 35.60 | 08006 |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| Extra over either of Items 08003 to 08006 inclusive for scantlings bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steam bending, etc.....   |   |                  |                  |                  |                  |   |  |                                      |        |       |       | 5%    |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |
| Ditto for scantlings cut curved from solid timber including dowelling and keying sections together.....   |   |                  |                  |                  |                  |   |  |                                      |        |       |       | 10%   |       |       |  |                |                   |                  |                  |                  |                  |   |  |         |         |         |         |         |         |         |  |



Item

Item

**BOARDING (CONT'D)**

Boarding in coverings, linings, window reveals and similar positions, including weather boarding, exceeding 150 mm in width and not exceeding 50 mm thick : - (Cont'd)

*Per square metre*

| Thickness (mm) |  |        |        |        |        |        |        |        |       |
|----------------|--|--------|--------|--------|--------|--------|--------|--------|-------|
| 15             | 20   | 25     | 30     | 40     | 45     | 50     |        |        |       |
| A              | B  | C      | D      | E      | F      | G      |        |        |       |
| \$             | \$   | \$     | \$     | \$     | \$     | \$     |        |        |       |
| 08016          | Wrot softwood boarding.....                                    | 146.60 | 165.20 | 189.90 | 209.00 | 261.20 | 292.00 | 308.50 | 08016 |
| 08017          | Ditto tongued and grooved.....                                 | 188.60 | 204.70 | 223.90 | 241.20 | 276.80 | 298.20 | 317.20 | 08017 |
| 08018          | Ditto tongued, grooved and 'V' or bead jointed one face.....   | 201.00 | 220.40 | 237.80 | 254.80 | 290.50 | 307.70 | 325.40 | 08018 |
| 08019          | Ditto tongued, grooved and 'V' or bead jointed both faces..... | 205.50 | 224.10 | 242.30 | 260.30 | 297.70 | 314.80 | 334.40 | 08019 |
| 08020          | Wrot teak boarding.....  | 258.50 | 316.30 | 374.10 | 432.00 | 547.60 | 605.40 | 663.20 | 08020 |
| 08021          | Ditto tongued and grooved.....                                 | 303.80 | 364.50 | 425.30 | 485.90 | 607.40 | 668.10 | 728.80 | 08021 |
| 08022          | Ditto tongued, grooved and "V" or bead jointed one face.....   | 317.00 | 377.70 | 438.50 | 499.10 | 620.60 | 681.20 | 742.00 | 08022 |
| 08023          | Ditto tongued, grooved and "V" or bead jointed both faces..... | 325.60 | 389.30 | 452.80 | 516.50 | 643.60 | 707.30 | 770.90 | 08023 |

Extra over either of Items 08011 to 08023 inclusive for boarding bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steam bending, etc.....

5%

Ditto for boarding cut curved from solid timber including dowelling and keying sections together.....

10%

| Sawn hard-wood | Wrot hard-wood | Wrot teak |
|----------------|----------------|-----------|
| A              | B              | C         |
| \$             | \$             | \$        |
| 54.30          | 38.10          | 60.10     |

*Per square metre*

08024 Plane and sand down surface of existing boarding in position to produce wrot face including punching nail heads as necessary.....

08024

| Item                 |   |  | Item  |                              |         |         |         |         |  |
|----------------------|---|--|---|------------------------------|---------|---------|---------|---------|--|
|                      | <b>BOARDING (CONT'D)</b>  |  |   |                              |         |         |         |         |  |
|                      | Boarding in coverings, linings, window reveals and similar positions, including weather boarding, exceeding 150 mm in width and not exceeding 50 mm thick : - (Cont'd)  | <table border="1" style="float: right;"> <thead> <tr> <th>Square edge boarding</th> <th>Tongued and grooved boarding</th> </tr> <tr> <th>A<br/>\$</th> <th>B<br/>\$</th> </tr> </thead> </table>   | Square edge boarding  | Tongued and grooved boarding | A<br>\$ | B<br>\$ |         |         |  |
| Square edge boarding | Tongued and grooved boarding  |  |   |                              |         |         |         |         |  |
| A<br>\$              | B<br>\$   |  |   |                              |         |         |         |         |  |
|                      | <i>Per square metre</i>   |  |   |                              |         |         |         |         |  |
| 08025                | Take down and clear away existing sawn hardwood / sawn softwood / sawn teak / wrot hardwood / wrot softwood / wrot teak boarding of any thickness.....  | 17.00  | 17.70   |                              |         |         |         |         |  |
| 08026                | Take down and set aside for re-use ditto.....   | 20.70  | 33.20   |                              |         |         |         |         |  |
| 08027                | Fix only ditto.....   | 80.70  | 117.20  |                              |         |         |         |         |  |
|                      |   |  |   |                              |         |         |         |         |  |
|                      |   | <table border="1" style="float: right;"> <thead> <tr> <th>Hard-wood</th> <th>Soft-wood</th> <th>Teak</th> </tr> <tr> <th>A<br/>\$</th> <th>B<br/>\$</th> <th>C<br/>\$</th> </tr> </thead> </table> | Hard-wood   | Soft-wood                    | Teak    | A<br>\$ | B<br>\$ | C<br>\$ |  |
| Hard-wood            | Soft-wood   | Teak   |   |                              |         |         |         |         |  |
| A<br>\$              | B<br>\$   | C<br>\$  |   |                              |         |         |         |         |  |
|                      | <i>Per linear metre</i>   |  |   |                              |         |         |         |         |  |
| 08028                | Forming rebate, groove, splay, chamfer, bead, rounded angle, tongue, flute, cove, moulding or similar labour on existing boarding in position.....  | 7.30   | 10.30   |                              |         |         |         |         |  |
| 08029                | Ditto but circular to radius n.e. 15.00 m.....  | 11.70  | 19.10   |                              |         |         |         |         |  |
|                      |   |  |   |                              |         |         |         |         |  |
|                      | <b>STRIP FLOORING</b>   |  |   |                              |         |         |         |         |  |
|                      |   | <table border="1" style="float: right;"> <thead> <tr> <th>Hard-wood</th> <th>Soft-wood</th> <th>Teak</th> </tr> <tr> <th>A<br/>\$</th> <th>B<br/>\$</th> <th>C<br/>\$</th> </tr> </thead> </table> | Hard-wood   | Soft-wood                    | Teak    | A<br>\$ | B<br>\$ | C<br>\$ |  |
| Hard-wood            | Soft-wood   | Teak   |   |                              |         |         |         |         |  |
| A<br>\$              | B<br>\$   | C<br>\$  |   |                              |         |         |         |         |  |
|                      | <i>Per square metre</i>   |  |   |                              |         |         |         |         |  |
| 08030                | Flooring of not less than 18 mm thick in any size wood strips matched for colour, tongued, grooved and "V" jointed all round and laid in basket or herringbone pattern with straight borders as ordered, laid on bitumen/rubber latex waterproofing emulsion coated screed or blockboard backing (paint, screed and blockboard backing measured separately), including preparing surface for polishing..... | 491.60   | 522.60  |                              |         |         |         |         |  |
|                      |   |  |   |                              |         |         |         |         |  |
|                      |   |  | <table border="1" style="float: right;"> <thead> <tr> <th>A<br/>\$</th> </tr> </thead> </table> | A<br>\$                      |         |         |         |         |  |
| A<br>\$              |   |  |   |                              |         |         |         |         |  |
| 08031                | Take up and clear away wood strip flooring (blockboard backing measured separately).....  |  | 24.40   |                              |         |         |         |         |  |
| 08032                | Take up and set aside for re-use wood strip flooring (ditto).....   |  | 36.90   |                              |         |         |         |         |  |
| 08033                | Lay only wood strip flooring (ditto).....   |  | 80.30   |                              |         |         |         |         |  |

| Item                       |   | Thickness (mm) |           |        |                  | Item  |
|----------------------------|---|----------------|-----------|--------|------------------|-------|
|                            |   | 20             | 25        | 20     | 25               |       |
|                            |   | Softwood       |           | Teak   |                  |       |
|                            |   | A              | B         | C      | D                |       |
|                            |   | \$             | \$        | \$     | \$               |       |
| <b>WOOD BLOCK FLOORING</b> |   |                |           |        |                  |       |
|                            | <i>Per square metre</i>   |                |           |        |                  |       |
| 08034                      | Flooring of the stated thickness in any size wood blocks matched for colour, tongued and grooved all round and laid in basket or herringbone pattern with straight borders as ordered, fixed with cold bitumen/rubber emulsion adhesive to screeds, including preparing surfaces for polishing..... | 171.80         | 200.20    | 199.00 | 240.30           | 08034 |
|                            | <i>Per square metre</i>   |                |           |        |                  |       |
| 08035                      | Take up and clear away wood block flooring.....   |                |           |        | A<br>\$<br>14.80 | 08035 |
| 08036                      | Take up and set aside for re-use wood block flooring.....   |                |           |        | 20.70            | 08036 |
| 08037                      | Lay only wood block flooring.....   |                |           |        | 80.30            | 08037 |
| <b>PARQUET FLOORING</b>    |   |                |           |        |                  |       |
|                            | <i>Per square metre</i>   |                |           |        |                  |       |
| 08038                      | Parquet flooring of 8 mm thick in any size wood blocks matched for colour, tongued and groove and laid in pattern as ordered, fixed with cold bitumen/rubber emulsion adhesive to screeds, including preparing surfaces for polishing.....  |                |           |        |                  |       |
|                            |   |                |           |        |                  |       |
|                            |   | Hard-wood      | Soft-wood | Teak   |                  |       |
|                            |   | A              | B         | C      |                  |       |
|                            |   | \$             | \$        | \$     |                  |       |
| 08038                      |   | 110.40         | 118.50    | 124.10 |                  | 08038 |
|                            | <i>Per square metre</i>   |                |           |        |                  |       |
| 08039                      | Take up and clear away parquet flooring.....  |                |           |        | A<br>\$<br>12.60 | 08039 |
| 08040                      | Take up and set aside for re-use parquet flooring.....  |                |           |        | 18.50            | 08040 |
| 08041                      | Lay only parquet flooring.....  |                |           |        | 51.30            | 08041 |
|                            | <i>Per square metre</i>   |                |           |        |                  |       |
| 08042                      | Plane as necessary, sand down, clean off existing wood block or parquet flooring of any type and prepare surface for polishing.....   |                |           |        | A<br>\$<br>19.10 | 08042 |

Item

Item

**BAMBOO FLOORING**

Bamboo flooring of not less than 14 mm thick in any size carbonized strand woven bamboo nature strips with factory applied finish matched for colour, tongued and grooved and laid in pattern as ordered, laid on and including 12 mm plywood, gum paper and asphalt paper with adhesive and complying with the following :-

|                                 |  |
|---------------------------------|--|
| Reaction to Fire classification | EN13501-1:2007 : Cfl – s1  |
| Impact                          | 114.7kg/cm <sup>3</sup>  |
| Abrasion Resistance             | ASTM D 4060, CS-17 Taber abrasive wheels: Final wear-through: Minimum 16,000 cycles. |
| Moisture Content                | 10% +/-2%  |
| Slip Resistance                 | In accordance with DIN 51130:2004 Testing of floor coverings, R9.                    |

*Per square metre*

|       |   | A      |       |
|-------|---|--------|-------|
|       |   | \$     |       |
| 08043 | Bamboo flooring.....  | 458.80 | 08043 |
| 08044 | Take up and clear away bamboo flooring (plywood backing measured separately)..... | 14.80  | 08044 |
| 08045 | Take up and set aside for re-use bamboo flooring (ditto).....                     | 20.70  | 08045 |
| 08046 | Lay only bamboo flooring (ditto).....   | 80.30  | 08046 |

**LAMINATED FLOORING**

Laminated flooring of various series comprising laminated planks, pre-finished, tongued and grooved and laid in the required pattern including sub-floor with approved bitumen/rubber latex waterproofing emulsion, fibreglass or polyethylene backing as required all in accordance with the manufacturer's recommendations :-

*Per square metre*

|       |                         | Boarding thickness (mm) |         |       |
|-------|-------------------------|-------------------------|---------|-------|
|       |                         | n.e. 10                 | exc. 10 |       |
|       |                         | A                       | B       |       |
|       |                         | \$                      | \$      |       |
| 08047 | Laminated flooring..... | 271.40                  | 308.70  | 08047 |

*Per square metre*

|       |   | A     |       |
|-------|---|-------|-------|
|       |   | \$    |       |
| 08048 | Take up and clear away laminated flooring complete with sub-flooring..... | 27.00 | 08048 |
| 08049 | Take up and set aside for re-use ditto.....                               | 21.10 | 08049 |
| 08050 | Fix only ditto.....   | 52.80 | 08050 |

*Per linear metre*

|       |  | A      |       |
|-------|--|--------|-------|
|       |  | \$     |       |
| 08051 | Aluminium T-strip cover for expansion joint..... | 112.20 | 08051 |
| 08052 | Aluminium end edging strip.....                  | 73.80  | 08052 |
| 08053 | Laminated skirting n.e. 100 mm high.....         | 102.90 | 08053 |

| Item   |  | Thickness (mm) |          |          |          |          | Item  |
|--|--|----------------|----------|----------|----------|----------|-------|
|  |  | 40             | 45       | 50       | 55       | 65       |       |
|  |  | A              | B        | C        | D        | E        |       |
|  |  | \$             | \$       | \$       | \$       | \$       |       |
| <b>SASHES</b>  |  |                |          |          |          |          |       |
| Sashes for solid or cased frames, fanlights, lanterns and skylights, etc., with styles, head and bottom rails of required widths, divided into squares of any size with glazing bars including all rebates, splays, throats, mouldings and similar labours (solid or cased frames, glass, glazing beads and ironmongery all measured separately) : - |  |                |          |          |          |          |       |
| <i>Per square metre</i>  |  |                |          |          |          |          |       |
| 08054  | Fixed wrot hardwood sash including screwing to frame and bedding in white lead if required.....  | 446.40         | 464.80   | 482.80   | 501.80   | 537.80   | 08054 |
| 08055  | Ditto but wrot softwood.....   | 608.80         | 636.10   | 663.70   | 692.80   | 747.60   | 08055 |
| 08056  | Ditto but wrot teak.....   | 624.40         | 656.80   | 689.70   | 723.70   | 789.00   | 08056 |
| 08057  | Opening wrot hardwood sash including hanging or hanging folding on hinges, pivots or to slides vertically or horizontally, providing and fixing parting beads and stops required.....  | 498.30         | 517.30   | 537.40   | 556.50   | 596.50   | 08057 |
| 08058  | Ditto but wrot softwood.....   | 633.10         | 660.40   | 689.20   | 716.10   | 773.20   | 08058 |
| 08059  | Ditto but wrot teak.....   | 692.70         | 727.20   | 763.50   | 797.80   | 869.80   | 08059 |
| <b>JALOUSIES</b>   |  |                |          |          |          |          |       |
| <i>Per square metre</i>  |  |                |          |          |          |          |       |
| 08060  | Wrot hardwood jalousie with fixed wood louvre blades at angle of 45 degrees rounded or splayed on edges and spaced at about 40 mm centres, framed up in panels with styles, head and bottom rails of required widths including all rebates, splays, throats, mouldings and similar labours, louvre blades notched and housed into styles and secured with small fillet around back edges of styles, and hanging or hanging folding (ironmongery measured separately).....                                    | 562.10         | 576.90   | 590.80   | 603.90   | 631.10   | 08060 |
| 08061  | Ditto but wrot softwood.....   | 719.00         | 736.30   | 755.50   | 774.20   | 812.40   | 08061 |
| 08062  | Ditto but wrot teak.....   | 789.20         | 811.10   | 835.00   | 858.60   | 906.30   | 08062 |
| 08063  | Wrot hardwood jalousie with wood louvre blades movable and spaced at about 65 mm centres pivoted into styles and movable operating bar secured to louvres with pairs of eyes, framed up in panels with styles, head and bottom rails of required widths including all rebates, splays, throats, mouldings and similar labours, louvre blades notched and housed into styles and secured with small fillet around back edges of styles, and hanging or hanging folding (ironmongery measured separately)..... | 731.20         | 748.40   | 762.80   | 777.40   | 806.10   | 08063 |
| 08064  | Ditto but wrot softwood.....   | 914.90         | 935.50   | 955.30   | 965.80   | 1,016.40 | 08064 |
| 08065  | Ditto but wrot teak.....   | 981.20         | 1,006.60 | 1,031.80 | 1,043.60 | 1,108.10 | 08065 |
| Extra over either of Items 08054 to 08065 inclusive for semi-circular, segmental or elliptical head to rectangular sash or jalousie (circular sash measured square, semi-circular, segmental or elliptical portion only measured rectangular net width by net height from springing).....  |  |                |          |          |          | 25%      |       |

Item

Item

**FRAMED, PANELLED AND GLAZED DOORS**

Framed, panelled and glazed doors with styles, muntin, head, intermediate and bottom rails of required widths and 20 mm thick panels, wholly or partly glazed, including semi-circular, segmental, or elliptical head etc, and hanging (ironmongery measured separately) :-

*Per square metre*

08066 Door square and flat both sides.....

| Wrot hardwood               |        |        |        |        |
|-----------------------------|--------|--------|--------|--------|
| Overall door thickness (mm) |        |        |        |        |
| 40                          | 45     | 50     | 55     | 65     |
| A                           | B      | C      | D      | E      |
| \$                          | \$     | \$     | \$     | \$     |
| 523.70                      | 552.40 | 575.70 | 592.60 | 642.20 |

08066

**SOLID DOORS***Per square metre*

08067 Solid door of tongued and grooved boarding clamped with and including three 16 mm diameter horizontal mild steel rods each 15 mm shorter than door width and threaded and fitted with nuts and washers both ends, drilling boarding for rods, countersinking for nuts, pelleting, "V" or bead jointed to one or both sides and hanging (ironmongery measured separately).....

| Wrot hardwood               |        |        |        |        |
|-----------------------------|--------|--------|--------|--------|
| Overall door thickness (mm) |        |        |        |        |
| 40                          | 45     | 50     | 55     | 65     |
| A                           | B      | C      | D      | E      |
| \$                          | \$     | \$     | \$     | \$     |
| 554.80                      | 602.90 | 649.10 | 684.50 | 774.90 |

08067

**FLUSH DOORS**

Flush doors lipped all round with 12 mm selected hardwood lipping and lipped meeting edge with 25 mm selected hardwood lipping. (ironmongery measured separately) :-

*Per square metre*

08068 Hollow core flush door covered both sides with 3.2 mm standard hardboard.....

| Overall door thickness (mm) |        |        |        |        |
|-----------------------------|--------|--------|--------|--------|
| 25                          | 30     | 40     | 45     | 50     |
| A                           | B      | C      | D      | E      |
| \$                          | \$     | \$     | \$     | \$     |
| 183.70                      | 201.10 | 219.90 | 261.70 | 290.40 |
| 228.20                      | 249.70 | 273.20 | 286.00 | 319.90 |
| 22.60                       | 24.40  | 27.40  | 28.90  | 31.00  |

08068

08069 Solid core flush door covered both sides with 3.2 mm standard hardboard.....

08069

08070 Add to either of Items 08066 to 08069 inclusive if door hung folding or in two heights including rebates, beads and additional thickness of edge fillet required.....

08070





| Item        |   |          |   | Item  |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|-------------|---|----------|---|-------|--|-------------|----------------|---------|---------|----------|----------|----------|----------|-------|-------|-------|-------|--------|--------|--|
|             | <b>PROPRIETARY FIRE RESISTING DOORS (CONT'D)</b>  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | Supply and fix proprietary fire resisting timber doors tested in accordance with BS 476 : Pt. 20-23 including any finish : - (Cont'd) |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | <i>Each or per leaf</i>   |          | A<br>\$   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08083       | Take down and clear away fire resisting door without door frames.....   | 17.00    |   | 08083 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08084       | Take down and clear away fire resisting door with and including door frames.....  | 25.10    |   | 08084 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08085       | Take down and set aside for re-use fire resisting door without door frames.....   | 39.10    |   | 08085 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08086       | Take down and set aside for re-use fire resisting door with and including door frames.....  | 68.60    |   | 08086 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08087       | Fix only fire resisting door without door frames.....   | 471.00   |   | 08087 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08088       | Fix only fire resisting door with and including door frames.....  | 998.00   |   | 08088 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | (Note : - The above Items 08076 to 08088 inclusive will only be paid for if ordered in writing by the Maintenance Surveyor.)          |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | <b>ACOUSTIC DOORS</b>   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | Approved acoustic doors including any finish : -  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | <i>Per square metre</i><br>(door panel size measured net)   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             |   |          | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Door</th> </tr> <tr> <th>with frames</th> <th>without frames</th> </tr> <tr> <th>A<br/>\$</th> <th>B<br/>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">5,250.90</td> <td style="text-align: right;">4,804.60</td> </tr> <tr> <td style="text-align: right;">4,374.00</td> <td style="text-align: right;">3,959.20</td> </tr> <tr> <td style="text-align: right;">29.30</td> <td style="text-align: right;">19.10</td> </tr> <tr> <td style="text-align: right;">77.60</td> <td style="text-align: right;">46.90</td> </tr> <tr> <td style="text-align: right;">998.20</td> <td style="text-align: right;">499.10</td> </tr> </tbody> </table> | Door  |  | with frames | without frames | A<br>\$ | B<br>\$ | 5,250.90 | 4,804.60 | 4,374.00 | 3,959.20 | 29.30 | 19.10 | 77.60 | 46.90 | 998.20 | 499.10 |  |
| Door        |   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| with frames | without frames  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| A<br>\$     | B<br>\$   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 5,250.90    | 4,804.60  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 4,374.00    | 3,959.20  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 29.30       | 19.10   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 77.60       | 46.90   |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 998.20      | 499.10  |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08089       | Single leaf acoustic door complete with acoustic seal assembly.....   | 5,250.90 | 4,804.60  | 08089 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08090       | Double leaf acoustic door complete with ditto.....  | 4,374.00 | 3,959.20  | 08090 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08091       | Take down and clear away acoustic door.....   | 29.30    | 19.10   | 08091 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08092       | Take down and set aside for re-use acoustic door.....   | 77.60    | 46.90   | 08092 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
| 08093       | Fix only acoustic door.....   | 998.20   | 499.10  | 08093 |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |
|             | (Note : - The above Items 08089 to 08093 inclusive will only be paid for, if ordered in writing by the Maintenance Surveyor.)         |          |   |       |  |             |                |         |         |          |          |          |          |       |       |       |       |        |        |  |

| Item   | Fixed or opening sash  | Jalousie with fixed or movable louvres | Door    | Cup-board door | Item  |
|--|--|--|---------|----------------|-------|
| <b>REPAIRS, ETC., TO SASHES, JALOUSIES AND DOORS</b>   |  |  |         |                |       |
| Execute the following to hardwood, softwood or teak sashes, jalousies, drawers and doors of any size and thickness, single or folding (any new ironmongery measured separately) :- |  |  |         |                |       |
| <i>Each or per leaf</i>  |  |  |         |                |       |
|  | A<br>\$  | B<br>\$                                | C<br>\$ | D<br>\$        |       |
| 08094  | 20.70  | 23.60                                  | 31.00   | 17.00          | 08094 |
| 08095  | 22.10  | 27.30                                  | 39.10   | 25.10          | 08095 |
| 08096  | 26.40  | -                                      | -       | -              | 08096 |
| 08097  | 21.60  | 27.00                                  | 43.00   | 26.70          | 08097 |
| 08098  | 13.80  | 17.10                                  | 21.60   | 17.10          | 08098 |
| 08099  | 66.90  | 83.80                                  | 124.00  | 79.40          | 08099 |
| 08100  | 30.10  | 30.10                                  | 30.10   | -              | 08100 |
| 08101  | 44.30  | 85.70                                  | 23.50   | -              | 08101 |
| 08102  | 143.00   | 237.00                                 | 147.00  | -              | 08102 |
|  |  |  |         | A<br>\$        |       |
| 08103  | Provide and fix new 16, 22 or 29 mm circumference white Manila or other approved sash cord.....  |  |         | 9.30           | 08103 |
| <i>Each</i>  |  |  |         |                |       |
| 08104  | Small hardwood pieces let in or plug holes for making good where door fitting has been removed from sash or door frames, doors, sashes, etc. including painting patch to match existing.....<br>(Note :- This item will not be paid for, if removal of door fitting and making good have been measured elsewhere.) |  |         | 15.20          | 08104 |

Item

Item

**TIMBER FRAMES TO WINDOWS, DOORS, PARTITIONS AND PANELS**

Timber frames to windows, doors, exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., framed up and fixed complete including rebates, grooves, throats, rounded angles, chamfers, splays, mouldings on solid and similar labours and all framed joints :-

| Wrot hardwood           |                         |       |       |       |       |        | Wrot softwood  |       |        |        |        |        |        |       |
|-------------------------|-------------------------|-------|-------|-------|-------|--------|----------------|-------|--------|--------|--------|--------|--------|-------|
| Thickness (mm)          |                         |       |       |       |       |        | Thickness (mm) |       |        |        |        |        |        |       |
| 30                      | 50                      | 65    | 75    | 90    | 100   | 30     | 50             | 65    | 75     | 90     | 100    |        |        |       |
| A                       | B                       | C     | D     | E     | F     | G      | H              | I     | J      | K      | L      |        |        |       |
| \$                      | \$                      | \$    | \$    | \$    | \$    | \$     | \$             | \$    | \$     | \$     | \$     |        |        |       |
| <i>Per linear metre</i> |                         |       |       |       |       |        |                |       |        |        |        |        |        |       |
| 08105                   | Width n.e. 50 mm.....   | -     | 25.10 | 28.40 | 30.70 | 34.60  | 37.40          | -     | 35.50  | 39.20  | 41.80  | 53.10  | 53.70  | 08105 |
| 08106                   | Width 50 - 100 mm.....  | 24.60 | 33.90 | 40.70 | 45.70 | 52.30  | 56.90          | 34.40 | 48.00  | 58.20  | 65.50  | 74.20  | 82.50  | 08106 |
| 08107                   | Width 100 - 150 mm..... | 35.40 | 51.30 | 61.90 | 70.10 | 80.90  | 87.60          | 51.40 | 73.10  | 87.50  | 103.30 | 116.00 | 128.30 | 08107 |
| 08108                   | Width 150 - 200 mm..... | 48.40 | 68.40 | 85.70 | 96.40 | 108.80 | 119.90         | 68.90 | 103.10 | 126.50 | 143.10 | 164.30 | 183.30 | 08108 |

Timber frames to windows, doors, exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., framed up and fixed complete including rebates, grooves, throats, rounded angles, chamfers, splays, mouldings on solid and similar labours and all framed joints :-

| Wrot teak               |                         |       |        |        |        |        |        |       |
|-------------------------|-------------------------|-------|--------|--------|--------|--------|--------|-------|
| Thickness (mm)          |                         |       |        |        |        |        |        |       |
| 30                      | 50                      | 65    | 75     | 90     | 100    |        |        |       |
| A                       | B                       | C     | D      | E      | F      |        |        |       |
| \$                      | \$                      | \$    | \$     | \$     | \$     |        |        |       |
| <i>Per linear metre</i> |                         |       |        |        |        |        |        |       |
| 08109                   | Width n.e. 50 mm.....   | -     | 41.80  | 48.60  | 52.50  | 60.50  | 65.30  | 08109 |
| 08110                   | Width 50 - 100 mm.....  | 40.80 | 58.90  | 72.30  | 82.70  | 96.70  | 104.50 | 08110 |
| 08111                   | Width 100 - 150 mm..... | 61.80 | 95.00  | 118.80 | 132.50 | 154.60 | 172.50 | 08111 |
| 08112                   | Width 150 - 200 mm..... | 89.70 | 134.10 | 172.10 | 192.60 | 217.80 | 243.80 | 08112 |

Extra over either of Items 08105 to 08112 inclusive for frames, etc., bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steam bending, etc.....

5%

Ditto for frames, etc., cut circular from solid timber including dowelling and keying sections together.....

10%

*Per linear metre*

A  
\$

08113 Take down and clear away wrot timber frames to windows, doors, exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., of any size..... 11.80 08113

08114 Take down and set aside for re-use ditto..... 19.10 08114

08115 Fix only ditto..... 21.10 08115

| Item  |   |         |         | Item  |
|-------|---|---------|---------|-------|
|       | <b>TIMBER FRAMES TO WINDOWS, DOORS, PARTITIONS AND PANELS (CONT'D)</b>  |         |         |       |
|       | Timber frames to windows, doors, exposed partition or panel frames, transoms, mullions, styles, rails or cills, etc., framed up and fixed complete including rebates, grooves, throats, rounded angles, chamfers, splays, mouldings on solid and similar labours and all framed joints : - (Cont'd) |         |         |       |
|       | <i>Each</i>   | A<br>\$ |         |       |
| 08116 | Repair angle or junction of frames, etc., with and including 150 x 150 x 25 x 5 mm galvanized steel flat tee or angle, let in flush and screwed (per angle or tee).....   | 28.40   |         | 08116 |
| 08117 | Clamp up and repair or re-make joint with glue or white lead including re-wedging or re-pinning with new wedges or pins if required (taking down and re-fixing measured separately).....  | 29.40   |         | 08117 |
|       | <b>PLASTIC FOLDING DOORS</b>  |         |         |       |
|       | Plastic folding doors in any colour and series including door frames and all necessary accessories, screwed to wood or plugged and screwed to concrete, brickwork and the like in accordance with the manufacturer's recommendations : -  |         |         |       |
|       | <i>Per square metre</i><br>(door panel size measured flat)  | A<br>\$ |         |       |
| 08118 | Plastic folding door.....   | 253.00  |         | 08118 |
|       | <b>SCREEN FABRIC</b>  |         |         |       |
|       | Screen fabric of minimum 3 mm thick in any colours for replacement of existing screen fabric covered to panel or backing : -  |         |         |       |
|       | <i>Per square metre</i>   | A<br>\$ | B<br>\$ |       |
| 08119 | Screen fabric.....  | 43.40   | 36.30   | 08119 |
|       | <b>SYNTHETIC LEATHER</b>  |         |         |       |
|       | Synthetic leather of n.e. 3 mm thick in any colours covered to panel or backing (panel or backing measured separately) : -  |         |         |       |
|       | <i>Per square metre</i>   | A<br>\$ | B<br>\$ |       |
| 08120 | Synthetic leather covering with 5 mm foam.....  | 363.70  | 25.70   | 08120 |
| 08121 | Synthetic leather covering without 5 mm foam.....   | 316.20  | 19.20   | 08121 |

| Item                    |  |        |        |        |                |        |        |        |        |                | Item                   |              |       |    |  |
|-------------------------|--|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|------------------------|--------------|-------|----|--|
| <b>STAIRCASES</b>       |  |        |        |        |                |        |        |        |        |                |                        |              |       |    |  |
|                         |  |        |        |        | Wrot hardwood  |        |        |        |        | Wrot teak      |                        |              |       |    |  |
|                         |  |        |        |        | Thickness (mm) |        |        |        |        | Thickness (mm) |                        |              |       |    |  |
|                         |  |        |        |        | 20             | 25     | 30     | 40     | 50     | 20             | 25                     | 30           | 40    | 50 |  |
|                         |  |        |        |        | A              | B      | C      | D      | E      | F              | G                      | H            | I     | J  |  |
|                         |  |        |        |        | \$             | \$     | \$     | \$     | \$     | \$             | \$                     | \$           | \$    | \$ |  |
| <i>Per square metre</i> |  |        |        |        |                |        |        |        |        |                |                        |              |       |    |  |
| 08122                   | Tread (including winder tread) with rounded nosing, grooved for risers and wedged, glued, blocked and fixed complete (exposed top surface area measured).....  |        |        |        |                |        |        |        |        |                | 08122                  |              |       |    |  |
|                         | -  | -      | 269.40 | 352.30 | 415.10         | -      | -      | 468.90 | 620.40 | 737.80         |                        |              |       |    |  |
| 08123                   | Riser (including winder riser) with rebated or tongued edges, and wedged, glued and fixed complete (exposed face area measured).....   |        |        |        |                |        |        |        |        |                | 08123                  |              |       |    |  |
|                         | 194.90   | 229.00 | 256.40 | -      | -              | 335.50 | 406.90 | 456.10 | -      | -              |                        |              |       |    |  |
| <i>Per linear metre</i> |  |        |        |        |                |        |        |        |        |                |                        |              |       |    |  |
|                         |  |        |        |        |                |        |        |        |        |                | Wrot<br>hard -<br>wood | Wrot<br>teak |       |    |  |
|                         |  |        |        |        |                |        |        |        |        |                | A                      | B            |       |    |  |
|                         |  |        |        |        |                |        |        |        |        |                | \$                     | \$           |       |    |  |
| 08124                   | Rounded or "mopstick" handrail n.e. 0.004 m <sup>2</sup> sectional area, framed and fixed level or raking, housed for balusters or rung for metal core rail, tenoned to newel posts, and jointed with and including double nut handrail screws, including splayed or rounded ends..... |        |        |        |                |        |        |        |        |                | 68.30                  | 103.10       | 08124 |    |  |
| 08125                   | Ditto ramped or circular.....  |        |        |        |                |        |        |        |        |                | 70.20                  | 106.10       | 08125 |    |  |
| 08126                   | Ditto wreathed.....  |        |        |        |                |        |        |        |        |                | 72.10                  | 108.40       | 08126 |    |  |
| 08127                   | Add to either of Items 08124 to 08126 inclusive for each additional 0.001 m <sup>2</sup> or part thereof in sectional area.....  |        |        |        |                |        |        |        |        |                | 16.90                  | 25.10        | 08127 |    |  |
| 08128                   | Handrail n.e. 0.004 m <sup>2</sup> sectional area all as last described but moulded to detail.....   |        |        |        |                |        |        |        |        |                | 71.60                  | 109.70       | 08128 |    |  |
| 08129                   | Ditto ramped or circular.....  |        |        |        |                |        |        |        |        |                | 73.80                  | 112.40       | 08129 |    |  |
| 08130                   | Ditto wreathed.....  |        |        |        |                |        |        |        |        |                | 78.80                  | 125.10       | 08130 |    |  |
| 08131                   | Add to either of Items 08128 to 08130 inclusive for each additional 0.001 m <sup>2</sup> or part thereof in sectional area.....  |        |        |        |                |        |        |        |        |                | 19.20                  | 29.40        | 08131 |    |  |
| 08132                   | 75 x 30 or 40 mm Rounded nosing fixed to edge of landing to match stair tread nosing, rebated to match thickness of flooring, and tongued and grooved to the same.....   |        |        |        |                |        |        |        |        |                | 71.60                  | 100.10       | 08132 |    |  |



| Item  |   |  | Wrot<br>hard-<br>wood                      | Wrot<br>teak | Item   |       |
|-------|---|--|--|--------------|--|-------|
|       | <b>SUNDRY ITEMS</b>   |  | A<br>\$                                    | B<br>\$      |  |       |
|       | <i>Per linear metre</i>   |  |  |              |  |       |
| 08139 | Curtain pole 40 mm to 50 mm diameter with ends turned to 65 mm diameter and fixing.....   |  | 80.30                                      | 120.00       | 08139  |       |
|       | <i>Each</i>   |  |  |              |  |       |
| 08140 | Turned caps and knobs 25 mm diameter and fixing.....  |  | 17.70                                      | 21.60        | 08140  |       |
| 08141 | Ditto but 50 mm diameter.....   |  | 22.60                                      | 28.80        | 08141  |       |
| 08142 | Ditto but 75 mm diameter.....   |  | 32.30                                      | 43.40        | 08142  |       |
| 08143 | Hatpegs of any length or size, square, shaped or turned.....  |  | 14.10                                      | 17.10        | 08143  |       |
| 08144 | Square or rectangular blocks with chamfered edges n.e. 40 mm thick for latches, bell pushes, door stops and the like,<br>and fixing ..... |  | 20.30                                      | 24.90        | 08144  |       |
| 08145 | Circular ditto.....   |  | 24.60                                      | 33.00        | 08145  |       |
| 08146 | 25 mm Thick backboard to cistern n.e. 450 x 300 mm chamfered all round and fixing.....  |  | 58.20                                      | -            | 08146  |       |
|       | <b>SUNDRY LABOURS</b>   |  | Diameter or average<br>length of side (mm) |              |  |       |
|       |   |  | n.e. 50                                    | 50 - 100     | Each<br>additional<br>100 mm<br>or part<br>thereof |       |
|       | <i>Each</i>   |  | A<br>\$                                    | B<br>\$      | C<br>\$  |       |
| 08147 | Bore or cut round hole through hardwood or teak n.e. 25 mm thick.....   |  | 5.20                                       | 8.90         | 5.90   | 08147 |
| 08148 | Add to Item 08147 for each additional 25 mm or part thereof in thickness.....   |  | 3.70                                       | 7.40         | 4.40   | 08148 |
| 08149 | Cut square or rectangular hole through hardwood or teak n.e. 25 mm thick.....   |  | 5.90                                       | 8.90         | 6.60   | 08149 |
| 08150 | Add to Item 08149 for each additional 25 mm or part thereof in thickness.....   |  | 4.40                                       | 5.90         | 5.20   | 08150 |
|       | <i>Each</i>   |  |  |              | A<br>\$  |       |
| 08151 | Cut oval shaped hole with rounded edges through timber or plywood for latrine seat.....   |  |  |              | 22.00  | 08151 |
| 08152 | Cut dishes housing in timber for rifle butt and the like.....   |  |  |              | 11.10  | 08152 |
| 08153 | Cut rounded notch in timber for rifle, revolver barrel and the like.....  |  |  |              | 4.40   | 08153 |
| 08154 | Cut pointed or rounded head to fencing post.....  |  |  |              | 4.40   | 08154 |



| Item           |   |  | Item           |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|----------------|---|--|----------------|--------|--------|--|-------|--------|---|----|----|----|---|---|---|---|---|----|----|----|----|----|--|
|                | <b>BUILDING BOARDS AND SUNDRY ITEMS</b>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <b>PLYWOOD</b>  |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="5">Thickness (mm)</th> </tr> <tr> <th>n.e. 6</th> <th>9</th> <th>12</th> <th>15</th> <th>18</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> <td>E</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </tbody> </table> | Thickness (mm) |        |        |  |       | n.e. 6 | 9 | 12 | 15 | 18 | A | B | C | D | E | \$ | \$ | \$ | \$ | \$ |  |
| Thickness (mm) |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| n.e. 6         | 9   | 12   | 15             | 18     |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| A              | B   | C  | D              | E      |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| \$             | \$  | \$   | \$             | \$     |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <i>Per square metre</i>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08155          | Grade 2 plywood, internal quality, luan faced, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, doors, or any other position.....  | 68.20  | 77.50          | 90.30  | 97.80  | 114.60   | 08155 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08156          | Grade 2 plywood, external quality, luan faced, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, doors, or any other position.....  | 84.20  | 95.70          | 111.40 | 120.70 | 141.50   | 08156 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <i>Per square metre</i>   |  |                |        |        | <table border="1" style="width: 100%;"> <tbody> <tr> <td style="text-align: center;">A</td> </tr> <tr> <td style="text-align: center;">\$</td> </tr> </tbody> </table> | A     | \$     |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| A              |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| \$             |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08157          | Extra over either of Items 08155 to 08156 inclusive for hardwood facing including teak, beech, maple, oak, zen wood, aneigre wood, sycamore wood and similar facing of natural finish or screen fabric minimum 3 mm thick in any colour to one side of plywood..... |  |                |        |        | 43.40  | 08157 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <i>Per square metre</i>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08158          | Marine plywood as G.S. item 13.13 bonded with W.B.P. adhesive between plys, finished for painting or polishing if required, and fixed with nails, panel pins, screws or adhesive as ordered, in wall or ceiling lining, doors, or any other position.....           |  |                |        | 106.90 | 149.20   | 08158 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <b>PLASTERBOARD</b>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <i>Per square metre</i>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08159          | Plasterboard of "gypsum base board" or "gypsum lath", fixed with nails panel pins, screws or adhesive as ordered, in walls or any other vertical position.....  |  |                |        | 74.20  | 79.80  | 08159 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08160          | Ditto in soffits, or any other sloping or horizontal position.....  |  |                |        | 81.60  | 86.90  | 08160 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                |   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
|                | <i>Per square metre</i>   |  |                |        |        |  |       |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |
| 08161          | Extra over either of Items 08159 to 08160 inclusive for screen fabric minimum 3 mm thick in any colour to one side of plasterboard.....   |  |                |        |        | 43.40  | 08161 |        |   |    |    |    |   |   |   |   |   |    |    |    |    |    |  |

| Item  |   | Thickness (mm)  |        |   |       | Item  |
|-------|---|---|--------|---|-------|-------|
|       | <b>FIBRE INSULATION BOARD</b>   |   |        |   |       |       |
|       | <i>Per square metre</i>   |   |        |   |       |       |
| 08162 | Natural finish fibre insulating board fixed with nails, screws or adhesive as ordered, in wall or ceiling lining, position, including chamfered edges to boards and fixing in symmetrical patterns if required..... | 9   | 12     | 19  |       | 08162 |
|       |   | A   | B      | C   |       |       |
|       |   | \$  | \$     | \$  |       |       |
|       |   | 61.60   | 65.70  | 79.70   |       |       |
|       | <b>BLOCKBOARD AND MEDIUM DENSITY FIBREBOARD (MDF)</b>   |   |        |   |       |       |
|       |   | Blockboard  |        | MDF   |       |       |
|       |   | Grade 2 veneer bonded with Type M.R. 13.14 with luan faced both sides |        | Moisture resistant grade as G.S. 13.17.1 including plain or melamine faced boarding |       |       |
|       | <i>Per square metre</i>   |   |        |   |       |       |
| 08163 | Boarding in coverings, linings and similar position.....  | 15  | 18     | 15  | 18    | 08163 |
|       |   | A   | B      | C   | D     |       |
|       |   | \$  | \$     | \$  | \$    |       |
|       |   | 97.80   | 102.90 | 77.90   | 89.60 |       |
| 08164 | Extra over Item 08163 for screen fabric minimum 3 mm thick in any colour to one side of boarding.....   |   |        |   |       | 08164 |
|       | <i>Per square metre</i>   |   |        |   |       |       |
|       |   |   |        |   |       | A     |
|       |   |   |        |   |       | \$    |
|       |   |   |        |   |       | 43.40 |
|       | <b>WOOD CHIPBOARD</b>   |   |        |   |       |       |
|       | <i>Per square metre</i>   |   |        |   |       |       |
| 08165 | Wood chipboard fixed with nails, screws, or adhesive as ordered, in wall or ceiling lining, doors, or any other position.....   | 9   | 12     | 18  | 32    | 08165 |
|       |   | A   | B      | C   | D     |       |
|       |   | \$  | \$     | \$  | \$    |       |
|       |   | 53.20   | 60.00  | 69.40   | 94.20 |       |
| 08166 | Ditto but faced for painting one side.....  | -   | 85.10  | 98.60   | -     | 08166 |
| 08167 | Ditto but faced for painting both sides.....  | -   | 97.40  | 120.20  | -     | 08167 |
| 08168 | Ditto but faced one side with and including laminated decorative plastic sheeting (Class VG or HG as specified) .....   | -   | 145.80 | 161.80  | -     | 08168 |

Item

Item

**LAMINATED PLASTIC DECORATIVE SHEETING**

Laminated plastic decorative sheeting fixed with adhesive to bench tops, doors or any other position :-

| Thickness (mm) |        |        |
|----------------|--------|--------|
| 0.7            | 1.0    | 1.3    |
| A              | B      | C      |
| \$             | \$     | \$     |
| 88.60          | 127.90 | 157.40 |

*Per square metre*

08169 Standard laminated plastic decorative sheeting (Class HG or VG as specified)..... 08169

*Per square metre*

|        |
|--------|
| A      |
| \$     |
| 149.30 |
| 181.00 |
| 225.80 |
| 176.90 |
| 302.00 |
| 308.00 |

08170 1.3 mm Thick laminated plastic decorative sheeting cigarette proof or chemical resistance..... 08170

08171 0.7 mm (Overall) thick laminated plastic decorative sheeting (raw finished wood grains series)..... 08171

08172 Ditto (PU finished wood grains series)..... 08172

08173 0.8 mm Thick laminated decorative sheeting faced with polished finish aluminium sheet fixed with adhesive to bench tops, doors or any position..... 08173

08174 1.3 mm (Overall) thick laminated plastic in aluminium sheet with engraved pattern, in stainless steel or copper finish fixed with adhesive to bench tops, doors or any position..... 08174

08175 Ditto brushed aluminium finish ditto..... 08175

**PROPRIETARY COMPACT LAMINATE PANELS**

(Note : - The following Item 08176 will only be paid for, if ordered by the Maintenance Surveyor in writing.)

| Thickness (mm) |        |        |        |          |
|----------------|--------|--------|--------|----------|
| 3              | 6      | 8      | 9      | 12       |
| A              | B      | C      | D      | E        |
| \$             | \$     | \$     | \$     | \$       |
| 377.00         | 554.10 | 678.40 | 987.60 | 1,257.10 |

*Per square metre*

08176 Proprietary compact laminate panels complying with BS EN 438 in any colours and finishes to form wall panels, partitions and cladding fixed in any position..... 08176

| Item  |  |                | Item    |         |       |
|-------|--|----------------|---------|---------|-------|
|       | <b>PROPRIETARY ACOUSTIC PANELS</b>   |                |         |         |       |
|       | Proprietary acoustic panel fixed to timber or steel framing (framing measured separately) to wall or ceiling in any colours and finishes complete with all backing and fixing accessories in accordance with the manufacturer's recommendation : - |                |         |         |       |
|       | <i>Per square metre</i>  | A<br>\$        |         |         |       |
| 08177 | Acoustic panel system comprising 25 mm thick acoustic panel of high density rigid composite panel fibreglass of density no less than 48kg/m <sup>3</sup> and covered with fabric of any thickness.....   | 775.00         | 08177   |         |       |
| 08178 | Acoustic wooden panel with melamine finish, tile type, grooved or perforation panel in n.e. 20 mm thick MDF, back sides laminated with acoustic inlay.....   | 1,473.60       | 08178   |         |       |
| 08179 | Acoustic wooden panel with melamine finish, plank type, grooved or perforation panel in n.e. 20 mm thick MDF, back sides laminated with acoustic inlay.....  | 1,263.10       | 08179   |         |       |
| 08180 | 25 mm thick acoustic underlay.....   | 176.80         | 08180   |         |       |
| 08181 | 50 mm thick acoustic underlay.....   | 303.20         | 08181   |         |       |
|       | <i>Per linear metre</i>  | A<br>\$        |         |         |       |
| 08182 | Concealed friction fit or interlock PVC track system to wall or ceiling complete with all fixing accessories.....  | 126.40         | 08182   |         |       |
|       | <b>FLAT FIBROUS REINFORCED CEMENT SHEETING</b>   |                |         |         |       |
|       |  | Thickness (mm) |         |         |       |
|       |  | 5              | 6       | 12      |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$ | C<br>\$ |       |
| 08183 | Sheeting butt jointed and fixed to vertical or horizontal timber framing (measured separately) with 30 mm galvanized nails at 300 mm centres around all edges.....   | 122.10         | 126.10  | 172.50  | 08183 |
| 08184 | Ditto but fixed to flat or sloping soffits.....  | 129.00         | 133.80  | 179.90  | 08184 |
| 08185 | Extra over either of Items 08183 to 08184 inclusive if fixed with screws in lieu of nails.....   | 14.20          | 14.20   | 14.20   | 08185 |
| 08186 | Ditto if fixed to steel framing (measured separately) with screws, or bolts, nuts and washers, including drilling steel and tapping if required.....   | 6.70           | 6.80    | 7.30    | 08186 |
|       | <i>Per linear metre</i>  |                |         |         |       |
| 08187 | 6 mm Thick fibrous reinforced cement cover strip 75 mm wide fixed at joints.....   | 11.20          | 11.70   | 15.60   | 08187 |

| Item                          |  |  | Item                          |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|-------------------------------|--|--|-------------------------------|--|--|----------|-----------|---------------------|----|----|---|----|----|----|------|-------|-------|------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|                               | <b>GLAZED FIBROUS REINFORCED CEMENT COLOURED SHEETING</b>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <i>Per square metre</i>  | A<br>\$  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08188                         | 4 mm Thick glazed fibrous reinforced cement coloured sheeting fixed with screws or adhesive in wall or ceiling lining, fittings, doors, or any other position.....                         | 125.70   | 08188                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <b>WOOD WOOL SLABS</b>   |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <i>Per square metre</i>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08189                         | Slabs set on edge or end, and jointed in cement/lime mortar if required in partition including building in panels between timber or other framing if necessary.....                        |  | 08189                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               |  | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="4">Thickness (mm)</th> </tr> <tr> <th>25</th> <th>40</th> <th>50</th> <th>75</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">69.40</td> <td style="text-align: center;">111.10</td> <td style="text-align: center;">138.90</td> <td style="text-align: center;">187.50</td> </tr> </tbody> </table>   | Thickness (mm)                |  |  |          | 25        | 40                  | 50 | 75 | A | B  | C  | D  | \$   | \$    | \$    | \$   | 69.40 | 111.10 | 138.90 | 187.50 |       |       |       |       |       |       |       |       |       |       |  |
| Thickness (mm)                |  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 25                            | 40   | 50   | 75                            |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| A                             | B  | C  | D                             |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| \$                            | \$   | \$   | \$                            |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 69.40                         | 111.10   | 138.90   | 187.50                        |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <b>SUNDRY LABOURS</b>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | (Note :- The following Items 08190 to 08191 inclusive will not be paid for, if working on new works item.)   |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <i>Each</i>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08190                         | Bore or cut round hole through any type of boarding or sheeting in any thickness.....  |  | 08190                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08191                         | Cut square or rectangular hole through any type of boarding or sheeting in any thickness.....  |  | 08191                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               |  | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="3">Girth of hole or opening (mm)</th> </tr> <tr> <th>N.e. 150</th> <th>150 - 300</th> <th>Each additional 100</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.20</td> <td style="text-align: center;">3.40</td> <td style="text-align: center;">2.30</td> </tr> <tr> <td style="text-align: center;">2.30</td> <td style="text-align: center;">4.60</td> <td style="text-align: center;">3.40</td> </tr> </tbody> </table>   | Girth of hole or opening (mm) |  |  | N.e. 150 | 150 - 300 | Each additional 100 | A  | B  | C | \$ | \$ | \$ | 1.20 | 3.40  | 2.30  | 2.30 | 4.60  | 3.40   |        |        |       |       |       |       |       |       |       |       |       |       |  |
| Girth of hole or opening (mm) |  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| N.e. 150                      | 150 - 300  | Each additional 100  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| A                             | B  | C  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| \$                            | \$   | \$   |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 1.20                          | 3.40   | 2.30   |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 2.30                          | 4.60   | 3.40   |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <b>GLASS FIBRE INSULATION</b>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
|                               | <i>Per square metre</i>  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08192                         | Glass fibre mat in rolls laid butt jointed on slab.....  |  | 08192                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08193                         | Ditto but fixed to timber floor joists, timber wall battening or partitions, or soffits of ceiling joists or bearers, with clout headed nails or fixing fillets (measured separately)..... |  | 08193                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08194                         | Extra over either of Items 08192 to 08193 inclusive for facing on one side with aluminium foil.....  |  | 08194                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08195                         | Glass fibre resin bonded slabs laid butt jointed on slab under screed (measured separately).....   |  | 08195                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08196                         | Ditto but fixed with approved adhesive to slabs, face of walls, ducts, etc.....  |  | 08196                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 08197                         | Extra over either of Items 08195 to 08196 inclusive for facing on one side with aluminium foil.....  |  | 08197                         |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
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| Uncompressed thickness (mm)   |  |  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 12                            | 25   | 50   |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| A                             | B  | C  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| \$                            | \$   | \$   |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| -                             | 17.20  | 24.50  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| -                             | 21.40  | 29.20  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| -                             | 20.30  | 21.10  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 30.20                         | 46.20  | 69.40  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 46.40                         | 62.50  | 85.10  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |
| 19.40                         | 19.40  | 19.40  |                               |  |  |          |           |                     |    |    |   |    |    |    |      |       |       |      |       |        |        |        |       |       |       |       |       |       |       |       |       |       |  |

Item

Item

**FIRE RESISTING INSULATION BOARD**

Fire resisting insulation board fixed to position (horizontally or vertically) in any form :-

|       |                   | 45 kg/m <sup>3</sup> | 60 kg/m <sup>3</sup> | 80 kg/m <sup>3</sup> | 100 kg/m <sup>3</sup> | 125 kg/m <sup>3</sup> |       |
|-------|-------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-------|
|       |                   | A                    | B                    | C                    | D                     | E                     |       |
|       |                   | \$                   | \$                   | \$                   | \$                    | \$                    |       |
| 08198 | 30 mm thick.....  | 34.50                | 39.80                | 44.30                | 45.50                 | 52.80                 | 08198 |
| 08199 | 50 mm thick.....  | 71.50                | 79.80                | 87.10                | 95.90                 | 109.00                | 08199 |
| 08200 | 75 mm thick.....  | 121.70               | 133.20               | 142.90               | 156.00                | 175.40                | 08200 |
| 08201 | 100 mm thick..... | 168.30               | 184.00               | 196.80               | 213.40                | 238.40                | 08201 |

*Per square metre***REPAIRS TO BUILDING BOARDS AND SUNDRY ITEMS**

|       |  | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|-------|--|--------------------------------------|--|-------------|-------|
|       |  | A                                    | B  | C           |       |
|       |  | \$                                   | \$   | \$          |       |
| 08202 | Detached solid or slat shelving complete with bearers and wood or steel brackets (top surface area of shelving measured).....  | 18.50                                | 19.20  | 58.10       | 08202 |
| 08203 | Plywood, plasterboard, insulating board, blockboard, wood chipboard, laminated plastic decorative sheeting, fibrous reinforced cement sheeting or wood wool slabs of any type or thickness, and in any position..... | 14.00                                | 14.80  | 56.60       | 08203 |
| 08204 | Baize or fine felt fixed to any boarding in any position.....  | 7.40                                 | 8.10   | 41.00       | 08204 |
| 08205 | Glass fibre insulation of any type and thickness laid on or fixed to any component.....  | 6.60                                 | 7.40   | 7.60        | 08205 |
| 08206 | Notice and directory boards, pin board and the like fixed to or hung on wall or column.....  | 20.70                                | 21.40  | 64.20       | 08206 |

*Per square metre*

| Item   | Supply and fix | Take down and clear away | Item  |
|--|----------------|--------------------------|-------|
| <b>PROPRIETARY SPORT HALL FLOORING SYSTEMS</b> |                |                          |       |
|  | A<br>\$        | B<br>\$                  |       |
| <i>Per square metre</i>                        |                |                          |       |
| 08207  | 846.40         | 32.50                    | 08207 |
| 08208  | 1,020.40       | 22.10                    | 08208 |
| 08209  | 988.80         | 22.10                    | 08209 |
| 08210  | 1,226.10       | 22.10                    | 08210 |
| 08211  | 1,170.70       | 22.10                    | 08211 |
| 08212  | 1,091.60       | 22.10                    | 08212 |
|  |                | Supply and fix           |       |
|  |                | A<br>\$                  |       |
| <i>Per linear metre</i>                        |                |                          |       |
| 08213  |                | 169.10                   | 08213 |
| 08214  |                | 62.20                    | 08214 |

| Item  |  | A<br>\$ |  | Item  |
|-------|--|---------|--|-------|
|       | <b>GLUE - LAMINATED TIMBER</b>   |         |  |       |
|       | Glue - laminated timber shall be manufactured from plantation grown Radiata Pine, CCA (Copper Chromium Arsenate) treated to Hazard Class as described in accordance with NZMP 3640 (1988). Glue laminated timber shall comply with NZS3603, NZS3606 and NZS3616. All glue shall be Resorcinol or Phenol, Resorcinol used to manufacturer's instructions. Moisture content at the time of lamination shall be 12-16% :- |         |  |       |
|       | <i>Per linear metre</i>  |         |  |       |
| 08215 | 90 x 65 mm.....  | 162.90  |  | 08215 |
| 08216 | 135 x 65 mm.....   | 234.00  |  | 08216 |
| 08217 | 180 x 65 mm.....   | 305.20  |  | 08217 |
| 08218 | 230 x 65 mm.....   | 383.10  |  | 08218 |
| 08219 | 180 x 90 mm.....   | 413.00  |  | 08219 |
| 08220 | 230 x 90 mm.....   | 513.70  |  | 08220 |
| 08221 | 280 x 90 mm.....   | 601.70  |  | 08221 |
| 08222 | 230 x 113 mm.....  | 678.50  |  | 08222 |
| 08223 | 280 x 113 mm.....  | 813.60  |  | 08223 |
|       | Extra over either of Items 08215 to 08223 inclusive for members bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steaming bending, etc.....  | 5%      |  |       |
|       | Ditto for members cut curved from solid timber including dowelling and keying sections together.....   | 10%     |  |       |
|       | Ditto for members cut rounded or mopstick from solid timber including dowelling and keying sections together.....  | 10%     |  |       |
|       | <i>Per linear metre</i>  |         |  |       |
| 08224 | Take down and clear away glue laminated timber in any size.....  | 5.20    |  | 08224 |
| 08225 | Take down and set aside for re-use ditto.....  | 5.90    |  | 08225 |
| 08226 | Fix only ditto.....  | 55.70   |  | 08226 |



| Item  |   |                                  |                                  |                              | Item                         |       |
|-------|---|----------------------------------|----------------------------------|------------------------------|------------------------------|-------|
|       | <b>LANDSCAPE TIMBER</b>   |                                  |                                  |                              |                              |       |
|       |   | Structural Select Grade CCA - H3 | Structural Select Grade CCA - H4 | No. 2 Framing Grade CCA - H3 | No. 2 Framing Grade CCA - H4 |       |
|       | <i>Per cubic metre</i>  | A \$                             | B \$                             | C \$                         | D \$                         |       |
| 08227 | Wrot landscape timber scantling n.e. 0.02 m <sup>2</sup> sectional area.....  | 20,534.70                        | 26,665.60                        | 17,724.20                    | 18,749.50                    | 08227 |
| 08228 | Ditto exceeding 0.02 m <sup>2</sup> sectional area.....   | 15,794.40                        | 16,709.70                        | 13,624.50                    | 14,451.50                    | 08228 |
|       | Extra over either of Items 08227 to 08228 inclusive for members bent to curve to radius n.e. 15.00 m during fixing by means of saw cuts, steaming bending, etc..... |                                  |                                  |                              | 5%                           |       |
|       | Ditto for members cut curved from solid timber including dowelling and keying sections together.....  |                                  |                                  |                              | 10%                          |       |
|       | Ditto for members cut rounded or mopstick from solid timber including dowelling and keying sections together.....   |                                  |                                  |                              | 10%                          |       |
|       |   |                                  |                                  |                              |                              |       |
|       |   |                                  |                                  |                              |                              |       |
|       |   |                                  |                                  |                              |                              |       |
|       | <i>Per cubic metre</i>  |                                  |                                  |                              |                              |       |
| 08229 | Take down and clear away landscape timber in any size.....  |                                  |                                  | 253.20                       | 214.10                       | 08229 |
| 08230 | Take down and set aside for re-use ditto.....   |                                  |                                  | 425.80                       | 353.50                       | 08230 |
| 08231 | Fix only ditto.....   |                                  |                                  | 1,471.70                     | 1,225.50                     | 08231 |
|       |   |                                  |                                  |                              |                              |       |
|       |   |                                  |                                  |                              |                              |       |
|       |   |                                  |                                  |                              |                              |       |
|       | <b>RECYCLED PLASTIC LUMBER</b>  |                                  |                                  |                              |                              |       |
|       | Recycled plastic lumber, resistant to UV, vandal, impact, algae, moss and corrosion; and rot, splinter and crack proof : -  |                                  |                                  |                              |                              |       |
|       | <i>Per cubic metre</i>  |                                  |                                  |                              |                              |       |
| 08232 | Recycled plastic lumber (if the total quantity measured in a single Works Order exceed 0.05 m <sup>3</sup> ).....   |                                  |                                  | 18,898.50                    | 19,961.30                    | 08232 |
|       | <i>Per linear metre</i>   |                                  |                                  |                              |                              |       |
| 08233 | Recycled plastic lumber (if the total quantity measured in a single Works Order n.e. 0.05 m <sup>3</sup> ).....   |                                  |                                  | 189.00                       | 399.20                       | 08233 |
|       | Extra over either of Items 08232 to 08233 inclusive for recycled plastic lumber of specific quality.....  |                                  |                                  |                              | 50%                          |       |

| Item  |   | Square / rectangular sectional area (m <sup>2</sup> ) |           | Item  |
|---|---|---|-----------|-------|
|   |   | n.e. 0.02   | exc. 0.02 |       |
|   |   | A \$  | B \$      |       |
| <b>RECYCLED PLASTIC LUMBER (CONT'D)</b>   |   |   |           |       |
| Recycled plastic lumber, resistant to UV, vandal, impact, algae, moss and corrosion; and rot, splinter and crack proof : - (Cont'd)   |   |   |           |       |
| <i>Per cubic metre</i>  |   |   |           |       |
| 08234   | Take down and clear away recycled plastic lumber in any size.....   | 253.20  | 214.10    | 08234 |
| 08235   | Take down and set aside for re-use ditto.....   | 425.80  | 353.50    | 08235 |
| 08236   | Fix only ditto including making all joints.....   | 1,471.70  | 1,225.50  | 08236 |
| <b>PROPRIETARY SOLID SURFACING MATERIALS</b>  |   |   |           |       |
| Counter top of proprietary solid surfacing material; non-porous surfacing material homogeneously composed of 56% Premium aluminum hydroxide, 40% MMA and 4% Optimizers & Colors<br>(Tensile elongation : ASTM-D-638: 0.45%-0.51%; Tensile strength : ASTM-D-638: 6,000 psi;<br>Flexural strength : ASTM-D-790: 8,000 psi; Hardness (Barcol) : ASTM-D-2583: 63 - 65) |   |   |           |       |
| <i>Per square metre</i>   |   |   |           |       |
| 08237   | 12 mm Thick counter top.....  | 2,237.40  |           | 08237 |
| <i>Per linear metre</i>   |   |   |           |       |
| 08238   | Backsplash n.e. 50 mm high.....   | 150.70  |           | 08238 |
| 08239   | Ditto 50 to 100 mm high .....   | 185.80  |           | 08239 |
| 08240   | Front apron n.e. 100 mm high.....   | 193.10  |           | 08240 |
| 08241   | Ditto 100 to 200 mm high.....   | 325.50  |           | 08241 |
| 08242   | Ditto 200 to 300 mm high.....   | 455.90  |           | 08242 |
| <i>Each</i>   |   |   |           |       |
| 08243   | Extra over Item 08237 for integral single bowl sink; external size : 469 mm (L) x 382 mm (W) x 183 mm (D); internal size : 418 mm (L) x 331 mm (W) x 134 mm (D).....  | 1,578.00  |           | 08243 |
| 08244   | Ditto for integral single bowl sink; external size : 445 mm (L) x 445 mm (W) x 223 mm (D); internal size : 401 mm (L) x 401 mm (W) x 206 mm (D).....  | 2,223.00  |           | 08244 |
| 08245   | Ditto for integral single bowl sink; external size : 583 mm (L) x 450 mm (W) x 201 mm (D); internal size : 533 mm (L) x 400 mm (W) x 187 mm (D).....  | 2,388.00  |           | 08245 |
| <i>Per square metre</i>   |   |   |           |       |
| 08246   | 12 mm Thick proprietary solid surfacing material fixed to wall of non-porous surfacing material homogeneously composed of 56% Premium aluminum hydroxide, 40% MMA and 4% Optimizers & Colors<br>(Tensile elongation : ASTM-D-638: 0.45%-0.51%; Tensile strength : ASTM-D-638: 6,000 psi;<br>Flexural strength : ASTM-D-790: 8,000 psi; Hardness (Barcol) : ASTM-D-2583: 63 - 65)..... | 2,237.40  |           | 08246 |

Item

Item

**PROPRIETARY ANTI-RICOCHET SURFACES**

Proprietary anti-ricochet tiles for flooring, walling and ceiling, size of 1000 mm x 500 mm (+/- 1%), thickness at 43 mm, weight approximately 35 kg/m<sup>2</sup>; can be fixed or loose laid, with 2-component polyurethane adhesive or with stainless steel screws to ceiling; tensile strength of approximately 1/mm<sup>2</sup> and the elongation at break is approximately 75% according to DIN 53 571; tear resistance at approximately 8.5 N/mm according to DIN 53 515 Graves; with heat resistance up to 80°C, shortly up to 100°C; water permeability at minimum 0.34 cm/s that complies with the standard of DIN 18 035 Part 6; stress at 20% compression at approximately 0.45 N/mm<sup>2</sup> according to DIN EN ISO 2286-2; can meet the fire resistance standard according to DIN 4102 Class B2; certified with the standard DIN EN ISO 9001:2000 and ISO 14001:2004 :-

**Per square metre**

08247 Proprietary anti-ricochet tile..... 1,363.00 14.80 53.90 97.40 08247

**Each**

08248 Proprietary anti-ricochet tile, total area not exceeding 0.50 m<sup>2</sup> of each Works Order..... 804.10 7.40 27.30 48.70 08248

| Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |
|----------------|--------------------------|------------------------------------|----------|
| A              | B                        | C                                  | D        |
| \$             | \$                       | \$                                 | \$       |
| 1,363.00       | 14.80                    | 53.90                              | 97.40    |
| 804.10         | 7.40                     | 27.30                              | 48.70    |

**Section 09**

**IRONMONGERY**

## SECTION 09

### IRONMONGERY

#### SPECIAL CONDITIONS

|  |                |  |   |
|--|----------------|--|---|
| <b>Specification</b>   | <b>SC09.01</b> | This Section shall generally be read and used in conjunction with the Specification adopted in the Contract. |   |
| <b>Measurement of "supply and fix" and "fix only" of ironmongery</b> | <b>SC09.02</b> | The "supply and fix" and "fix only" of various items of ironmongery shall be measured as follows : -         |   |
|  |                | (a) Butt, rising or falling butt, backflap, counter or Parliament hinge                                      | - Length along joint                    |
|  |                | (b) Cross garnet, tee or hook and ride hinge   | - Length from joint or knuckle to point |
|  |                | (c) Spring hinge   | - Length along spring                   |
|  |                | (d) Tower or barrel bolt   | - Length of shoot                       |
|  |                | (e) Monkey tail bolt   | - Length overall                        |
|  |                | (f) Flush bolt and lever flush bolt  | - Length of plate                       |
|  |                | (g) Casement stay  | - Length from hinge to point            |
|  |                | (h) Cabin hook   | - Length of hook                        |
|  |                | (i) Hasp and staple  | - Length from hinge to point            |
|  |                | (j) Sliding door gear track and channel, curtain track and valance rail                                      | - Net length fixed                      |

### SPECIAL CONDITIONS

**Measurement  
of labour for  
ironmongery**

**SC09.03**

Measurement of labour for taking down and clearing away or setting aside for re-use of ironmongery shall be based on the following classification : -

- (a) Group I : Articles of ironmongery or related fittings generally which involve only minor labour, including but not be limited to the following
- Hinges generally
  - Bolts generally except for panic bolts
  - Door furniture generally
  - Door seals generally
  - Door holders and stoppers
  - Fittings for sashes and fanlights
  - Fittings for sliding sashes
  - Fittings for jalousies and typhoon bars
  - Fittings for doors and cupboards generally
  - Similar articles or fittings
- (b) Group II : Articles of ironmongery or related fittings generally which involve more labour when compared with Group I, including but not be limited to the following
- Activating bar of panic bolts or panic exit devices (emergency panic bolt and alarm system and rim exit device and alarm system are measured separately)
  - Key-in the knob type of lock and latch sets
  - Locks and latches generally
  - Digital lock sets
  - Door closers generally
  - Sliding door gear
  - Similar articles or fittings
- (c) Group III : Articles of ironmongery or related fittings generally which involve more extensive labour when compared with Groups I and II, including but not be limited to the following
- Floor springs, both concealed and exposed types
  - Similar articles or fittings

Labour for taking down and clearing away of ironmongery shall not be measured separately where the same is taken down together with the removal of doors, windows and/or frames.

**SC09.04**

Unless otherwise stated herein, all articles of ironmongery shall be measured per unit of article of ironmongery irrespective of sizes and materials, except for the following : -

- (a) Door seals shall be measured based on each number of single door.
- (b) Curtain tracks shall be measured based on each number of window.
- (c) Tracks and/or channel guides related to the sliding door gear shall be measured together and measured once only based on each number of sliding door, and are inclusive of brackets and accessories.

**SPECIAL CONDITIONS**

|  |                |  |
|--|----------------|--|
| <b>Measurement of repairs to ironmongery</b> | <b>SC09.05</b> | <p>Repairs to ironmongery shall be measured based on the same classification as described in Clause SC09.03 herein.</p> <p>No measurement for oiling, easing, adjusting and re-securing of ironmongery shall be made if repairs of ironmongery are measured as a separate item.</p>  |
| <b>Measurement of signage generally</b>      | <b>SC09.06</b> | <p>Circular or irregular shaped signs shall be measured as the smallest square or rectangle from which the sign can be cut.</p> <p>Cutting plastic sign shall be measured as a single cut and is only applicable to cutting shapes, features and the like other than for letters and characters.</p> <p>Cutting out letters, numbers or Chinese characters shall include for all full stops and commas. No separate payment shall be made. All punctuations other than full stops and commas shall be treated as letters. Logos, graphics and the like shall be measured as Chinese characters of the same size.</p>   |
| <b>Finishes to ironmongery</b>               | <b>SC09.07</b> | <p>Unless otherwise stated, the material for articles of ironmongery is classified into the following types :-</p> <p>Type A :     aluminium, stainless steel or brass</p> <p>Type B :     steel, galvanized steel or wrought iron</p> <p>The rates for Type A materials shall further include for any of the following surface finishes as required :-</p> <p>(a)     Electroplated coatings on nickel, chromium, bronze, brass, cadmium or zinc to form satin, bright, polished or similar plated finishes.</p> <p>(b)     Anodic oxidation coating on aluminium to form milled finish, rough or soft texture finish, polished, satin anodized or similar finish.</p> <p>(c)     Coating on stainless steel to form polished or satin finish.</p> <p>(d)     Protection of all concealed components by the manufacturer's standard finish.</p> <p>The rates for Type B materials shall further include for protection by galvanizing, zinc or cadmium plated finish.</p> |
| <b>Rates for ironmongery generally</b>       | <b>SC09.08</b> | <p>The rates for ironmongery shall generally include for :-</p> <p>(a)     Submission of samples, catalogues and certificates, and obtaining approval from the Maintenance Surveyor as required.</p> <p>(b)     Provision of ironmongery schedule as G.S. Item 14.09.</p>  |

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for ironmongery generally (Cont'd)</b> | <b>SC09.08 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(c) Provision of key-alike or master-keying, if required, except for key-alike or master-keying to existing group of door locks.</li> <li>(d) Fixing to any type of timber or building board or other surfaces.</li> <li>(e) Provision of all necessary screws to match the ironmongery and all bolts, nuts, washers, nails, pins and the like.</li> <li>(f) Protecting with approved intumescent sheets or intumescent paint where required.</li> <li>(g) All housing, sinking, drilling and similar labours required to timber or other surface to which the article is being fixed.</li> <li>(h) All plugging in concrete, brick, stone or other floors, walls, columns, soffits and the like.</li> <li>(i) Cutting and grouting all mortices, pockets, etc., for bolts, bolt sockets, floor spring boxes and the like.</li> <li>(j) Oiling, easing and adjusting, and leaving the ironmongery in perfect working order.</li> <li>(k) Making good disturbed surfaces.</li> </ul> |
| <b>Rates for bolts</b>                          | <b>SC09.09</b>          | <p>The rates for bolts shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All sockets, staples plates, thimbles, etc. and all necessary accessories.</li> <li>(b) Square or circular, straight or necked shoot.</li> </ul>   |
| <b>Rates for locks</b>                          | <b>SC09.10</b>          | <p>The rates for locks shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision of knob with or without rose, lever handles with cover plates, and the like.</li> <li>(b) Provision of key hole escutcheon.</li> <li>(c) Provision of keys and identification discs.</li> <li>(d) Stamping number on lock face.</li> </ul>   |
| <b>Rates for labour for ironmongery</b>         | <b>SC09.11</b>          | <p>The rates for taking down and clearing away or setting aside for re-use of ironmongery, shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Piecing out and filling all old housing, sinking, screw holes, mortices and the like.</li> <li>(b) Finishing surface fair and spot painting, polishing or making good.</li> </ul>  |



### SPECIAL CONDITIONS

**Rates for repairs to ironmongery**

**SC09.12**

The rates for repairs to ironmongery shall include for : -

- (a) Replacement of any compatible parts, fittings and fixing accessories, if required.
- (b) Provision of any ancillary works as may be necessary.
- (c) Carrying out oiling, easing, adjusting and re-securing of ironmongery on completion of repairs and leaving the ironmongery in perfect working order.

**Rates for plastic or metal signs, silkscreen printing and translucent film signage generally**

**SC09.13**

The rates for plastic or metal signs, silkscreen printing and translucent film signage shall generally include for : -

- (a) Setting out, cutting to size, bevelling and polishing edges, and anodizing after manufactured as required.
- (b) Drilling, plugging and screwing with brass, chromium plated or stainless steel screws, or fixing with approved adhesive or fixing on a special suspension system (measured separately).
- (c) Providing backing plate with colour coating, powder coating, anodized or polished finish on all exposed surfaces before silkscreen printing or after cut out or cut through signage.
- (d) Temporary protection with mask as required.
- (e) Making good disturbed surfaces.
- (f) Design, submission of shop drawings, samples and the like.
- (g) Compliance with Design Manual : Barrier Free Access, issued by Buildings Department, 2008 Edition.

**Rates for silkscreen printing and translucent film signage to existing surfaces**

**SC09.14**

The rates for silkscreen printing and translucent film signage to existing surfaces shall further include for : -

- (a) Preparing substrate surface to receive silkscreen printing or translucent film.

**Rates for plastic signs with cut through letters, Chinese characters and the like**

**SC09.15**

The rates for plastic signs with cut through letters, Chinese characters and the like shall further include for : -

- (a) Cutting through for letters, numbers, Chinese characters, graphics, punctuations and the like.
- (b) Plastic sign plate of any colour or finishes.
- (c) Finishing with polished edges.

**SPECIAL CONDITIONS**

|   |                |  |
|---|----------------|--|
| <b>Rates for letter or number signs cut from plastic or metal sheet</b> | <b>SC09.16</b> | The rates for letter or number signs cut from plastic or metal sheet shall further include for : -<br><br>(a) Cutting out from sheets.<br><br>(b) In the case of plastic signs, any colour or finishes.<br><br>(c) Finishing with polished edges.<br><br>(d) Fixing with moulded metal/plastic pegs or projecting plastic.<br><br>(e) In the case of anodized aluminium signs, re-anodize after fabrication. |
| <b>Rates for engraved plastic sign face</b>                             | <b>SC09.17</b> | The rates for engraved plastic sign face shall further include for : -<br><br>(a) Picking out with paint either in single or multi-colour for engraved letters, number, Chinese characters, graphics, punctuations and the like.<br><br>(b) Provision of plastic backing plate.<br><br>(c) Finishing with mirror face when engraved on the back of the plastic.  |
| <b>Rates for acid etched stainless steel sign face</b>                  | <b>SC09.18</b> | The rates for acid etched stainless steel sign face shall further include for : -<br><br>(a) Picking out with paint either in single or multi-colour for acid etched letters, number, Chinese characters, graphics, punctuations and the like.<br><br>(b) Provision of stainless steel backing plate.<br><br>(c) Finishing with polished face.   |
| <b>Government stores or other designated suppliers</b>                  | <b>SC09.19</b> | Where ironmongery is obtained from Government stores or other designated suppliers, the rates for "Fix only" will be paid.   |

| Item  | HINGES   | Supply and fix |         |          | Item  |
|-------|--|----------------|---------|----------|-------|
|       |  | Type A         | Type B  | Fix only |       |
|       |  | A<br>\$        | B<br>\$ | C<br>\$  |       |
|       | <i>Per pair</i>  |                |         |          |       |
| 09001 | Butt hinges with or without nylon bushes n.e. 75 mm long.....  | 33.90          | 25.50   | 13.50    | 09001 |
| 09002 | Ditto 75 - 125 mm long.....  | 51.30          | 38.50   | 16.90    | 09002 |
| 09003 | Rising or falling butt hinges n.e. 75 mm long.....   | 56.30          | -       | 16.90    | 09003 |
| 09004 | Ditto 75 - 100 mm long.....  | 67.20          | -       | 20.40    | 09004 |
| 09005 | Backflap hinges n.e. 75 mm long.....   | 36.60          | 27.50   | 13.50    | 09005 |
| 09006 | Counter hinges n.e. 75 mm long.....  | 49.70          | -       | 8.40     | 09006 |
| 09007 | Parliament hinges n.e. 75 mm long.....   | 79.00          | -       | 20.40    | 09007 |
| 09008 | Ditto 75 - 150 mm long.....  | 93.00          | -       | 30.40    | 09008 |
| 09009 | Cranked or semi-concealed cupboard hinges.....   | 58.90          | 44.20   | 10.20    | 09009 |
| 09010 | Fully concealed cupboard hinges.....   | 24.40          | 18.30   | 10.20    | 09010 |
| 09011 | Cross garnet or tee hinges up to 150 mm long.....  | -              | 12.20   | 8.40     | 09011 |
| 09012 | Ditto 150 - 300 mm long.....   | -              | 25.00   | 11.80    | 09012 |
| 09013 | Ditto 300 - 450 mm long.....   | -              | 34.30   | 15.30    | 09013 |
| 09014 | Ditto 450 - 600 mm long.....   | -              | 40.90   | 20.40    | 09014 |
| 09015 | Hook and ride hinges, local made heavy pattern, with hook riveted to plate up to 300 mm long.....  | 39.60          | 29.70   | 11.80    | 09015 |
| 09016 | Ditto 300 - 600 mm long.....   | 56.50          | 42.40   | 16.90    | 09016 |
| 09017 | Ditto 600 - 900 mm long.....   | 78.00          | 58.40   | 30.40    | 09017 |
| 09018 | Add to either of Items 09015 to 09017 inclusive if hook plate is flanged for and cast into concrete, brick or stone wall including cutting mortice and grouting..... | 6.60           | 6.60    | 6.60     | 09018 |
| 09019 | Single action spring hinges n.e. 75 mm long.....   | 44.20          | 33.20   | 13.50    | 09019 |
| 09020 | Ditto 75 - 150 mm long.....  | 61.30          | 46.00   | 16.90    | 09020 |
| 09021 | Double action spring hinges n.e. 75 mm long.....   | 62.80          | 47.20   | 16.90    | 09021 |
| 09022 | Ditto 75 - 150 mm long.....  | 85.00          | 64.00   | 17.30    | 09022 |
| 09023 | Safety hinges n.e. 75 mm long.....   | -              | 29.30   | 8.40     | 09023 |
| 09024 | Ditto 75 - 150 mm long.....  | -              | 41.20   | 11.80    | 09024 |
|       | <i>Per linear metre</i>  |                |         |          |       |
| 09025 | Piano hinge.....   | 31.20          | -       | 16.90    | 09025 |



| Item                  |   | Supply and fix |          |                          | Item                               |          |       |
|-----------------------|---|----------------|----------|--------------------------|------------------------------------|----------|-------|
|                       |   | Type A         | Type B   | Fix only                 |                                    |          |       |
|                       |   | A              | B        | C                        |                                    |          |       |
|                       |   | \$             | \$       | \$                       |                                    |          |       |
| <b>BOLTS (CONT'D)</b> |   |                |          |                          |                                    |          |       |
|                       | <i>Each</i>   |                |          |                          |                                    |          |       |
| 09047                 | Flat bolt plate for any size shoot.....   | 11.30          | -        | 8.40                     | 09047                              |          |       |
| 09048                 | Bolt socket of any size for surface fixing.....   | 18.50          | -        | 8.40                     | 09048                              |          |       |
| 09049                 | Bolt socket of any size for letting into and including cutting mortice in concrete, brick, stone or similar surface and grouting in and making good.....  | 19.80          | -        | 11.80                    | 09049                              |          |       |
|                       | <i>Per set</i>  |                |          |                          |                                    |          |       |
| 09050                 | Handicap indicator bolts with long lever operated, specially designed for use by the physically disabled and visually impaired with range of colour available for contrast purpose.....   | 445.00         | 334.00   | 30.40                    | 09050                              |          |       |
| 09051                 | Toilet door lock enables one handed operation with flip-up locking/opening function for handicapped use, also with outside level handle to operate latch bolt and inside level handle to operate both the latch and deadbolt ; featuring outside colour indicator showing locked or unlocked condition ; outside override function in case of emergency, and provided with option of right hand or left hand side installation to door.....   | 762.00         | 572.00   | 30.40                    | 09051                              |          |       |
| <b>PANIC BOLTS</b>    |   |                |          |                          |                                    |          |       |
|                       |   | Supply and fix |          | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|                       |   | Type A         | Type B   | C                        | D                                  | E        |       |
|                       |   | A              | B        | C                        | D                                  | E        |       |
|                       |   | \$             | \$       | \$                       | \$                                 | \$       |       |
| 09052                 | Panic exit device with type A bar operation (push-bar) as BS EN 1125 comprising horizontal activating bar and vertical shoots to suit single door.....  | 967.00         | -        | 16.00                    | 34.40                              | 64.30    | 09052 |
| 09053                 | Ditto but to suit double leaf door.....   | 1,639.00       | -        | 24.60                    | 51.60                              | 98.10    | 09053 |
| 09054                 | Panic exit device with type B bar operation (touch-bar) as BS EN 1125 comprising horizontal activating bar vertical shoots to suit single door.....   | 841.00         | -        | 13.50                    | 30.80                              | 61.00    | 09054 |
| 09055                 | Ditto but to suit pair of doors.....  | 1,367.00       | -        | 20.90                    | 46.80                              | 91.40    | 09055 |
| 09056                 | Add to either of Items 09054 to 09055 inclusive for cylinder locking device from outside.....   | 544.00         | -        | 11.10                    | 22.10                              | 47.40    | 09056 |
| 09057                 | Emergency panic bolt featuring with push bar, alarm system operated by 9-volt battery with back up device at sound level approximately 100 dB piezo alarm ; tamper resistant housing, saw-resistant deadbolt, corrosion-resistant alloy lock body, optional two-point locking device, can resist at least 2,000 lbs. outside pull force, signages available in different languages, different colour option, ten year warranty, and complies with standard of "U.L .Listed panic hardware exceeds all Life Safety, ADA, California Title 19, ANSI/BHMA for all building codes"..... | 1,924.00       | 1,443.00 | 46.80                    | 106.00                             | 203.00   | 09057 |
| 09058                 | Rim exit device for single doors or pairs of doors constructed of metal, wood or composite materials ; non-handed ; with deadlocking latch bolt engages roller strike ; coupled with battery operated and completely self-contained audible alarm with sounds continuously UL/cUL Listed : FVSR/FVSR7-Panic hardware GXHX/FXHX7-Fire exit hardware.....   | 3,783.00       | 2,837.00 | 46.80                    | 106.00                             | 203.00   | 09058 |

| Item  | Supply and fix |           |          | Item  |
|---|----------------|-----------|----------|-------|
|   | Type<br>A      | Type<br>B | Fix only |       |
|   | A<br>\$        | B<br>\$   | C<br>\$  |       |
| <b>LOCKS AND LATCHES</b>  |                |           |          |       |
| <i>Each</i>   |                |           |          |       |
| 09059 Suffolk latch with 200 x 50 mm plate.....   | -              | 66.50     | 25.30    | 09059 |
| 09060 Rim latch with case, staple and brass spring bolt.....  | 246.00         | 185.00    | 30.40    | 09060 |
| 09061 Upright mortice latch with brass spring bolt and striking plate.....  | 163.00         | 122.00    | 40.60    | 09061 |
| 09062 Horizontal ditto.....   | 169.00         | 127.00    | 40.60    | 09062 |
| 09063 Latch including knob set in stainless steel.....  | 57.60          | -         | 30.40    | 09063 |
| 09064 Bathroom lock including knob set with push button on one side and emergency device on the other side.....             | 62.50          | -         | 33.90    | 09064 |
| 09065 Lock including knob set with push button on one side and locking device on the other side.....                        | 63.70          | -         | 33.90    | 09065 |
| 09066 Combined latch and dead lock including knob set with thumb turn on one side and locking device on the other side..... | 166.00         | -         | 54.20    | 09066 |
| 09067 150 mm Rim dead lock with case, staple, brass bolt and three lever mechanism.....                                     | 82.00          | 61.40     | 30.40    | 09067 |
| 09068 150 mm Rim lock with case, staple, brass dead and spring bolt and three lever mechanism.....                          | 82.00          | 61.40     | 30.40    | 09068 |
| 09069 Horizontal mortice dead lock with brass bolt, keeper and four lever mechanism.....                                    | 131.00         | 98.00     | 47.40    | 09069 |
| 09070 Ditto but with rebated fore-end.....  | 149.00         | 112.00    | 52.40    | 09070 |
| 09071 Upright mortice lock with brass dead and spring bolt, striking plate and four lever mechanism.....                    | 145.00         | 109.00    | 52.40    | 09071 |
| 09072 Ditto but with rebated fore-end.....  | 213.00         | 160.00    | 67.70    | 09072 |
| 09073 Horizontal mortice lock with brass dead and spring bolt, striking plate and four lever mechanism.....                 | 145.00         | 109.00    | 52.40    | 09073 |
| 09074 Ditto but with rebated fore-end.....  | 213.00         | 160.00    | 67.70    | 09074 |
| 09075 Cylinder rim night latch (reversible) with staple, brass bolt, cylinder, thumb slide, knob and three keys.....        | 159.00         | 119.00    | 50.80    | 09075 |
| 09076 Cylinder mortice night latch with brass bolt, cylinder, thumb turn and three keys.....                                | 254.00         | 191.00    | 67.70    | 09076 |
| 09077 Flush cupboard, drawer or desk lock with four lever mechanism.....  | -              | 34.20     | 27.10    | 09077 |
| 09078 Ditto but with four pin tumbler mechanism.....  | 43.10          | 32.30     | 27.10    | 09078 |
| 09079 Self locking flush cupboard, drawer or desk lock with brass spring bolt and four pin tumbler mechanism.....           | 46.90          | 35.20     | 27.10    | 09079 |
| 09080 50 mm Padlock with hardened steel shackle and four lever mechanism.....   | 30.40          | 22.90     | 3.40     | 09080 |
| 09081 75 mm Ditto.....  | 36.10          | 27.10     | 3.40     | 09081 |
| 09082 50 mm Padlock with hardened steel shackle and five pin tumbler mechanism.....   | 34.90          | -         | 3.40     | 09082 |
| 09083 75 mm Ditto.....  | 55.40          | -         | 3.40     | 09083 |

| Item  |  |                | Item     |
|-------|--|----------------|----------|
|       | <b>LOCKS AND LATCHES (CONT'D)</b>  |                |          |
|       |  | Supply and fix | Fix only |
|       |  | A<br>\$        | B<br>\$  |
| 09084 | Approved Grade 2 key-in-lever lockset with chassis constructed of heavy gauge steel and cast components, plated to protect against rust and corrosion ; locksets shall be adjustable for different door thickness ; non-handed ; with separate anti-rotation through bolts ; no exposed mounting screws ; in solid one piece ; cast levers without plastic inserts ; independent operated lever ; inside and outside lever return springs ; vandal resistant lever and be free wheeling in the locked condition ; stainless steel latch bolt ; optional and complies with certifications of ASNI A156.2 Series 4000, Grade 2, UL 3 Hour Fire Rating..... | 235.00         | 32.90    |
| 09085 | Mechanical digital lock.....   | 413.00         | 46.10    |
| 09086 | Approved mechanical push button heavy-duty lock with heavy-duty cylindrical and mortise locksets ; optional mechanical key override, passage allows access, lockout (privacy) to disable the lock and access by key override only ; and different finish options ; and conform to ANSI specifications.....   | 1,530.00       | 47.40    |
|       | <b>DOOR FURNITURE</b>  |                |          |
|       | Replacement parts only : -   | Supply and fix |          |
|       |  | Type A         | Type B   |
|       |  | A<br>\$        | B<br>\$  |
| 09087 | Key hole escutcheon.....   | 12.50          | 3.40     |
| 09088 | Ditto with cover.....  | 14.90          | 3.40     |
| 09089 | Single knob with rose if required.....   | 21.60          | 5.10     |
| 09090 | Single lever handle with cover plate if required.....  | 39.20          | 5.90     |
| 09091 | Set of knob furniture complete with roses or cover plates and spindle.....   | 25.60          | 10.20    |
| 09092 | Set of lever handles ditto.....  | 101.00         | 10.20    |
|       | <b>DOOR SEALS</b>  |                |          |
|       |  | Supply and fix | Fix only |
|       |  | A<br>\$        | B<br>\$  |
| 09093 | Aluminium door seal with neoprene inserts.....   | 83.00          | 7.90     |
| 09094 | PVC door seal with neoprene inserts.....   | 75.10          | 7.90     |

| Item   |  | Supply and fix |        |          | Item  |
|--|--|----------------|--------|----------|-------|
|  |  | Type A         | Type B | Fix only |       |
|  |  | A              | B      | C        |       |
|  |  | \$             | \$     | \$       |       |
| <b>DOOR SPRINGS AND HOLDERS</b>                |  |                |        |          |       |
|  | <i>Each</i>  |                |        |          |       |
| 09095  | Single action floor spring and top pivot with or without check.....                                    | 1,016.00       | -      | 102.00   | 09095 |
| 09096  | Double action ditto.....   | 1,177.00       | -      | 102.00   | 09096 |
| 09097  | Spring action type floor door holder with rubber door stop.....  | 80.70          | -      | 6.80     | 09097 |
| 09098  | Door holder, clip pattern.....   | -              | 41.30  | 6.80     | 09098 |
| 09099  | 40 mm Diameter rubber door stop.....   | 7.60           | 5.70   | 3.40     | 09099 |
| 09100  | 40 mm Ditto but with plate fixing.....   | 5.90           | 4.40   | 3.40     | 09100 |
| 09101  | Door stopper, dome shape with rubber buffer, chrome plated.....  | 16.90          | -      | 6.80     | 09101 |
| 09102  | Overhead door closer, light duty non-hold open.....  | 182.00         | 137.00 | 42.40    | 09102 |
| 09103  | Overhead door closer, heavy duty non-hold open.....  | 237.00         | 178.00 | 42.40    | 09103 |
| 09104  | Extra over either of Items 09102 to 09103 inclusive for overhead door closer with delayed action.....  | 79.20          | 59.40  | -        | 09104 |
| 09105  | Concealed door closer, light duty non-hold open.....   | 204.00         | 153.00 | 67.70    | 09105 |
| 09106  | Concealed door closer, heavy duty non-hold open.....   | 268.00         | 201.00 | 67.70    | 09106 |
| 09107  | Extra over either of Items 09105 to 09106 inclusive for concealed door closer with delayed action..... | 91.00          | 68.30  | -        | 09107 |
| <b>FITTINGS FOR SASHES AND FANLIGHTS, ETC.</b> |  |                |        |          |       |
|  | <i>Each</i>  |                |        |          |       |
| 09108  | 75 mm Cleat hook.....  | 17.00          | -      | 3.40     | 09108 |
| 09109  | Spring catch with projecting ring and strike plate or staple.....                                      | 46.60          | -      | 8.40     | 09109 |
| 09110  | Staple only for spring catch.....  | 21.90          | -      | 3.40     | 09110 |
| 09111  | 15 mm Internal diameter screw eye.....   | 10.90          | -      | 3.40     | 09111 |
| 09112  | Casement fastener with 115 mm handle and hook or mortice plate.....                                    | 43.60          | 32.60  | 8.40     | 09112 |
| 09113  | 200 mm Casement stay with two stud pins.....   | 33.90          | 25.50  | 11.80    | 09113 |
| 09114  | 250 mm Ditto.....  | 35.20          | 26.40  | 11.80    | 09114 |
| 09115  | 300 mm Ditto.....  | 36.30          | 27.30  | 11.80    | 09115 |
| 09116  | Single stud pins.....  | 9.00           | 6.70   | 5.10     | 09116 |
| 09117  | Sliding bar type casement stay n.e. 300 mm long.....   | 61.80          | 32.70  | 11.80    | 09117 |
| 09118  | Ditto 300 - 600 mm long.....   | 82.20          | 61.60  | 18.60    | 09118 |
| 09119  | Fanlight opener with 300 mm long rack and pinion, worm wheel, pulley and endless cord.....             | 203.00         | -      | 16.90    | 09119 |
| 09120  | Set of two sash pivots and sockets.....  | 94.40          | -      | 22.00    | 09120 |



| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>FITTINGS FOR SLIDING SASHES, ETC.</b>   |                |                          | Supply and fix                     |          |       |
|       |  | Type<br>A      | Type<br>B                | Fix only                           |          |       |
|       |  | A<br>\$        | B<br>\$                  | C<br>\$                            |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
| 09121 | 15 mm Diameter sash rollers with frame and face plate.....   | 35.80          | -                        | 11.80                              | 09121    |       |
| 09122 | 20 mm Diameter ditto.....  | 40.00          | -                        | 11.80                              | 09122    |       |
| 09123 | Sash axle pulley with brass face, galvanized steel frame and 40 mm diameter brass wheel.....   | 37.50          | -                        | 13.50                              | 09123    |       |
| 09124 | Ditto but with 50 mm diameter brass wheel.....   | 58.20          | -                        | 15.30                              | 09124    |       |
| 09125 | 25 mm Internal diameter sash eye on plate.....   | 37.80          | -                        | 5.10                               | 09125    |       |
| 09126 | Sash hook pattern lift on 50 mm plate.....   | 44.70          | -                        | 5.10                               | 09126    |       |
| 09127 | Sash flush pattern lift size 75 x 40 mm overall.....   | 64.80          | -                        | 10.20                              | 09127    |       |
| 09128 | Iron sash weight with hook or plate for cord attachment weighing 1.50 kg including providing and fixing cord.....  | -              | 58.10                    | 15.30                              | 09128    |       |
| 09129 | Add for each additional 0.50 kg or part thereof in weight.....   | -              | 15.30                    | 3.40                               | 09129    |       |
| 09130 | Pair of spiral rods and tension spring sash balances for sash weighing n.e. 13 kg and height of run n.e. 2 m.....  | -              | 289.00                   | 35.50                              | 09130    |       |
| 09131 | Ditto but for sash weighing 13 kg - 20 kg.....   | -              | 329.00                   | 38.90                              | 09131    |       |
| 09132 | Ditto but for sash weighing 20 kg - 27 kg.....   | -              | 334.00                   | 44.00                              | 09132    |       |
|       | <b>WINDOW OPENERS</b>  |                |                          |                                    |          |       |
|       | Approved mechanical systems for the window remote control comprising all necessary fixing accessories all in accordance with the manufacturer's instructions :-  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       | <i>Each</i>  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 09133 | Window opener for 1 sash high level window.....  | 1,037.00       | 12.30                    | 16.00                              | 16.90    | 09133 |
| 09134 | Ditto but 2 sashes.....  | 1,535.00       | 22.10                    | 31.90                              | 37.30    | 09134 |
| 09135 | Ditto but 3 sashes.....  | 1,938.00       | 35.60                    | 47.90                              | 55.90    | 09135 |
| 09136 | Ditto but 4 sashes.....  | 2,387.00       | 47.90                    | 63.90                              | 72.80    | 09136 |
| 09137 | Add to Item 09136 for each additional sash.....  | 494.00         | 12.30                    | 16.00                              | 16.90    | 09137 |
|       | Approved electrically operated systems for the window remote control comprising all necessary fixing accessories all in accordance with the manufacturer's instructions and connection to nearest power point by a registered electrical worker :- |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
| 09138 | Window opener for 1 sash high level window.....  | 2,492.00       | 14.80                    | 18.40                              | 40.60    | 09138 |
| 09139 | Ditto but 2 sashes.....  | 2,884.00       | 27.10                    | 36.90                              | 81.20    | 09139 |
| 09140 | Ditto but 3 sashes.....  | 3,275.00       | 41.80                    | 59.00                              | 122.00   | 09140 |
| 09141 | Ditto but 4 sashes.....  | 3,657.00       | 55.30                    | 73.70                              | 152.00   | 09141 |
| 09142 | Add to Item 09141 for each additional sash.....  | 611.00         | 14.80                    | 18.40                              | 40.60    | 09142 |

| Item   |   | Supply and fix |        |          | Item  |
|--|---|----------------|--------|----------|-------|
|  |   | Type A         | Type B | Fix only |       |
|  |   | A              | B      | C        |       |
|  |   | \$             | \$     | \$       |       |
| <b>FITTINGS FOR JALOUSIES AND TYPHOON BARS</b> |   |                |        |          |       |
|  | <i>Each</i>   |                |        |          |       |
| 09143  | Turn buckle comprising 150 x 25 x 5 mm plate flanged one end with 15 x 15 mm pin 75 mm long filed circular for half the length and fitted with 75 x 25 x 5 mm turn buckle splayed one end and holed for 15 x 15 mm pin..... | -              | 64.70  | 11.80    | 09143 |
| 09144  | Bar clip 150 x 40 x 5 mm twice bent and three times holed for screws.....   | 92.70          | 69.50  | 6.80     | 09144 |
| 09145  | Eye for movable louvre.....   | 16.30          | 12.30  | 3.40     | 09145 |
| 09146  | 8 mm Diameter butterfly headed thumb screw 150 mm long.....   | 30.10          | -      | 3.40     | 09146 |
| 09147  | Ditto but 200 mm long.....  | 37.40          | -      | 5.10     | 09147 |
| 09148  | 50 x 50 x 3 mm Plate holed for thumb screw and four fixing screws.....  | 30.10          | -      | 6.80     | 09148 |
| 09149  | Ditto with tapped shoulder to receive 8 mm diameter screw.....  | 40.80          | -      | 6.80     | 09149 |
| <b>FITTINGS FOR DOORS AND CUPBOARDS</b>        |   |                |        |          |       |
|  | <i>Per square metre</i>   |                |        |          |       |
| 09150  | 1.60 mm Kicking plate with bevelled edges if required and holed for screws.....   | 676.00         | -      | 89.70    | 09150 |
|  | <i>Per linear metre</i>   |                |        |          |       |
| 09151  | Corner guard.....   | 329.70         | 247.30 | 50.80    | 09151 |
|  | <i>Each</i>   |                |        |          |       |
| 09152  | Local pattern "Magic Eye" observation eyehole fitting.....  | 54.40          | -      | 6.80     | 09152 |
| 09153  | Cupboard door pull knob.....  | 13.90          | 10.40  | 3.40     | 09153 |
| 09154  | Ditto with 50 mm diameter back plate.....   | 20.10          | -      | 3.40     | 09154 |
| 09155  | Bales catch with plate size 28 x 10 mm.....   | 23.40          | -      | 6.80     | 09155 |
| 09156  | Ditto but plate size 40 x 15 mm.....  | 24.30          | -      | 6.80     | 09156 |
| 09157  | Ditto but plate size 50 x 20 mm.....  | 25.20          | -      | 6.80     | 09157 |
| 09158  | Magnetic door catch.....  | 27.20          | 20.50  | 6.80     | 09158 |
| 09159  | Drawer, wardrobe or cupboard pull handle 100 mm long.....   | 37.30          | 28.00  | 8.40     | 09159 |
| 09160  | Ditto but 150 mm long.....  | 43.50          | 32.60  | 8.40     | 09160 |
| 09161  | Door pull handle 225 mm long.....   | 38.20          | -      | 10.20    | 09161 |
| 09162  | Ditto but 300 mm long.....  | 47.20          | -      | 10.20    | 09162 |

| Item   |   |                |           | Item     |       |
|--|---|----------------|-----------|----------|-------|
| <b>FITTINGS FOR DOORS AND CUPBOARDS (CONT'D)</b> |   |                |           |          |       |
|  |   | Supply and fix |           | Fix only |       |
|  |   | Type<br>A      | Type<br>B | C        |       |
|  |   | \$             | \$        | \$       |       |
|  | <i>Each</i>   |                |           |          |       |
| 09163  | 300 x 75 mm Finger plate.....   | 35.50          | -         | 8.40     | 09163 |
| 09164  | 75 x 45 mm Flush pattern drop drawer handle.....  | 35.90          | -         | 16.90    | 09164 |
| 09165  | 75 x 40 mm Flush pull handle.....   | 34.90          | 26.30     | 15.30    | 09165 |
| 09166  | 100 x 50 mm Ditto.....  | 36.00          | 27.00     | 15.30    | 09166 |
| 09167  | 75 x 40 mm Card holder frame.....   | 23.30          | 17.50     | 5.10     | 09167 |
| 09168  | 100 x 75 mm Ditto.....  | 26.80          | 20.10     | 5.10     | 09168 |
| 09169  | 150 x 100 mm Ditto.....   | 36.30          | 27.30     | 5.10     | 09169 |
| 09170  | 25 x 1.60 mm Hanging plate.....   | 40.40          | -         | 3.40     | 09170 |
| 09171  | 40 x 1.60 mm Ditto.....   | 45.00          | -         | 3.40     | 09171 |
| 09172  | 50 x 1.60 mm Ditto.....   | 49.50          | -         | 3.40     | 09172 |
| 09173  | 50 mm Coat hook.....  | 14.30          | -         | 3.40     | 09173 |
| 09174  | 100 mm Hat and coat hook.....   | 20.80          | -         | 3.40     | 09174 |
| 09175  | 75 mm Combined hook and rubber door stop.....   | 31.10          | -         | 3.40     | 09175 |
| 09176  | 25 mm Cup hook.....   | 9.00           | -         | 3.40     | 09176 |
| 09177  | 50 mm Hook.....   | 21.50          | 16.10     | 3.40     | 09177 |
| 09178  | 100 x 75 mm Shelf bracket.....  | -              | 15.90     | 10.20    | 09178 |
| 09179  | 150 x 125 mm Ditto.....   | -              | 19.70     | 11.80    | 09179 |
| 09180  | 225 x 175 mm Ditto.....   | -              | 23.40     | 13.50    | 09180 |
| 09181  | 300 x 250 mm Ditto.....   | -              | 28.00     | 15.30    | 09181 |
| 09182  | Cabin hook and eye n.e. 150 mm.....   | 41.30          | 30.90     | 13.50    | 09182 |
| 09183  | Ditto but 150 - 300 mm.....   | 63.60          | 48.00     | 22.00    | 09183 |
| 09184  | 150 mm Double hinged cabin hook and eye.....  | -              | 35.30     | 15.30    | 09184 |
| 09185  | Eye for cabin hook.....   | 14.60          | 11.00     | 5.10     | 09185 |
| 09186  | Hasp and staple n.e. 75 mm.....   | -              | 10.90     | 8.40     | 09186 |
| 09187  | Ditto but exceeding 75 mm.....  | -              | 13.30     | 10.20    | 09187 |
| 09188  | Solid drawn flat bar type hasp and staple n.e. 75 mm.....                                   | 13.40          | 10.10     | 8.40     | 09188 |
| 09189  | Ditto but exceeding 75 mm.....  | -              | 12.60     | 10.20    | 09189 |
| 09190  | 450 mm Hinged swing locking bar with pivot and plate, two hook plates and staple plate..... | 95.10          | -         | 30.40    | 09190 |
| 09191  | 600 mm Ditto.....   | 113.00         | -         | 38.90    | 09191 |
| 09192  | 900 mm Ditto.....   | 135.00         | -         | 42.40    | 09192 |

| Item  |  | Supply and fix |        |          | Item  |
|---|--|----------------|--------|----------|-------|
|   |  | Type A         | Type B | Fix only |       |
|   |  | A              | B      | C        |       |
|   |  | \$             | \$     | \$       |       |
| <b>FITTINGS FOR DOORS AND CUPBOARDS (CONT'D)</b>                              |  |                |        |          |       |
|   | <i>Each</i>  |                |        |          |       |
| 09193   | Door chain complete with slider and 100 x 40 mm plate.....   | 48.80          | 36.70  | 15.30    | 09193 |
| 09194   | Ditto but with 150 x 40 mm plate.....  | 57.30          | 42.90  | 15.30    | 09194 |
| 09195   | Slide or upright single pulley (screw or frame and plate) with wheel n.e. 25 mm diameter.....  | 24.50          | 18.40  | 6.80     | 09195 |
| 09196   | Ditto with wheel 25 - 50 mm diameter.....  | 27.40          | 20.60  | 6.80     | 09196 |
| 09197   | Slide or upright double pulley (screw or frame and plate) with wheel n.e. 25 mm diameter.....  | 30.40          | 22.80  | 6.80     | 09197 |
| 09198   | Ditto with wheel 25 - 50 mm diameter.....  | 36.30          | 27.20  | 6.80     | 09198 |
| 09199   | Ash tray in any size, surface mounted.....   | 199.00         | -      | 5.10     | 09199 |
| 09200   | Litter bin, 250 x 250 x 350 mm high, surface mounted .....   | 354.00         | -      | 16.90    | 09200 |
| 09201   | Ditto, 400 x 400 x 550 mm high, surface mounted.....   | 754.00         | -      | 20.40    | 09201 |
| 09202   | Socket for shelves.....  | 5.60           | 4.20   | 1.90     | 09202 |
| 09203   | Stud pin with socket for shelves.....  | 8.10           | 6.10   | 2.50     | 09203 |
|   | <i>Per set</i>   |                |        |          |       |
| 09204   | Approved ball bearing slides n.e. 500 mm long inset/horizontal type and soft closing mechanism flipper to cupboard door complete with slides, pivoted arms and all necessary fittings and furniture..... | 402.00         | -      | 67.70    | 09204 |
|   | <i>Per pair</i>  |                |        |          |       |
| 09205   | Set of drawer slider 300 mm long.....  | 49.60          | 37.30  | 8.40     | 09205 |
| 09206   | Add to Item 09205 for each additional 50 mm long or part thereof in length.....  | 5.40           | 4.40   | 3.40     | 09206 |
| <b>FIBRE TRACK, SLIDERS, ETC., FOR SMALL CUPBOARD AND GLASS SLIDING DOORS</b> |  |                |        |          |       |
|   | <i>Per linear metre</i>  |                |        |          |       |
| 09207   | "Grooving-in" type track including cutting groove.....   | 34.60          | 26.00  | 11.80    | 09207 |
| 09208   | "T" shaped track for surface fixing.....   | 34.90          | 26.20  | 8.40     | 09208 |
| 09209   | Single channel including cutting groove if required.....   | 61.40          | 46.10  | 16.90    | 09209 |
| 09210   | Double channel including ditto.....  | 65.00          | 48.80  | 16.90    | 09210 |
| 09211   | Triple channel including ditto.....  | 74.30          | 55.70  | 16.90    | 09211 |
|   | <i>Each</i>  |                |        |          |       |
| 09212   | Slider of various sizes.....   | 13.40          | 10.10  | 3.40     | 09212 |

| Item  |  |                |           | Item          |       |
|-------|--|----------------|-----------|---------------|-------|
|       | <b>SLIDING DOOR GEAR</b>   |                |           |               |       |
|       | Sliding door gear as BS EN 1527 : -  | Supply and fix |           |               |       |
|       |  | Type<br>A      | Type<br>B | Fix only<br>C |       |
|       |  | A<br>\$        | B<br>\$   | C<br>\$       |       |
|       | <i>Per linear metre</i>  |                |           |               |       |
| 09213 | Track and fixed in bracket (measured separately).....  | 433.00         | 324.80    | 16.90         | 09213 |
| 09214 | Add to Item 09213 for plugging and screwing direct to wall, beam, lintol and the like.....   | 33.20          | 24.90     | 21.90         | 09214 |
| 09215 | Channel guide and fix in and including cutting or forming groove or mortice in concrete or paved floor, grouting and making good; or in wood, wood block floor or edge of door and any necessary plugging..... | 234.30         | 175.70    | 49.10         | 09215 |
|       | <i>Each</i>  |                |           |               |       |
| 09216 | Closed or open end track bracket for face fixing or soffit fixing, screwed to wood or plugged and screwed to wall, beam, lintol and the like.....  | 204.00         | 153.00    | 38.90         | 09216 |
| 09217 | Add to Item 09216 for fixing with 8 mm rawbolt including drilling hole in concrete, brick, stone or other surface and make good.....   | 20.70          | 15.50     | 10.20         | 09217 |
| 09218 | Ditto but with 12 mm rawbolt.....  | 28.30          | 21.20     | 13.20         | 09218 |
| 09219 | Four wheel hanger and adjustable split sprons.....   | 198.00         | 149.00    | 27.10         | 09219 |
| 09220 | Two wheel swivel hanger with nylon wheels concealed fixing.....  | 260.00         | 195.00    | 28.80         | 09220 |
| 09221 | Four wheel swivel hanger with nylon wheels concealed fixing.....   | 285.00         | 214.00    | 28.80         | 09221 |
| 09222 | Two wheel swivel end hanger face fixing.....   | 258.00         | 193.00    | 28.80         | 09222 |
| 09223 | Two wheel swivel intermediate hanger face fixing.....  | 331.00         | 248.00    | 37.30         | 09223 |
| 09224 | Brass roller guide light duty.....   | 46.60          | 35.00     | 10.20         | 09224 |
| 09225 | Ditto face fixed heavy duty.....   | 137.00         | 103.00    | 15.30         | 09225 |
| 09226 | Flush fold guide.....  | 74.30          | 55.70     | 16.10         | 09226 |
| 09227 | Face fixed end fold guide.....   | 97.60          | 73.20     | 10.20         | 09227 |
| 09228 | Face fixed intermediate fold guide.....  | 149.00         | 111.00    | 20.40         | 09228 |

| Item                       | Supply and fix  | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |       |
|----------------------------|---|--------------------------|------------------------------------|----------|-------|-------|
|                            | A<br>\$   | B<br>\$                  | C<br>\$                            | D<br>\$  |       |       |
| <b>CURTAIN TRACKS</b>      |   |                          |                                    |          |       |       |
| <i>Per linear metre</i>    |   |                          |                                    |          |       |       |
| 09229                      | Metal curtain track including rails, brackets, hoods and accessories, operated manually or by cord.....   | 59.20                    | 2.40                               | 5.00     | 8.40  | 09229 |
| 09230                      | Metal valance rail including brackets at not more than 400 mm centres and thirteen hooks per linear metre .....   | 34.70                    | 1.90                               | 3.70     | 6.80  | 09230 |
| 09231                      | Approved hospital curtain tracks including ditto.....   | 384.10                   | 3.70                               | 6.10     | 50.80 | 09231 |
| Replacement parts only : - |   |                          |                                    |          |       |       |
| <i>Each</i>                |   |                          |                                    |          |       |       |
| 09232                      | Bracket to metal curtain track.....   | 15.00                    | 1.30                               | 2.40     | 3.40  | 09232 |
| 09233                      | Double bracket at overlap to ditto.....   | 18.70                    | 1.30                               | 2.40     | 5.10  | 09233 |
| 09234                      | End stop to ditto.....  | 4.50                     | 1.30                               | 1.30     | 3.40  | 09234 |
| 09235                      | Runner to ditto including removing and replacing end stop as necessary.....   | 7.60                     | 1.30                               | 2.40     | 5.10  | 09235 |
| 09236                      | Bracket to metal valance rail.....  | 15.00                    | 1.30                               | 2.40     | 3.40  | 09236 |
| 09237                      | Hook to ditto.....  | 4.60                     | 1.30                               | 1.30     | 3.40  | 09237 |
| <i>Per linear metre</i>    |   |                          |                                    |          |       |       |
| 09238                      | Cord operated metal curtain track with regular duty rail in baked enamelled finish for ceiling and wall mounting, one-way or two-way or multiple draw; the whole can withstand maximum fabric weight of at least 16 pounds for one-way draw, or at least 30 pounds for two-way draw; including all necessary brackets for top or face fixing, centre overlap and master slides, sliders and accessories (pulley set measured separately).....   | 62.60                    | 2.40                               | 5.00     | 10.20 | 09238 |
| 09239                      | Cord operated metal curtain track with double duty rail in baked enamelled finish for ceiling, wall and recessed mounting, extra strong and rugged deluxe traverse line and flange construction, one-way or two-way or multiple draw; the whole can withstand maximum fabric weight of at least 30 pounds for one-way draw, or at least 45 pounds for two-way and multiple draw; including all necessary brackets for top or face fixing, featuring with push-in style brackets for fast mounting, centre self-lubricating overlap and master slides, concealed cord, sliders and accessories (pulley set measured separately)..... | 65.40                    | 2.10                               | 4.20     | 10.20 | 09239 |
| Replacement parts only : - |   |                          |                                    |          |       |       |
| <i>Each</i>                |   |                          |                                    |          |       |       |
| 09240                      | Pulley set complete with cords to regular or double duty rail.....  | 18.30                    | 1.30                               | 2.40     | 5.10  | 09240 |
| 09241                      | Bracket to regular or double duty rail.....   | 6.00                     | 1.30                               | 2.40     | 3.40  | 09241 |
| 09242                      | Slider for regular or double duty rail.....   | 4.70                     | 1.30                               | 1.30     | 3.40  | 09242 |
| 09243                      | Master slide to regular or double duty rail.....  | 5.10                     | 1.30                               | 1.30     | 3.40  | 09243 |
| 09244                      | Tension pulley.....   | 27.40                    | 1.30                               | 2.40     | 5.10  | 09244 |

| Item  |  |                      |                                      |  | Item        |       |
|---|--|----------------------|--------------------------------------|--|-------------|-------|
| <b>MOSQUITOES/FLY SCREENS</b>   |  |                      |                                      |  |             |       |
| Mosquitoes or fly screens of approved gauge and mesh size in any colour coating or finish :-              |  |                      |                                      |  |             |       |
| <i>Per square metre</i>   |  |                      |                                      |  |             |       |
|   |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 09245   | Plastic coated glass fibre mosquitoes or fly screens fixed to wood or metal frames with or without beads (beads measured separately).....  | 87.80                | 5.00                                 | 9.80   | 20.40       | 09245 |
| 09246   | Brass mosquitoes or fly screens ditto.....   | 198.00               | 5.00                                 | 9.80   | 20.40       | 09246 |
| 09247   | Aluminium mosquitoes or fly screens ditto.....   | 181.00               | 5.00                                 | 9.80   | 20.40       | 09247 |
| 09248   | Stainless steel mosquitoes or fly screens ditto.....   | 312.00               | 5.00                                 | 9.80   | 20.40       | 09248 |
| (Note :- The above Item 09248A will only be paid for, if ordered by the Maintenance Surveyor in writing.) |  |                      |                                      |  |             |       |
| <b>ROLLER TYPE MOSQUITOES/FLY SCREENS</b>   |  |                      |                                      |  |             |       |
| Roller type mosquitoes or fly screens of approved gauge and mesh size in any colour coating or finish :-  |  |                      |                                      |  |             |       |
| <i>Per square metre</i>   |  |                      |                                      |  |             |       |
|   |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 09249   | Aluminium vertical sliding roller retractable fly screen comprising a roller cassette and side channels with aluminium pull down bar on heavy duty fiberglass fly screen mesh including catch and all necessary ironmongery..... | 558.00               | 5.00                                 | 9.80   | 20.40       | 09249 |
| 09250   | Ditto but horizontal sliding roller type.....  | 553.00               | 4.20                                 | 8.30   | 20.40       | 09250 |
| <b>SUNDRIES</b>   |  |                      |                                      |  |             |       |
| <i>Per linear metre</i>   |  |                      |                                      |  |             |       |
|   |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 09251   | 12.70 mm Wide x 6.40 mm thick plastic foam self-adhesive draught excluder strip fixed to door edge, window edge or similar position.....   | 7.20                 | 1.30                                 | -  | 5.10        | 09251 |
| 09252   | Plastic foam self adhesive strip size 15 x 3 mm fixed to window or door edge.....  | 19.80                | 1.30                                 | -  | 5.10        | 09252 |
| 09253   | Vinyl plastic handrail capping to 50 mm core rail.....   | 43.70                | 5.00                                 | 11.10  | 20.40       | 09253 |
| 09254   | Rubber speed reduction ramp including end caps and anchor bolts.....   | 731.80               | 14.80                                | 24.60  | 47.40       | 09254 |

| Item  |  |  | Take down and clear away | Take down and set aside for re-use | Item  |
|-------|--|--|--------------------------|------------------------------------|-------|
|       | <b>REPAIRS TO IRONMONGERY</b>  |  |                          |                                    |       |
|       | <i>Each</i>  |  | A<br>\$                  | B<br>\$                            |       |
| 09255 | Group I type of article of ironmongery.....  |  | 5.50                     | 8.30                               | 09255 |
| 09256 | Group II ditto.....  |  | 8.30                     | 16.60                              | 09256 |
| 09257 | Group III ditto.....   |  | 27.70                    | 60.90                              | 09257 |
|       | <i>Each</i>  |  |                          | A<br>\$                            |       |
| 09258 | Oil, ease, adjust and re-secure of article of ironmongery of any types.....<br>(Note : - Item 09258 shall not be measured when either of Items 09259 to 09261 inclusive is ordered.)   |  |                          | 3.40                               | 09258 |
| 09259 | Repair Group I article of ironmongery of any types including providing any parts and fittings as required and including re-fixing upon repair (taking down article of ironmongery shall be measured separately if required)..... |  |                          | 42.20                              | 09259 |
| 09260 | Ditto but Group II article of ironmongery.....   |  |                          | 64.20                              | 09260 |
| 09261 | Ditto but Group III article of ironmongery.....  |  |                          | 187.00                             | 09261 |
| 09262 | Provide two new keys to lock each complete with chromium plated stamped label and split ring and including re-fixing upon repair (taking down lock measured separately if required).....   |  |                          | 22.00                              | 09262 |
| 09263 | Provide new keys to cylinder lock from pattern of old complete with ditto (ditto).....   |  |                          | 15.20                              | 09263 |



| Item  |   |                        |             |             |             | Item   |       |
|-------|---|------------------------|-------------|-------------|-------------|--|-------|
|       | <b>TRANSLUCENT FILM SIGNAGE</b>   |                        |             |             |             |  |       |
|       | Signage comprising graphics, logos, letters, numbers, Chinese characters, full stops, commas, and the like, cut from self adhesive translucent films and fixed on metal, plastic, or glass surfaces : - |                        |             |             |             |  |       |
|       |   | Size (m <sup>2</sup> ) |             |             |             |  |       |
|       |   | n.e. 0.25              | 0.25 - 0.50 | 0.50 - 1.00 | 1.00 - 1.50 | Add to 1.50m <sup>2</sup> for each additional 0.50m <sup>2</sup> or part thereof in size |       |
|       |   | A                      | B           | C           | D           | E  |       |
|       |   | \$                     | \$          | \$          | \$          | \$   |       |
| 09264 | Translucent film signage to existing plastic, glass and metal surfaces.....   | 57.00                  | 66.00       | 104.00      | 154.00      | 38.40  | 09264 |
|       | <b>SILKSCREEN SIGNS</b>   |                        |             |             |             |  |       |
|       | Silkscreen printed signs comprising graphics, logos, letters, numbers, Chinese characters, full stops, commas, and the like : -   |                        |             |             |             |  |       |
|       | <i>Each</i>   |                        |             |             |             |  |       |
| 09265 | Silkscreen printing to existing plastic, glass and metal surfaces.....  | 56.50                  | 74.00       | 118.00      | 178.00      | 50.00  | 09265 |
| 09266 | Silkscreen printing with 3 mm thick white or coloured plastic sheet.....  | 84.20                  | 140.00      | 213.00      | 330.00      | 97.00  | 09266 |
| 09267 | Ditto but with 6 mm thick white or coloured plastic sheet.....  | 107.00                 | 187.00      | 274.00      | 433.00      | 132.00   | 09267 |
| 09268 | Ditto but with 10 mm thick white or coloured plastic sheet.....   | 131.00                 | 241.00      | 361.00      | 581.00      | 161.00   | 09268 |
| 09269 | Ditto but with 12.5 mm thick white or coloured plastic sheet.....   | 146.00                 | 270.00      | 398.00      | 644.00      | 179.00   | 09269 |
| 09270 | Silkscreen printing with 1.5 mm thick hairline stainless steel plate.....   | 125.00                 | 212.00      | 321.00      | 505.00      | 148.00   | 09270 |
| 09271 | Ditto but with 3 mm thick hairline stainless steel plate.....   | 190.00                 | 328.00      | 501.00      | 779.00      | 221.00   | 09271 |
| 09272 | Ditto but with 1.5 mm thick mirror finished stainless steel plate.....  | 127.00                 | 214.00      | 325.00      | 511.00      | 149.00   | 09272 |
| 09273 | Ditto but with 3 mm thick mirror finished stainless steel plate.....  | 192.00                 | 331.00      | 503.00      | 787.00      | 220.00   | 09273 |
| 09274 | Silkscreen printing with 1.5 mm thick aluminium plate.....  | 85.30                  | 140.00      | 227.00      | 342.00      | 103.00   | 09274 |
| 09275 | Ditto but with 3 mm thick aluminium plate.....  | 112.00                 | 189.00      | 284.00      | 451.00      | 135.00   | 09275 |

| Item                        |   |             |             |             |  | Item   |       |
|-----------------------------|---|-------------|-------------|-------------|--|--------|-------|
| <b>PLASTIC SIGNS</b>        |   |             |             |             |  |        |       |
| <b>Thickness (mm)</b>       |   |             |             |             |  |        |       |
|                             | n.e. 3  | 3 - 6       | 6 - 9       | 9 - 12      | Add to 12mm for each additional 3mm or part thereof in thickness                         |        |       |
|                             | A<br>\$   | B<br>\$     | C<br>\$     | D<br>\$     | E<br>\$  |        |       |
| 09276                       | Clear, white or coloured acrylic sheet.....   | 131.00      | 262.00      | 393.00      | 524.00   | 109.00 | 09276 |
| 09277                       | Ditto but with matt finish.....   | 231.00      | 291.00      | 437.00      | 582.00   | 146.00 | 09277 |
| 09278                       | Clear, white or coloured acrylic sheet fixed with adhesive as laminated cover or backing sheet.....                         | 196.00      | 327.00      | 458.00      | 589.00   | 109.00 | 09278 |
| 09279                       | Ditto but with matt finish.....   | 218.00      | 364.00      | 509.00      | 655.00   | 121.00 | 09279 |
| <b>Per square metre</b>     |   |             |             |             |  |        |       |
| <b>Per linear metre</b>     |   |             |             |             |  |        |       |
| 09280                       | Cutting only acrylic sheet for features, graphics, etc. other than those measured elsewhere.....                            | 4.00        | 4.00        | 5.00        | 5.00   | 4.00   | 09280 |
| <b>Size (m<sup>2</sup>)</b> |   |             |             |             |  |        |       |
|                             | n.e. 0.25   | 0.25 - 0.50 | 0.50 - 1.00 | 1.00 - 1.50 | Add to 1.50m <sup>2</sup> for each additional 0.50m <sup>2</sup> or part thereof in size |        |       |
|                             | A<br>\$   | B<br>\$     | C<br>\$     | D<br>\$     | E<br>\$  |        |       |
| 09281                       | Engraved plastic sign face complete with letters, numbers, characters, graphics, punctuations and the like, 3 mm thick..... | 128.00      | 266.00      | 383.00      | 574.00   | 159.00 | 09281 |
| 09282                       | Ditto but 6 mm thick.....   | 151.00      | 315.00      | 454.00      | 668.00   | 179.00 | 09282 |
| 09283                       | Plastic sign complete with cut through letters, numbers, characters, graphics, punctuations and the like, 3 mm thick.....   | 192.00      | 321.00      | 459.00      | 650.00   | 145.00 | 09283 |
| 09284                       | Ditto but through 4.50 mm thick sheet .....   | 208.00      | 350.00      | 503.00      | 704.00   | 151.00 | 09284 |
| 09285                       | Ditto but through 6.00 mm thick sheet .....   | 225.00      | 377.00      | 545.00      | 756.00   | 157.00 | 09285 |
| 09286                       | Ditto but through 10.00 mm thick sheet .....  | 249.00      | 417.00      | 603.00      | 836.00   | 172.00 | 09286 |
| 09287                       | Ditto but through 12.50 mm thick sheet .....  | 274.00      | 461.00      | 666.00      | 924.00   | 191.00 | 09287 |
| <b>Each</b>                 |   |             |             |             |  |        |       |

| Item   |  |           |            |   |   | Item  |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
|--|--|-----------|------------|---|---|-------|-------|----------|-----------|------------|---|---|-------------|-------------|----------|----------|----------|----------|----------|----|----|----|----|----|----|----|--|
| <b>PLASTIC SIGNS (CONT'D)</b>  |  |           |            |   |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| Plastic signs in letter, number or Chinese character : -   |  |           |            |   |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <b>Height (mm)</b>   |  |           |            |   |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">n.e. 25</th> <th style="width: 15%;">25 - 50</th> <th style="width: 15%;">50 - 100</th> <th style="width: 15%;">100 - 150</th> <th style="width: 15%;">Add to 150mm for each additional 50mm or part thereof in height</th> <th style="width: 10%;"></th> </tr> <tr> <td style="text-align: left;"><b>Each</b></td> <td style="text-align: center;"><b>A</b></td> <td style="text-align: center;"><b>B</b></td> <td style="text-align: center;"><b>C</b></td> <td style="text-align: center;"><b>D</b></td> <td style="text-align: center;"><b>E</b></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td></td> </tr> </thead> </table> |  |           |            |   |   |       |       | n.e. 25  | 25 - 50   | 50 - 100   | 100 - 150   | Add to 150mm for each additional 50mm or part thereof in height |             | <b>Each</b> | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> | <b>E</b> |    |    | \$ | \$ | \$ | \$ | \$ |  |
|  | n.e. 25  | 25 - 50   | 50 - 100   | 100 - 150   | Add to 150mm for each additional 50mm or part thereof in height |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <b>Each</b>  | <b>A</b>   | <b>B</b>  | <b>C</b>   | <b>D</b>  | <b>E</b>  |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
|  | \$   | \$        | \$         | \$  | \$  |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09288  | Letter or number cut from 3.00 mm thick sheet and fixed with adhesive .....  | 8.10      | 13.70      | 21.80   | 34.40   | 7.30  | 09288 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09289  | Ditto but from 4.50 mm thick sheet ditto .....                               | 9.80      | 19.70      | 27.40   | 41.20   | 8.70  | 09289 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09290  | Ditto but from 6.00 mm thick sheet ditto.....                                | 11.40     | 22.80      | 32.10   | 50.80   | 12.50 | 09290 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09291  | Ditto but from 10.00 mm thick sheet ditto .....                              | 15.70     | 31.40      | 44.00   | 69.00   | 16.10 | 09291 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09292  | Ditto but from 12.50 mm thick sheet ditto .....                              | 18.40     | 36.80      | 55.00   | 88.00   | 20.90 | 09292 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09293  | Chinese character cut from 3.00 mm thick sheet and fixed with adhesive ..... | 9.40      | 15.50      | 24.30   | 37.40   | 11.50 | 09293 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09294  | Ditto but from 4.50 mm thick sheet ditto .....                               | 11.30     | 22.60      | 33.20   | 54.30   | 17.70 | 09294 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09295  | Ditto but from 6.00 mm thick sheet ditto.....                                | 13.20     | 26.40      | 38.40   | 64.00   | 21.70 | 09295 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09296  | Ditto but from 10.00 mm thick sheet ditto.....                               | 18.20     | 36.40      | 49.00   | 83.00   | 26.30 | 09296 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09297  | Ditto but from 12.50 mm thick sheet ditto .....                              | 21.30     | 43.00      | 63.00   | 98.00   | 32.10 | 09297 |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <b>Height (mm)</b>   |  |           |            |   |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">n.e. 500</th> <th style="width: 15%;">500 - 750</th> <th style="width: 15%;">750 - 1000</th> <th style="width: 15%;">Add to 1000mm for each additional 250mm or part thereof in height</th> <th style="width: 10%;"></th> </tr> <tr> <td style="text-align: left;"><b>Each</b></td> <td style="text-align: center;"><b>A</b></td> <td style="text-align: center;"><b>B</b></td> <td style="text-align: center;"><b>C</b></td> <td style="text-align: center;"><b>D</b></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td></td> </tr> </thead> </table>   |  |           |            |   |   |       |       | n.e. 500 | 500 - 750 | 750 - 1000 | Add to 1000mm for each additional 250mm or part thereof in height |   | <b>Each</b> | <b>A</b>    | <b>B</b> | <b>C</b> | <b>D</b> |          |          | \$ | \$ | \$ | \$ |    |    |    |  |
|  | n.e. 500   | 500 - 750 | 750 - 1000 | Add to 1000mm for each additional 250mm or part thereof in height |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| <b>Each</b>  | <b>A</b>   | <b>B</b>  | <b>C</b>   | <b>D</b>  |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
|  | \$   | \$        | \$         | \$  |   |       |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09298  | Letter or number cut from 8 mm thick plastic sheet with studs.....           | 118.00    | 179.00     | 240.00  | 62.00   | 09298 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09299  | Ditto but from 10.00 mm thick sheet.....                                     | 151.00    | 229.00     | 307.00  | 66.00   | 09299 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09300  | Ditto but from 12.50 mm thick sheet.....                                     | 182.00    | 263.00     | 337.00  | 67.00   | 09300 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09301  | Chinese characters cut from 8 mm thick plastic sheet with studs.....         | 176.00    | 260.00     | 345.00  | 70.00   | 09301 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09302  | Ditto but from 10.00 mm thick sheet.....                                     | 194.00    | 287.00     | 380.00  | 78.00   | 09302 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |
| 09303  | Ditto but from 12.50 mm thick sheet.....                                     | 249.00    | 365.00     | 472.00  | 93.00   | 09303 |       |          |           |            |   |   |             |             |          |          |          |          |          |    |    |    |    |    |    |    |  |

Item

Item

**PLASTIC SIGNS (CONT'D)**

Plastic signs in letter, number or Chinese character : - (Cont'd)

| Size (m <sup>2</sup> ) |             |             |             |  |
|------------------------|-------------|-------------|-------------|--|
| n.e. 0.25              | 0.25 - 0.50 | 0.50 - 1.00 | 1.00 - 1.50 | Add to 1.50m <sup>2</sup> for each additional 0.50m <sup>2</sup> or part thereof in size |
| A \$                   | B \$        | C \$        | D \$        | E \$   |
| 3.90                   | 5.90        | 9.70        | 11.70       | 1.50   |
| 7.80                   | 11.70       | 23.40       | 25.30       | 1.60   |
| 11.70                  | 17.60       | 31.20       | 35.20       | 3.10   |

*Each*

|       |  |       |       |       |       |      |       |
|-------|--|-------|-------|-------|-------|------|-------|
| 09304 | Take down and clear away plastic sheet sign from any position..... | 3.90  | 5.90  | 9.70  | 11.70 | 1.50 | 09304 |
| 09305 | Take down and set aside for re-use ditto.....                      | 7.80  | 11.70 | 23.40 | 25.30 | 1.60 | 09305 |
| 09306 | Fix only ditto.....  | 11.70 | 17.60 | 31.20 | 35.20 | 3.10 | 09306 |

*Each*

| A \$  |
|-------|
| 3.90  |
| 9.70  |
| 16.10 |

|       |   |       |       |
|-------|---|-------|-------|
| 09307 | Take down and clear away letters, numbers or Chinese characters of any size cut from plastic sheet from any position..... | 3.90  | 09307 |
| 09308 | Take down and set aside for re-use ditto.....   | 9.70  | 09308 |
| 09309 | Fix only ditto.....   | 16.10 | 09309 |

**METAL SIGNS**

Metal signs in letter, number or Chinese character : -

| Height (mm) |         |          |           |           |           |           |   |
|-------------|---------|----------|-----------|-----------|-----------|-----------|---|
| n.e. 25     | 25 - 50 | 50 - 100 | 100 - 150 | 150 - 200 | 200 - 250 | 250 - 300 | Add to 300mm for each additional 50mm or part thereof in height |
| A \$        | B \$    | C \$     | D \$      | E \$      | F \$      | G \$      | H \$  |
| 24.30       | 34.00   | 48.60    | 72.90     | 97.20     | 121.00    | 146.00    | 20.30   |
| 35.20       | 49.30   | 70.40    | 95.00     | 118.00    | 141.00    | 169.00    | 23.50   |
| 30.80       | 43.10   | 67.80    | 92.40     | 116.00    | 139.00    | 166.00    | 23.00   |
| 43.10       | 60.30   | 86.20    | 111.00    | 138.00    | 172.00    | 202.00    | 24.40   |
| 35.20       | 49.30   | 70.40    | 95.00     | 121.00    | 148.00    | 173.00    | 21.00   |
| 49.30       | 69.00   | 94.70    | 111.00    | 138.00    | 163.00    | 189.00    | 22.00   |
| 56.20       | 78.70   | 101.00   | 125.00    | 153.00    | 180.00    | 209.00    | 24.00   |
| 79.00       | 105.00  | 130.00   | 156.00    | 184.00    | 208.00    | 242.00    | 29.00   |

*Each*

|       |   |       |        |        |        |        |        |        |       |       |
|-------|---|-------|--------|--------|--------|--------|--------|--------|-------|-------|
| 09310 | Letter or number cut from 3.00 mm thick anodized aluminium sheet fixed with adhesive or screws .....  | 24.30 | 34.00  | 48.60  | 72.90  | 97.20  | 121.00 | 146.00 | 20.30 | 09310 |
| 09311 | Ditto but from 6.00 mm thick sheet ditto .....  | 35.20 | 49.30  | 70.40  | 95.00  | 118.00 | 141.00 | 169.00 | 23.50 | 09311 |
| 09312 | Chinese character cut from 3.00 mm thick anodized aluminium sheet fixed with adhesive or screws ..... | 30.80 | 43.10  | 67.80  | 92.40  | 116.00 | 139.00 | 166.00 | 23.00 | 09312 |
| 09313 | Ditto but from 6.00 mm thick sheet ditto .....  | 43.10 | 60.30  | 86.20  | 111.00 | 138.00 | 172.00 | 202.00 | 24.40 | 09313 |
| 09314 | Letter or number cut from 3.00 mm thick brass sheet fixed with adhesive or screws.....                | 35.20 | 49.30  | 70.40  | 95.00  | 121.00 | 148.00 | 173.00 | 21.00 | 09314 |
| 09315 | Ditto but from 6.00 mm thick sheet ditto.....   | 49.30 | 69.00  | 94.70  | 111.00 | 138.00 | 163.00 | 189.00 | 22.00 | 09315 |
| 09316 | Chinese character cut from 3.00 mm thick brass sheet fixed with adhesive or screws .....              | 56.20 | 78.70  | 101.00 | 125.00 | 153.00 | 180.00 | 209.00 | 24.00 | 09316 |
| 09317 | Ditto but from 6.00 mm thick sheet ditto .....  | 79.00 | 105.00 | 130.00 | 156.00 | 184.00 | 208.00 | 242.00 | 29.00 | 09317 |

| Item  |   | Height (mm)            |             |             |   | Item   |       |
|-------|---|------------------------|-------------|-------------|---|--|-------|
|       | <b>METAL SIGNS (CONT'D)</b>   |                        |             |             |   |  |       |
|       | Metal signs in letter, number or Chinese character : - (Cont'd)   |                        |             |             | Add to 1000mm for each additional 250mm or part thereof in height |  |       |
|       |   | n.e. 500               | 500 - 750   | 750 - 1000  |   |  |       |
|       | <i>Each</i>   | A \$                   | B \$        | C \$        | D \$  |  |       |
| 09318 | Letter or number cut from 8 mm thick aluminium sheet with studs including baked paint finish and screws.....            | 337.00                 | 391.00      | 459.00      | 54.00   | 09318  |       |
| 09319 | Ditto but from 10 mm thick sheet.....   | 423.00                 | 491.00      | 576.00      | 68.00   | 09319  |       |
| 09320 | Ditto but from 12 mm thick sheet.....   | 507.00                 | 588.00      | 690.00      | 81.00   | 09320  |       |
| 09321 | Chinese characters cut from 8 mm thick aluminium sheet with studs including baked paint finish and screws.....          | 403.00                 | 492.00      | 572.00      | 64.00   | 09321  |       |
| 09322 | Ditto but from 10 mm thick sheet.....   | 506.00                 | 653.00      | 764.00      | 89.00   | 09322  |       |
| 09323 | Ditto but from 12 mm thick sheet.....   | 606.00                 | 782.00      | 915.00      | 107.00  | 09323  |       |
|       |   | Size (m <sup>2</sup> ) |             |             |   |  |       |
|       |   | n.e. 0.25              | 0.25 - 0.50 | 0.50 - 1.00 | 1.00 - 1.50   | Add to 1.50m <sup>2</sup> for each additional 0.50m <sup>2</sup> or part thereof in size |       |
|       | <i>Each</i>   | A \$                   | B \$        | C \$        | D \$  | E \$   |       |
| 09324 | Acid etched stainless steel sign face, 1.5 mm thick.....  | 258.00                 | 386.00      | 643.00      | 964.00  | 398.00   | 09324 |
| 09325 | Take down and clear away metal signs from any position.....   | 2.40                   | 3.70        | 7.40        | 8.60  | 1.00   | 09325 |
| 09326 | Take down and set aside for re-use ditto.....   | 5.00                   | 6.10        | 12.30       | 13.50   | 1.20   | 09326 |
| 09327 | Fix only ditto.....   | 8.30                   | 12.30       | 22.80       | 24.40   | 1.30   | 09327 |
|       |   |                        |             |             |   |  |       |
|       | <i>Each</i>   |                        |             |             |   | A \$   |       |
| 09328 | Take down and clear away letters, numbers or Chinese characters of any size cut from metal sheet from any position..... |                        |             |             |   | 6.10   | 09328 |
| 09329 | Take down and set aside for re-use ditto.....   |                        |             |             |   | 9.80   | 09329 |
| 09330 | Fix only ditto.....   |                        |             |             |   | 19.60  | 09330 |

| Item  |   | Height (mm)                 |             |             |   | Item   |
|-------|---|-----------------------------|-------------|-------------|---|--|
|       | <b>HOLLOW METAL SIGNS</b>   |                             |             |             |   |  |
|       | Hollow metal signs in letter, number or Chinese character : -   |                             |             |             | Add to 1000mm for each additional 250mm or part thereof in height |  |
|       | <i>Each</i>   | n.e. 500                    | 500 - 750   | 750 - 1000  |   |  |
|       |   | A \$                        | B \$        | C \$        | D \$  |  |
| 09331 | Letter or number cut and formed from stainless steel sheet not less than 1.2 mm thick with covered edge, fixed at any height including all necessary fixing accessories.....                              | 324.00                      | 486.00      | 648.00      | 147.00  | 09331  |
| 09332 | Ditto but Chinese character.....  | 405.00                      | 607.00      | 810.00      | 182.00  | 09332  |
| 09333 | Letter or number cut and formed from anodized aluminium sheet not less than 2 mm thick with covered edge, fixed at any height including all necessary fixing accessories.....                             | 283.00                      | 425.00      | 567.00      | 132.00  | 09333  |
| 09334 | Ditto but Chinese character.....  | 354.00                      | 531.00      | 708.00      | 163.00  | 09334  |
|       |   |                             |             |             |   |  |
|       |   | <b>Size (m<sup>2</sup>)</b> |             |             |   |  |
|       |   | n.e. 0.50                   | 0.50 - 1.00 | 1.00 - 1.50 | 1.50 - 2.00   | Add to 2.00m <sup>2</sup> for each additional 0.50m <sup>2</sup> or part thereof in size |
|       | <i>Each</i>   | A \$                        | B \$        | C \$        | D \$  | E \$   |
| 09335 | Logo or signage cut and formed from stainless steel sheet not less than 1.2 mm thick with covered edge, including moulding, graphic finish, fixed at any height and all necessary fixing accessories..... | 1,700.00                    | 2,692.00    | 3,188.00    | 3,684.00  | 369.00   |
| 09336 | Ditto but cut and formed from anodized aluminium sheet not less than 2 mm thick.....  | 1,457.00                    | 2,307.00    | 2,732.00    | 3,157.00  | 316.00   |
|       |   |                             |             |             |   |  |
|       | Add to either of Items 09331 to 09336 inclusive for the supply of powder coated and baked paint finish.....   |                             |             |             |   | 20%  |

**Section 10**

**STEEL AND METAL WORK**

## SECTION 10

### STEEL AND METAL WORK

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Drawings for hoardings and walkways</b>  | <b>SC10.01</b> | <p>The drawings for hoardings and walkways referred to in this Section and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule can be viewed on the internet website via the pathway referred therein. The latest version of drawings posted shall be referred to when reading this Section.</p>  |
| <b>Drawings for internal metal/aluminium hoardings</b>                                    | <b>SC10.02</b> | <p>The drawings for internal metal/aluminium hoardings referred to in this Section are listed and attached in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule.</p>  |
| <b>Particular Specification for maintenance of proprietary fall arrest system</b>         | <b>SC10.03</b> | <p>The maintenance of proprietary fall arrest system shall be read and used in conjunction with the Particular Specification for Examination, Testing and Provision of Operation Training for Fall Arrest System adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages for complying with all requirements as stipulated in the Specification and Employer's Requirements adopted in the Contract for the maintenance of proprietary fall arrest system.</p>  |
| <b>Measurement of hoardings and walkways including internal metal/aluminium hoardings</b> | <b>SC10.04</b> | <p>Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work, such as to protect new work or existing surfaces, and to protect the public from harm, dust or nuisance. No payment will be made for hoardings and walkways including internal metal/aluminium hoardings under any circumstances, with the following exceptions : -</p> <p>(a) Hoardings and walkways including internal metal/aluminium hoardings are specifically ordered by the Maintenance Surveyor in writing and stating that the hoarding and walkways including internal metal/aluminium hoardings are for the exclusive use of the Employer and other contractor employed by the Employer within the Works Order period.</p> <p>In the event that the hoardings and walkways including internal metal/aluminium hoardings mentioned in sub-clause (a) above are subsequently used as preventive and protective measures by the Contractor himself, no payment will be made.</p> <p>The hoardings and walkways including internal metal/aluminium hoardings shall be measured the length on plan as fixed.</p> <p>No measurement or adjustment shall be made for anchor bolts and footings including concrete footings.</p> |



**SPECIAL CONDITIONS**

|  |                |   |
|--|----------------|---|
| <b>Measurement of enhanced treatment to hoardings</b>                      | <b>SC10.05</b> | Enhanced treatment to hoardings including graphic design proprietary graphical use film, plastic sheeting, painting and "green" features shall be measured the net area as covered. No deduction shall be made for openings not exceeding 0.50 m <sup>2</sup> .   |
| <b>Measurement of temporary work - Fire protection enclosure materials</b> | <b>SC10.06</b> | Throughout this Schedule, rates for all trades shall include for all temporary preventive and protective measures necessary for the execution of the work such as to protect new work or existing surfaces, and to protect the public from harm, dust or nuisance. No payment will be made for such work except additional requirement of fire protection enclosure materials are specifically ordered by the Maintenance Surveyor in writing.  |
| <b>Measurement of steel shoring</b>  | <b>SC10.07</b> | <p>Steel strutting, shoring, supporting and protective measures for the face of excavation have been allowed in the rates of Section 03 - Excavation in this Schedule. No payment will be made for these measures under any circumstance, with the following exception : -</p> <p>(a) Steel strutting, shoring, bracings, supporting and the like in respect of the steel sheet piling. Steel sheet piling must be specifically ordered by the Maintenance Surveyor in writing.</p> <p>Steel sections shall be measured the total weight as fixed. No deduction shall be made for bolt holes, splays, notches and the like. The weight of the bolts and nuts shall be added.</p>  |
| <b>Measurement by weight</b>   | <b>SC10.08</b> | <p>Structural steel work and metal work shall normally be measured by weight and shall be calculated in the following order of preference : -</p> <p>(1) Measurements of the structural steel sections and metal sections and reference to</p> <p style="margin-left: 40px;">(a) Annex 'C' - Tables of Metal Weights, etc. in this Schedule.</p> <p style="margin-left: 40px;">(b) Tables in British Standards or other International Standards.</p> <p style="margin-left: 40px;">(c) Tables in manufacturer's catalogues or similar documents.</p> <p style="margin-left: 40px;">(d) Unit weights calculated from the mass per cubic metre given in Annex 'C' - Tables of Metal Weights, etc. in this Schedule.</p> <p style="margin-left: 40px;">or</p> <p>(2) Weighed by the Contractor in the presence of the Maintenance Surveyor before fixing, and in default of this, shall be taken out, weighed and re-fixed by the Contractor at his own expense.</p> |
| <b>Measurement of structural steel work</b>                                | <b>SC10.09</b> | Structural steel work shall be paid only when it is specifically ordered by the Maintenance Surveyor in writing. Surface protection to structural steel shall be measured separately in Section 15 - Painting of this Schedule.   |

**SPECIAL CONDITIONS**

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|--|----------------|--|
| <b>Measurement of metal sections</b>                               | <b>SC10.10</b> | <p>Metal sections shall generally be measured the length as fixed with square ends and the weight calculated unless otherwise provided.</p> <p>No deduction shall be made for rivet, screw and bolt holes, and notches or slots.</p>   |
| <b>Measurement of sheet, flat bar or plate</b>                     | <b>SC10.11</b> | <p>Mild steel (plain or galvanized) plate, stainless steel plate and aluminium plate, when exceeding 300 mm wide and not exceeding 3 mm thick shall be measured as sheet metal. When exceeding 3 mm thick, the same shall be measured as “flat bar” or “plate”.</p>  |
| <b>Measurement of sheet metal</b>                                  | <b>SC10.12</b> | <p>Sheet metal work shall be measured the area as fixed and the weight calculated. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>. No addition shall be made for rivets, screws, nuts, bolts and the like.</p> <p>Perforated sheet metal work shall be measured the area as fixed. No deduction shall be made in weight for factory-formed perforations of the sheet metal. No deduction shall be made for openings cut on Site not exceeding 0.50 m<sup>2</sup>.</p> <p>Sheet or perforated sheet metal work shall include all sheet metal formed in any shape, pattern, graphics, etc. and the like.</p> |
| <b>Measurement of bolts and anchor bolts for isolated repairs</b>  | <b>SC10.13</b> | <p>Except for holding down bolts for structural steelwork as stated in Special Conditions Clause SC10.33(d) and for bolts / anchor bolts required for replacement in isolated repair items, of which the specified bolts shall be measured separately; all other types of bolts / anchor bolts shall not be measured separately but shall deem to be included in the work items in this Section.</p>   |
| <b>Measurement of collapsible gate</b>                             | <b>SC10.14</b> | <p>Collapsible gate shall be measured the net weight calculated. No deduction shall be made for bolt holes, splays, notches and the like. The weight of bolts, nuts, rivets, spacers, fixing lugs and the like, except ironmongeries, shall be added.</p>  |
| <b>Measurement of sundry repairs</b>                               | <b>SC10.15</b> | <p>Items for sundry repairs in this Section of the Schedule shall not be measured except under the following special circumstances : -</p> <p>(a) Where the material and/or the labour of the work item to be repaired is not measured and paid for separately under any other Schedule rates.</p> <p>(b) Where the work item to be repaired requires labour, welding and fixing of the work item at its existing position.</p>  |
| <b>Measurement of corrugated and profiled steel sheet cladding</b> | <b>SC10.16</b> | <p>Corrugated and profiled steel sheet cladding (other than corrugated or profiled steel sheet roofing under Section 07 - Roofing and Waterproofing of this Schedule) shall be measured flat (not girth on corrugations or profiles) over the net area covered with no allowance for laps. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>. Cladding to a radius not exceeding 15.00 m along the corrugation or profile shall be measured as “curved work”.</p>   |

## SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Measurement of shutters</b>  | <b>SC10.17</b> | Shutters shall be measured the net area of the opening to which the shutter is to be installed irrespective of the position of the hood.<br><br>"Extra over shutters" for wicket door shall be measured the overall size of door.  |
| <b>Measurement of "Take down and set aside for re-use" of shutters for repairs</b>                            | <b>SC10.18</b> | "Take down and set aside for re-use" of existing shutters for repairs shall generally be measured as net affected area.<br><br>The affected area means the damaged area including the individual module of each affected slat or panel.  |
| <b>Measurement of cast iron, brass and copper</b>   | <b>SC10.19</b> | Cast iron, brass and copper articles shall be measured the net weight as cast and finished ready for fixing.   |
| <b>Measurement of metal windows and doors generally</b>   | <b>SC10.20</b> | Metal windows and doors shall generally be measured the net area of the opening in which the windows and doors are fixed.<br><br>"Extra over windows or doors" for openable portions shall be measured the overall size of the opening sashes or doors.<br><br>Glazing to metal windows and doors shall be measured separately in Section 14 - Glazing of this Schedule. |
| <b>Measurement of "Take down and clear away" or "Take down and set aside for re-use" metal window or door</b> | <b>SC10.21</b> | "Take down and clear away" or "Take down and set aside for re-use" of existing window and door shall generally be measured the net area of the opening in which the window and door are fixed. No separate measurement will be made for openable sash, ironmongery, fixing lugs, dowels, etc. and the like.  |
| <b>Measurement of galvanized steel works</b>  | <b>SC10.22</b> | Measurement of galvanized mild steel works shall include all processes of galvanizing in accordance with G.S. Items 15.63 and 17.02 for all raw materials and factory manufactured products.   |
| <b>Measurement of galvanizing, electro-plating and chromium plating</b>                                       | <b>SC10.23</b> | Galvanizing, electro-plating and chromium shall be measured when the work has been fabricated on Site or off Site with further processing on Site required and is specifically ordered by the Maintenance Surveyor in writing. No payment will be made for proprietary or factory manufactured products.   |

## SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Measurement of “Zinc sprayed” or “Hot dipped” galvanizing</b>                                       | <b>SC10.24</b> | “Zinc sprayed” or “hot dipped” galvanizing shall only be measured when the mild steel work has been fabricated (not factory manufactured products) and it is specifically ordered in writing by the Maintenance Surveyor.   |
| <b>Measurement of proprietary composite aluminium cladding / panel linings</b>                         | <b>SC10.25</b> | Composite aluminium cladding / panel linings shall be measured the net area covered. No deduction shall be made for opening not exceeding 0.50 m <sup>2</sup> . No measurement for additional materials required for bending, rolling edges, returns, etc. and the like shall be made.  |
| <b>Measurement of curtain walls</b>  | <b>SC10.26</b> | Curtain walls shall be measured the plane area of the curtain wall as fixed. No deduction shall be made for opening not exceeding 0.50 m <sup>2</sup> .   |
| <b>Measurement of proprietary automatic swing and sliding doors</b>                                    | <b>SC10.27</b> | Proprietary automatic swing and sliding doors shall be measured the plane area of the door panel.   |
| <b>Measurement of slotted angle, tubing and wire rope</b>  | <b>SC10.28</b> | Slotted angle, galvanized steel tubing and wire rope shall be measured the net length as fixed.   |
| <b>Measurement of fire resisting door set</b>  | <b>SC10.29</b> | Fire resisting door set shall be measured the plane area of the door panel.   |
| <b>Measurement of proprietary fire resisting partitions</b>  | <b>SC10.30</b> | Proprietary fire resisting partitions shall generally be measured the plane area of panels. No deduction shall be made for voids or openings not exceeding 0.50 m <sup>2</sup> . Finishes to the partition shall be measured separately.  |
| <b>Measurement of wire netting, wire mesh, welded wire mesh, expanded metal and chain link fencing</b> | <b>SC10.31</b> | <p>Wire netting, wire mesh, welded wire mesh, expanded metal and chain link fencing shall be measured the net area covered with no allowance for laps. No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.</p> <p>Irregular areas shall be measured the smallest square or rectangle size from which they can be cut.</p> <p>Various meshes sizes shall be measured in accordance with the British Standard unless otherwise specified.</p> |

### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Measurement of periodic or ad-hoc examination of existing proprietary fall arrest system</b> | <b>SC10.32</b> | <p>Periodic or ad-hoc examination of existing proprietary fall arrest system of upto a total of 5 sets per visit shall be measured based on each inspection visit. Subsequent number shall be measured based on number of sets of the system examined.</p> <p>Each set of fall arrest system shall be measured as the span between two end anchors and over intermediate brackets, and is irrespective of the distance between the two end anchors and the number of intermediate brackets.</p>   |
| <b>Rates generally</b>  | <b>SC10.33</b> | <p>The rates shall generally include for any or all of the following as applicable : -</p> <ul style="list-style-type: none"> <li>(a) All straight, raking or circular cutting and waste.</li> <li>(b) Lowering or hoisting to any depth or height and supporting, fitting and fixing various items to new or existing work in any position including the provision of all temporary supports and fastening, and grouting as required.</li> <li>(c) All fabrication, assembling and erection work including riveting, drilling, welding, brazing, either off Site or on Site as required.</li> <li>(d) Providing throughout all ancillary materials for jointing and fixing, such as welding rods, solders, screws, all types of bolts (except holding down bolts for structural steelwork or otherwise specified), nuts and the like.</li> <li>(e) Executing all work to true detail, filing all edges, welds, etc., smoothing, filing off burrs around drilled holes, countersinking all screws, rivet heads and the like when required and finishing work to the satisfaction of the Maintenance Surveyor.</li> <li>(f) Drilling and tapping holes, mortices and the like.</li> <li>(g) Preparing new or existing surface for connection.</li> <li>(h) Allowance for rolling margin.</li> <li>(i) Building in, grouting and bedding, casting in and the application of bonding agents, fillers and sealing materials.</li> <li>(j) Sampling and testing of materials including submission of records.</li> <li>(k) In the case of structural steel, sampling and testing of materials shall further include all necessary security handling of samples, stock management on Site and removal of non-compliant steel sections.</li> <li>(l) Allowance for laps or seams.</li> <li>(m) Providing prototypes as G.S. Item 17.14.</li> <li>(n) Protecting decorative finishes to metalwork.</li> <li>(o) Allowing all provisions of suitable connection point for equipotential bonding as required by the I.E.E. Wiring Regulations.</li> </ul> |

**SPECIAL CONDITIONS**

**Rates for hoardings and walkways including internal metal/aluminium hoardings**

**SC10.34**

The rates for hoardings and walkways including internal metal/aluminium hoardings shall further include for : -

- (a) Delivering to and erecting on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or clearing away.
- (b) Providing all materials including poles, posts, rails, struts, wedges, plates, sheeting, bolts and the like, and providing dust-proof covers and sand bags in the case of internal metal/aluminium hoardings.
- (c) Preparing and applying or touching up paint to all surfaces including writings and logos in single or multi-colour paints.
- (d) Providing and fixing anchor bolts, nuts and washers.
- (e) Provision of concrete footing including associated earthwork, formwork and reinforcement, if required.
- (f) Providing adequate lightings and warning lights, associated power supply and electrical work and payment of all charges incurred.
- (g) Making good any damage caused to pavings and other surfaces during use, erection and taking down.
- (h) Payment for resurfacing of the pavings, roads, drainage system or any other utilities in the event that making good is not allowed to be executed by the Contractor.

**Rates for temporary work - fire protection enclosure materials**

**SC10.35**

The rates for temporary work - fire protection enclosure materials shall further include for : -

- (a) Working at any level, floor and locations.
- (b) All steel sections adequate for the specified fire resistance rating.
- (c) Finishing all fire protective boarding, metal plates, steel sections, etc. and the like with intumescent paint, painting and colour coating.
- (d) All footings including concrete footings, base plate and anchor bolts including nuts and washers.
- (e) Delivering to and erecting on Site, adjusting and maintaining throughout the period of uses, and taking down and setting aside for re-use or removal from Site.
- (f) Providing and forming temporary access door, ironmongeries and door seals.
- (g) Providing, maintaining and clearing away after use adequate lighting and warning lights, associated power supply and electrical work and payment of all charges incurred.
- (h) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.

**SPECIAL CONDITIONS**

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for temporary work - fire protection enclosure materials (Cont'd)</b> | <b>SC10.35 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(i) Sealing around edges with intumescent materials.</li> <li>(j) Grouting into new or existing mortice or holes.</li> <li>(k) Protecting and making good disturbed surfaces.</li> <li>(l) Providing test certificate.</li> </ul>   |
| <b>Rates for steel shoring</b>   | <b>SC10.36</b>          | <p>The rates for steel shoring shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Working at any depth, height and locations.</li> <li>(b) All steel sections such as round bars, squares, flats, plates, angles, tees, channels, "I" joists, hollow sections and the like.</li> <li>(c) All anchor bolts and high friction grip bolts including nuts and washers.</li> <li>(d) Any wedges as required.</li> <li>(e) Delivering to and erecting on Site, adjusting and maintaining throughout the period of uses, and taking down and setting aside for re-use or removal from Site.</li> <li>(f) Design and submission of calculation and working drawings of lateral support including details of connections of walings, strutting, shoring, bracing, posts and splicing of members and sequence of construction and sequence of subsequent removal including endorsement by Registered Structural Engineer.</li> <li>(g) Preparing and submitting method statement.</li> <li>(h) Cleaning the interface of members to be jointed.</li> <li>(i) Carrying out welding as G.S. Items 15.23 to 15.38.</li> <li>(j) Grouting to joints as required.</li> <li>(k) Protecting and making good existing surfaces disturbed.</li> </ul> |
| <b>Rates for structural steel works</b>  | <b>SC10.37</b>          | <p>The rates for structural steel works shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Qualification tests for welders as G.S. Item 15.44 and submission of welding record as G.S. Item 15.45.</li> <li>(b) Approval tests of welding as G.S. Item 15.47.</li> <li>(c) Test welded joints by non-destructive testing methods, and employing the PWL/AL to carry out and interpret these tests all as G.S. Item 15.58.</li> <li>(d) Making good damaged galvanized surfaces as G.S. Items 15.53 and 15.64.</li> </ul>   |

## SPECIAL CONDITIONS

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for structural steel works (Cont'd)</b>                   | <b>SC10.37 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(e) Providing manufacturers' certificates as G.S. Item 15.13.</li> <li>(f) Marking for identification on all materials as G.S. Item 15.14, protection from damage and delivery in matching sequence.</li> </ul>   |
| <b>Rates for mild steel</b>  | <b>SC10.38</b>          | <p>The rates for mild steel shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Forging, notching, framing and bending.</li> <li>(b) Pointed, forged, fanged and threaded ends.</li> <li>(c) Mitres angles, ramps and wreaths.</li> <li>(d) Spot, fillet and seam welding.</li> </ul>   |
| <b>Rates for sheet metal work</b>                                  | <b>SC10.39</b>          | <p>The rates for sheet metal work shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Notching, dressing, bending and rolled edges.</li> <li>(b) Punching holes.</li> <li>(c) Plugging or drilling existing surfaces.</li> <li>(d) Fixing with an approved adhesive.</li> </ul>   |
| <b>Rates for lining, ducting, gutters, ventilator and the like</b> | <b>SC10.40</b>          | <p>The rates for lining, ducting, gutters, ventilator and the like shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Notching, dressing, bending and rolled edges.</li> <li>(b) Punching holes.</li> <li>(c) Plugging or drilling existing surfaces.</li> <li>(d) Fixing with an approved adhesive.</li> <li>(e) All bends, ends, inlets, outlets, junctions, connections, flanged joints and the like.</li> <li>(f) Forming perforations (gross weight measured).</li> <li>(g) Fixing to wood or metal framing with or without brackets (framing and brackets measured separately).</li> </ul> |



**SPECIAL CONDITIONS**

**Rates for  
collapsible  
gates**

**SC10.41**

The rates for collapsible gates shall further include for : -

- (a) Framing to head, jambs, top and bottom guides.
- (b) Fixing blocks, pickets, diagonal folding item bars and fixing lugs.
- (c) Riveted pivot points with brass washers and spacers.
- (d) Supply and fixing of ball bearing rollers, retaining catches, catch hook, brass pull handles, lock and all necessary ironmongeries.
- (e) Forming pockets in existing structure, grouting in with cement mortar and making good.

**Rates for  
bolts and  
anchor bolts  
for isolated  
repairs**

**SC10.42**

The rates for bolts and anchor bolts for isolated repairs shall further include for : -

- (a) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (b) Grouting into new or existing mortice or holes.
- (c) Providing and fixing with nuts and washers.
- (d) Making good disturbed surfaces.
- (e) Components and devices for grouping and tying anchor bolts to form assemblies of bolts.

**Rates for  
corrugated  
and  
profiled  
steel sheet  
cladding**

**SC10.43**

The rates for corrugated and profiled steel sheet cladding shall further include for : -

- (a) Works at any height and locations.
- (b) Works to new or existing surfaces in repairs.
- (c) Provision of sub-frames, backing frames and purlin system including design and submission of RSE structural calculations and shop drawings.
- (d) Forming and including joints and allowing for laps including side and end laps when required.
- (e) Allowing for cutting, waste and breakage.
- (f) Sealing at edges, joints and around intersections and projections with approved non-acidic and anti-mould sealant as required.
- (g) All narrow widths and small areas.
- (h) Providing shop drawings as necessary for the works.
- (i) Making good affected areas to match existing.

## SPECIAL CONDITIONS

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for corrugated and profiled steel sheet cladding (Cont'd)</b> | <b>SC10.43 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(j) Allowing all notching and fitting edges of sheets and mitring corners as required, and all mitred angles, junctions and ends.</li> <li>(k) Drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.</li> <li>(l) Drilling holes to existing or new purlins of framing spaced at any interval for the fixing of corrugated and profiled sheet cladding.</li> <li>(m) Forming holes for pipes or articles.</li> <li>(n) Recommended fixing method in accordance with the manufacturer's instructions.</li> <li>(o) Forming and including movement joints as required.</li> <li>(p) Forming sheets to required curvature.</li> </ul> |
| <b>Rates for tubular metal work</b>                                    | <b>SC10.44</b>          | <p>The rates for tubular metal work shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Framing and bending.</li> <li>(b) Cut and welded junctions, angles, tees and cross joints.</li> <li>(c) Flanged or screw fitting connectors.</li> <li>(d) Screw fitting bends, tees, crosses and flanges.</li> <li>(e) Ramps, wreaths and fanged, fair and capped ends.</li> </ul>  |
| <b>Rates for stainless steel</b>                                       | <b>SC10.45</b>          | <p>The rates for stainless steel shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Items described as trim or cover strip shall include for cutting to length and mitred angles.</li> <li>(b) Finishing all welds, etc. to match the finish specified.</li> <li>(c) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on stainless steel surfaces or using an approved tape.</li> </ul>   |
| <b>Rates for aluminium</b>   | <b>SC10.46</b>          | <p>The rates for aluminium shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Clear, bronze or black anodized finish, and powder coated or fluorocarbon coated finish.</li> <li>(b) Items described as trim or cover strip shall include for cutting to length and mitred angles.</li> <li>(c) Ramps, wreaths and flanged, fair and capped ends.</li> </ul>  |

## SPECIAL CONDITIONS

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for aluminium (Cont'd)</b>   | <b>SC10.46 (Cont'd)</b> | (d) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on aluminium surfaces or using an approved tape.   |
| <b>Rates for wire netting, wire mesh, welded wire mesh, expanded metal and chain link fencing</b> | <b>SC10.47</b>          | <p>The rates for wire netting, wire mesh, welded wire mesh, expanded metal and chain link fencing shall further include for : -</p> <p>(a) All bending and notching required.</p> <p>(b) Allowance for side and end laps.</p> <p>(c) Allowance for spot weld, staples, tying wire, strained wire and the like as required.</p>   |
| <b>Rates for steel windows and doors</b>  | <b>SC10.48</b>          | <p>The rates for steel windows and doors shall further include for : -</p> <p>(a) Providing steel clamps to all opening lights of casements as G.S. Item 17.32 (o).</p> <p>(b) Providing and fixing galvanized mild steel glazing beads and drips, if required.</p> <p>(c) Providing and fixing galvanized mild steel fixing lugs or anchor bolts as required.</p> <p>(d) Providing and fixing all necessary ironmongeries of any types of surface finish and materials except torque arm control system.</p> <p>(e) Providing drawings as G.S. Item 17.34.</p> <p>(f) Providing sample as G.S. Item 17.35.</p> <p>(g) Raking joints, pointing, masking, cleaning as G.S. Item 17.36 (i).</p> <p>(h) Pointing joints with approved non-acidic and anti-mould sealant as required.</p> <p>(i) Making good disturbed surfaces.</p> <p>(j) Protecting and cleaning.</p> |
| <b>Rates for repairs to metal windows and doors</b>   | <b>SC10.49</b>          | <p>The rates for repairs to metal windows and doors shall further include for : -</p> <p>(a) Providing ironmongery of matching materials and finishes.</p> <p>(b) Cutting at all means.</p> <p>(c) Drilling and tapping to existing framing including riveting and welding.</p> <p>(d) Providing and fixing screws, rivets, etc. and the like.</p> <p>(e) Cutting mortices and grouting in cement mortar and making good disturbed surfaces.</p>   |

## SPECIAL CONDITIONS

**Rates for repairs to metal windows and doors (Cont'd)**

**SC10.49 (Cont'd)**

- (f) Making good disturbed surfaces.
- (g) Protecting and cleaning.

**Rates for aluminium windows and doors**

**SC10.50**

The rates for aluminium windows and doors shall further include for : -

- (a) Providing all necessary galvanized steel fixing lugs and the like as G.S. Item 17.33 (e).
- (b) Providing galvanized steel water bars as G.S. Item 17.33 (f).
- (c) Providing and fixing all necessary ironmongeries, fittings and furniture as G.S. Items 17.33 (k) to 17.33 (m) except remote control system.
- (d) Providing and fixing all necessary weather strip as G.S. Item 17.33 (h).
- (e) Providing drawings as G.S. Item 17.34.
- (f) Providing sample as G.S. Item 17.35.
- (g) Bedding frames as G.S. Item 17.36 (h).
- (h) Raking joints, pointing, masking, cleaning as G.S. Item 17.36 (j).
- (i) Pointing joints with approved non-acidic and anti-mould sealant as required.
- (j) Treatment on surfaces in contact with concrete or dissimilar metals with one coat of bituminous paint on aluminium surfaces or using an approved tape.

**Rates for fire resisting windows**

**SC10.51**

The rates for fire resisting windows shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions, and in compliance with the fire resisting properties as specified in the Code of Practice for Fire Safety in Buildings and all related statutory requirements.
- (b) Finishing all surfaces as required.
- (c) Providing test certificate, operation and maintenance manuals and supplier's warranty.

**Rates for curtain walls**

**SC10.52**

The rates for curtain walls shall further include for : -

- (a) The design of the curtain walls to comply with the maximum Overall Thermal Transfer Values (OTTV) for building (including walls and roof) of 23 w/m<sup>2</sup> or less.
- (b) All submissions of information as required in G.S. Item 16.07.

**SPECIAL CONDITIONS**

**Rates for  
curtain  
walls  
(Cont'd)**

**SC10.52  
(Cont'd)**

- (c) Requirements pursuant to codes and standards as G.S. Item 16.05 and an itemized list of deviations from the Specification and Drawings for the works.
- (d) Submission of drawings and calculations as G.S. Item 16.09.
- (e) Submission of samples, mock-up erection and tests.
- (f) Method statement related to jointing of components, fire barriers between perimeters of floors and curtain wall, programme for the works, erection and any remedial works.
- (g) In the case of aluminium curtain walls, all types of anodized finishes, powder coated, organic coating fluorocarbon coated or PVF2 finishes.
- (h) In the case of stainless steel curtain walls, all types of polished finishes.
- (i) Reinforcing members, sub-frames and the like of any material.
- (j) Fixing, connections and provision of anchorages.
- (k) Openable windows and doors, integral louvres and associated ironmongeries and fittings.
- (l) Spandrels, stone panels and their supporting systems.
- (m) Cills, copings, water bars, flashings, seals and other attachments including dressing to roofs/abutments.
- (n) Isolation of dissimilar metals and moving parts.
- (o) Support fire-saving insulation on galvanized steel support clips spaced at a maximum of 450 mm centres.
- (p) Preparation work to adjoining structure for attachment of curtain wall.
- (q) All glass and glazing work.
- (r) All tests, at field or in laboratories, and report work.
- (s) Forming and including movement joints as required.
- (t) Sealing joints within curtain wall and joints to existing with approved non-acidic and anti-mould sealant.
- (u) Provision of test reports, manufacturer's guarantee, maintenance manuals and deed of warranty.
- (v) Provision of anchors for gondola.

## SPECIAL CONDITIONS

|   |                         |   |
|---|-------------------------|---|
| <b>Rates for curtain walls (Cont'd)</b>                   | <b>SC10.52 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(w) Provision of lightning protection.</li> <li>(x) Provision of Field or Site mock-up.</li> <li>(y) Provision of closure panel for venetian blind/shutter.</li> <li>(z) Provision of waterproofing/water-tightness.</li> <li>(aa) Protection and cleaning.</li> </ul>   |
| <b>Rates for ironmongery</b>                              | <b>SC10.53</b>          | The Special Conditions for Section 09 - Ironmongery in this Schedule shall apply equally to all items of ironmongery in this Section.   |
| <b>Rates for proprietary composite aluminium cladding</b> | <b>SC10.54</b>          | <p>The rates for proprietary composite aluminium cladding shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Design, supply, fabrication and installation of composite aluminium cladding in conformity to BS 476 Parts 6 &amp; 7, EN 13501-1 or other equivalent fire classification standards.</li> <li>(b) Applying and installation of composite aluminium cladding panels to walls, bulkheads, ceiling soffits or any other locations.</li> <li>(c) Submission of structural design, calculations and drawings endorsed by a Registered Structural Engineer.</li> <li>(d) Submission of details related to quality, coating finish, thickness and standard of aluminium and galvanized mild steel reinforcement together with the manufacturer's certification, for the Maintenance Surveyor's approval.</li> <li>(e) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation.</li> <li>(f) Submission of samples and carrying out of mock-up erection and testing including all necessary tests required to ensure the integrity and safety of the cladding and associated support and fixing system.</li> <li>(g) Submission of method statements related to jointing of components, programme for the work, erection and any remedial works.</li> <li>(h) All types of finishes to the cladding panels and bending to suit all shapes and configurations.</li> <li>(i) Support framework constructed of reinforcing members, backing materials, framing, stiffeners and the like of any materials.</li> <li>(j) Fixing, connections, angle brackets and provision of all types of anchorages including bolts, nuts and the like.</li> <li>(k) Openable access doors, louvres and openings for building services installation.</li> </ul> |

## SPECIAL CONDITIONS

**Rates for  
proprietary  
composite  
aluminium  
cladding  
(Cont'd)**

**SC10.54  
(Cont'd)**

- (l) Ironmongeries and fittings.
- (m) Forming opening around door and/or window.
- (n) Provision of anchorage for gondolas, where required.
- (o) Provision of waterproofing and water-tightness.
- (p) Provision of lightning protection.
- (q) Isolation of dissimilar metals, moving parts and provision of lubrication.
- (r) Support fire-saving insulation on galvanized steel support clips spaced at a maximum of 450 mm centres.
- (s) Preparation work to adjoining structure for attachment of cladding.
- (t) Forming and including movement joints as required.
- (u) Sealing joints within cladding and joints to existing with approved non-acidic and anti-mould sealant.
- (v) Concealed and exposed flashings, edge trims and the like.
- (w) Provision of all necessary test reports, maintenance manuals and manufacturer's guarantee.
- (x) Protection and cleaning.

**Rates for  
proprietary  
composite  
aluminium  
cladding to  
ceiling**

**SC10.55**

Where the proprietary composite aluminium cladding is applied / installed at ceiling soffits, the rates for proprietary composite aluminium cladding shall further include for : -

- (a) Design, supply, fabrication and installation of the whole suspension system (i.e. suspension framing, edge trims, runners, hangers and the like and fixing to concrete soffits).
- (b) Edge trims at junction with bulkheads.
- (c) All cutting and narrow widths.
- (d) Unless otherwise stated, any drop length from soffits.
- (e) Forming openings and trimming around pipes, conduits, power points and the like including extra supports and trimmers for the same.
- (f) Trimming around sprinkler and detector heads, air grilles, light fittings, access panels and the like including extra supports and trimmers for the same.
- (g) Additional framing and supports, etc. to bridge across ducts and the like.

**SPECIAL CONDITIONS**

**Rates for  
composite  
aluminium  
lining**

**SC10.56**

The rates for composite aluminium lining shall further include for : -

- (a) Design, supply, fabrication and installation of aluminium lining for internal use.
- (b) Submission of details related to quality, coating finish, thickness and standard of aluminium and galvanized mild steel reinforcement together with the manufacturer's certification, for the Maintenance Surveyor's approval.
- (c) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation.
- (d) Submission of samples and carrying out of mock-up erection.
- (e) Submission of method statements related to jointing of components, programme for the work, erection and any remedial works.
- (f) All types of finishes to the panel lining and bending to suit all shapes and configurations.
- (g) Support framework constructed of reinforcing members, backing materials, framing, stiffeners and the like of any materials.
- (h) Fixing, connections, angle brackets and provision of all types of anchorages including bolts, nuts and the like.
- (i) Openable access doors, louvres and openings for building services installation.
- (j) Ironmongeries and fittings.
- (k) Forming opening around door and/or window.
- (l) Provision of lightning protection.
- (m) Isolation of dissimilar metals, moving parts and provision of lubrication.
- (n) Preparation work to adjoining structure for attachment of cladding.
- (o) Forming and including movement joints as required.
- (p) Sealing joints within panels of linings and joints to existing with approved non-acidic and anti-mould sealant.
- (q) Provision of all necessary test reports, maintenance manuals and manufacturer's guarantee.
- (r) Protection and cleaning.



**SPECIAL CONDITIONS****Rates for shutters****SC10.57**

The rates for shutters shall further include for : -

- (a) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.
- (b) Grouting into new or existing mortice or holes.
- (c) Providing and fixing with nuts and washers.
- (d) Providing and fixing hinges, locking device, lock and all necessary ironmongeries.
- (e) Making good disturbed surfaces.
- (f) Provision of connection to nearest power point by registered electrical workers for any electrically operated shutters.

**Rates for fire resisting roller shutters****SC10.58**

The rates for fire resisting roller shutters shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions, Particular Specification and in compliance with the fire resisting properties as specified in the Code of Practice for Fire Safety in Buildings and all related statutory requirements.
- (b) Providing and fixing self closing mechanism activated by smoke detector(s) and manual control device(s) on both side of the wall openings for automatic and manual operation compliance with the Fire Service Installation of Government Buildings, Architectural Services Department, and all accessories, ironmongeries and the like recommended by the manufacturer.
- (c) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (d) Grouting into new or existing mortice or holes.
- (e) Providing back up power supply.
- (f) Connecting to fire alarm system when required.
- (g) Finishing all surfaces as required.
- (h) Providing test certificate, operation and maintenance manuals and supplier's warranty.
- (i) Provision of connection to nearest power point by registered electrical workers for any electrically operated fire resisting roller shutters.
- (j) Coordination with and providing all necessary documents to a separate Specialist Contractor for obtaining certification in compliance with fire services statutory requirements.

**SPECIAL CONDITIONS****Rates for transparent shutters****SC10.59**

The rates for transparent shutters shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions.
- (b) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.
- (c) Grouting into new or existing mortice or holes.
- (d) Providing and fixing with nuts and washers.
- (e) Providing and fixing typhoon shutter guide with locking device.
- (f) Providing and fixing hinges, locking device, lock and all necessary ironmongeries.
- (g) Making good disturbed surfaces.
- (h) Providing test certificate, operation and maintenance manuals and supplier's warranty.

**Rates for fire resisting doors****SC10.60**

The rates for fire resisting doors shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions and in compliance with the fire resisting properties as specified in the Code of Practice for Fire Safety in Buildings and all related statutory requirements.
- (b) Providing and fixing door frames, all accessories, ironmongeries and the like recommended by the manufacturer (panic bolt, emergency panic device and digital locking device measured separately).
- (c) Providing back up power supply when required.
- (d) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (e) Grouting into new or existing mortice or holes.
- (f) Finishing all surfaces as required.
- (g) Pointing joints with approved non-acidic and anti-mould sealant as required.
- (h) Making good disturbed surfaces.
- (i) Providing test certificate, operation and maintenance manuals and supplier's warranty.

**SPECIAL CONDITIONS**

**Rates for  
proprietary  
automatic swing  
and sliding doors**

**SC10.61**

The rates for proprietary automatic swing and sliding doors shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions.
- (b) Providing and fixing door frames, door operator, automatic mechanism, interlocking devices and all necessary accessories, ironmongeries and the like recommended by the manufacturer.
- (c) Providing clear tempered glass door panel or observation panel.
- (d) Providing back up power supply.
- (e) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (f) Grouting into new or existing mortice or holes.
- (g) Pointing joints with approved non-acidic and anti-mould sealant as required.
- (h) Finishing all surfaces as required.
- (i) Making good disturbed surfaces.
- (j) Testing and commissioning on completion.
- (k) Submission of catalogues, technical literature and shop drawings for the Maintenance Surveyor's approval.
- (l) Submission of the supplier's warranty.
- (m) Submission of operation and maintenance manuals.
- (n) Provision of connection to nearest power point by registered electrical workers.

**Rates for  
proprietary fire  
resisting partitions**

**SC10.62**

The rates for proprietary fire resisting partitions shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions and in compliance with the fire resisting properties as specified in the Code of Practice for Fire Safety in Buildings and all related statutory requirements.
- (b) Providing and fixing all framings, bracings, supports, fixing accessories and the like as recommended by the manufacturer.
- (c) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (d) Grouting into new or existing mortice or holes.
- (e) Finishing both sides of partition with fire resisting boarding/material.
- (f) Making good disturbed surfaces.
- (g) Providing test certificate, operation and maintenance manuals and supplier's warranty.

**SPECIAL CONDITIONS**

**Rates for  
fibreglass  
house**

**SC10.63**

The rates for fibreglass house shall further include for : -

- (a) Compliance with BS 3396, BS 3479 and BS 4549: Part 1.
- (b) All mechanical parts, fixings, anchor bolts and screws in AISI Type 316 stainless steel.
- (c) Fire retardant gratings in compliance with BS 476 Part 3, Part 6 and Part 7.
- (d) Fire retardant in compliance with BS 476 Part 7 class 1 and class 2.
- (e) All necessary accessories recommended by the manufacturer.
- (f) Fixing to concrete base or steel support (measured separately) including anchor bolts.
- (g) Provision of windows and doors in any type and number.
- (h) Fulfilling the Impact Test based on BS 6206.

**Rates for  
periodic or  
ad-hoc  
examination  
of existing  
proprietary fall  
arrest system  
generally**

**SC10.64**

The rates for periodic or ad-hoc examination of existing proprietary fall arrest system shall generally include for : -

- (a) Provision of a competent person as defined in the Particular Specification for Examination, Testing and Provision of Operation Training for Fall Arrest Systems including all expenses and reimbursement in connection with employment of the competent person.
- (b) Where applicable, planning, programming, co-ordination, liaising and seeking approval from the concerned authorities, departments / venue representatives, building management committees or property management agents for site access, temporary works, temporary site traffic arrangements and/or site occupation and phasing of works in existing and/or occupied buildings and premises.
- (c) Obtaining and providing all licenses and/or permits necessary for periodic or ad-hoc examination of the fall arrest system.
- (d) Temporary works, working platform or scaffolding, labour, materials, plant, equipment, personal protective equipment and the like required for access and for examination of the fall arrest systems in existing and/or occupied buildings or premises to suit users and/or building management requirements.
- (e) Carrying out inspection of the fall arrest system and sub-systems in accordance with B.S. 7883 and the requirements, recommendations and instructions issued by the manufacturers of the fall arrest system.
- (f) All necessary cleaning and application of lubricants for proper upkeep during periodical examination of the fall arrest system.

**SPECIAL CONDITIONS**

**Rates for periodic or ad-hoc examination of existing proprietary fall arrest system generally (Cont'd)**

**SC10.64 (Cont'd)**

- (g) Update the existing site labels or provision of new labels, if necessary.
- (h) Warning tags.
- (i) Submission of examination report which is prepared and endorsed by the competent person who carried out the examination, including : -
  - (i) attendance records of the competent person who carried out the examination;
  - (ii) drawings showing the location and extent of the fall arrest systems;
  - (iii) details and results of the examination carried out including recommendations on any necessary remedial action, if required;
  - (iv) photographic records including photos for necessary cleaning and application of lubricants applied, where applicable;
  - (v) provision of a certificate signed by the competent person certifying that the fall arrest system has been subject to periodic or ad-hoc examination in accordance with B.S. 7883 and the requirements, recommendations and instructions issued by the manufacturers of the fall arrest systems, and is in order; and
  - (vi) Validity of the certificate and the next due date for re-examination and re-certification.
- (j) Compliance with alternative nationally or internationally recognised standards other than B.S. 7883 as recommended by the manufacturers and approved by the Maintenance Surveyor.

**Rates for periodic or ad-hoc examination and load test on Class A1 anchor device**

**SC10.65**

- The rates for periodic or ad-hoc examination and load test on Class A1 anchor device of existing proprietary fall arrest system shall further include for : -
- (a) Carrying out the periodic or ad-hoc examination and load test under the supervision of a Registered Professional Engineer (RPE) (Structural) including all expenses and reimbursement in connection with employment of the RPE (Structural).
  - (b) Carrying out of load test on Class A1 of the anchor devices of the fall arrest system in accordance with the requirements of B.S. 7883 and the results shall be endorsed by a RPE (Structural).
  - (c) Submission of examination reports for load test on Class A1 anchor devices as described in Special Conditions SC10.64(i) which are prepared by the competent person who carried out the examination and endorsed by the RPE (Structural).

**SPECIAL CONDITIONS**

|   |                |  |
|---|----------------|--|
| <b>Rates for operation training of proprietary fall arrest system</b> | <b>SC10.66</b> | <p>The rates for operation training of proprietary fall arrest system shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision of a competent trainer as defined in the Particular Specification for Examination, Testing and Provision of Operation Training for Fall Arrest System including all expenses and reimbursement in connection with employment of the competent trainer.</li> <li>(b) Maintaining and submission of attendance records.</li> <li>(c) Personal protective equipment to all trainees.</li> <li>(d) Provision of operation training at the Government building where the FAS was installed, and its associated facilities and training materials.</li> <li>(e) Provision of training certificates to trainees who successfully complete the operation training.</li> </ul> |
| <b>G.S. clauses</b>   | <b>SC10.67</b> | <p>G.S. clauses for the following items can be found in the respective sections of the General Specification for Building as listed below : -</p> <ul style="list-style-type: none"> <li>(a) Steel sheet cladding - Section 12 - Roofing.</li> <li>(b) Fencing and gates - Section 24 - External Works.</li> <li>(c) Structural steel work - Section 15 - Structural Steel Work.</li> <li>(d) Curtain walls - Section 16 - Curtain Walls.</li> <li>(e) Corrugated and profiled sheeting cladding - Section 12 - Roofing.</li> <li>(f) Strong room doors - Section 22 - Internal Fittings and Fixtures.</li> </ul>  |

| Item   |   |   |                                       |          |                                      |          |          | Item  |       |
|--|---|---|---------------------------------------|----------|--------------------------------------|----------|----------|-------|-------|
| <b>STEEL SHORING</b>   |   |   |                                       |          |                                      |          |          |       |       |
| The following Items 10001 to 10002 inclusive will only be paid in accordance with Special Conditions Clause SC10.07 :-   |   | Erect, maintain, take down and clear away | Erect, maintain, and left-in position |          |                                      |          |          |       |       |
| <i>Per kg</i>  |   | A \$                                      | B \$                                  |          |                                      |          |          |       |       |
| 10001  | Steel shoring to support surface of excavation.....   | 9.30                                      | 8.20                                  |          |                                      |          |          |       | 10001 |
| 10002  | Steel shoring to support existing building or structure.....  | 11.30                                     | 9.80                                  |          |                                      |          |          |       | 10002 |
| <b>HOARDINGS AND WALKWAYS</b>  |   |   |                                       |          |                                      |          |          |       |       |
| The following Items 10003 to 10023 inclusive will only be paid in accordance with Special Conditions Clause SC10.04 :-   |   |   |                                       |          |                                      |          |          |       |       |
| Note: The drawings referred to in this Section and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule can be viewed on the internet website via the pathway referred therein. The latest version of drawings posted shall be referred to when reading this Section. |   | Erect, maintain, take down and clear away | Erect, maintain, and left-in position |          |                                      |          |          |       |       |
| <i>Per linear metre</i>  |   | A \$                                      | B \$                                  |          |                                      |          |          |       |       |
| 10003  | Type A hoarding – corrugated steel fence as detailed on drawings 9711/A/A01 to 9711/A/A05 and 9711/A/S01 to 9711/A/S04.....                                       | 1,216.20                                  | 1,155.00                              |          |                                      |          |          |       | 10003 |
| 10004  | Type E hoarding – corrugated steel fence (surface-mounted footing) as detailed on drawings 9711/E/A01 to 9711/E/A05 and 9711/E/S01 to 9711/E/S04.....             | 1,443.60                                  | 1,371.50                              |          |                                      |          |          |       | 10004 |
| <i>Each</i>  |   |   |                                       |          |                                      |          |          |       |       |
| 10005  | Gateway for Type A hoarding – corrugated steel fence as detailed on drawings 9711/A/A01 to 9711/A/A05 and 9711/A/S01 to 9711/A/S04.....                           | 14,481.00                                 | 13,757.00                             |          |                                      |          |          |       | 10005 |
| 10006  | Gateway for Type E hoarding – corrugated steel fence (surface-mounted footing) as detailed on drawings 9711/E/A01 to 9711/E/A05 and 9711/E/S01 to 9711/E/S04..... | 16,269.00                                 | 15,456.00                             |          |                                      |          |          |       | 10006 |
| <i>Per linear metre</i>  |   |   |                                       |          |                                      |          |          |       |       |
|  |   | Erect, maintain, take down and clear away |                                       |          | Erect, maintain and left-in position |          |          |       |       |
|  |   | with walkway of minimum clear width       |                                       |          | with walkway of minimum clear width  |          |          |       |       |
|  |   | 1.10 m                                    | 1.40 m                                | 2.00 m   | 1.10 m                               | 1.40 m   | 2.00 m   |       |       |
|  |   | A \$                                      | B \$                                  | C \$     | D \$                                 | E \$     | F \$     |       |       |
| 10007  | Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....  | 3,218.10                                  | 3,378.90                              | 3,861.70 | 3,057.10                             | 3,210.00 | 3,668.60 | 10007 |       |
| 10008  | Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....              | 4,938.80                                  | 5,185.80                              | 5,926.60 | 4,691.90                             | 4,926.40 | 5,630.20 | 10008 |       |
| 10009  | Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....              | 6,570.20                                  | 6,898.60                              | 7,884.20 | 6,241.70                             | 6,553.70 | 7,490.10 | 10009 |       |

| Item                                   |   |  |          |           |   |          |          | Item  |
|--|---|--|----------|-----------|---|----------|----------|-------|
| <b>HOARDINGS AND WALKWAYS (CONT'D)</b> |   |  |          |           |   |          |          |       |
|  |   | Erect, maintain,<br>take down and clear away |          |           | Erect, maintain<br>and left-in position |          |          |       |
|  |   | with walkway of<br>minimum clear width       |          |           | with walkway of<br>minimum clear width  |          |          |       |
|  |   | 1.10 m                                       | 1.40 m   | 2.00 m    | 1.10 m                                  | 1.40 m   | 2.00 m   |       |
|  |   | A<br>\$                                      | B<br>\$  | C<br>\$   | D<br>\$                                 | E<br>\$  | F<br>\$  |       |
| 10010                                  | Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....                                      | 3,441.50                                     | 3,613.60 | 4,129.80  | 3,269.40                                | 3,432.80 | 3,923.40 | 10010 |
|  | <i>Per linear metre</i>   |  |          |           |   |          |          |       |
|  |   | Erect, maintain,<br>take down and clear away |          |           | Erect, maintain<br>and left-in position |          |          |       |
|  |   | with walkway of<br>minimum clear width       |          |           | with walkway of<br>minimum clear width  |          |          |       |
|  |   | 1.35 m                                       | 1.60 m   | 1.85 m    | 1.35 m                                  | 1.60 m   | 1.85 m   |       |
|  |   | A<br>\$                                      | B<br>\$  | C<br>\$   | D<br>\$                                 | E<br>\$  | F<br>\$  |       |
| 10011                                  | Type G1 hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G1/A01 to 9711/G1/A09 and 9711/G1/S01 to 9711/G1/S05..... | 5,162.30                                     | 5,620.10 | 5,781.70  | 4,904.20                                | 5,339.10 | 5,492.60 | 10011 |
|  | <i>Per linear metre</i>   |  |          |           |   |          |          |       |
| 10012                                  | Type H1 hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H1/A01 to 9711/H1/A09 and 9711/H1/S01 to 9711/H1/S05..... | 6,913.80                                     | 7,542.30 | 7,743.40  | 6,568.00                                | 7,165.20 | 7,356.20 | 10012 |
|  | <i>Per linear metre</i>   |  |          |           |   |          |          |       |
|  |   | Erect, maintain,<br>take down and clear away |          |           | Erect, maintain<br>and left-in position |          |          |       |
|  |   | with walkway of<br>minimum clear width       |          |           | with walkway of<br>minimum clear width  |          |          |       |
|  |   | 1.85 m                                       | 2.43 m   | 3.00 m    | 1.85 m                                  | 2.43 m   | 3.00 m   |       |
|  |   | A<br>\$                                      | B<br>\$  | C<br>\$   | D<br>\$                                 | E<br>\$  | F<br>\$  |       |
| 10013                                  | Type G2 hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G2/A01 to 9711/G2/A08 and 9711/G2/S01 to 9711/G2/S05..... | 5,781.70                                     | 6,652.70 | 7,508.80  | 5,492.60                                | 6,320.20 | 7,133.30 | 10013 |
|  | <i>Per linear metre</i>   |  |          |           |   |          |          |       |
| 10014                                  | Type H2 hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H2/A01 to 9711/H2/A08 and 9711/H2/S01 to 9711/H2/S05..... | 7,743.40                                     | 8,910.00 | 10,056.40 | 7,356.20                                | 8,464.60 | 9,553.60 | 10014 |
|  | <i>Per linear metre</i>   |  |          |           |   |          |          |       |



| Item                                   |   |  |           |           |   |           |           | Item  |
|--|---|--|-----------|-----------|---|-----------|-----------|-------|
| <b>HOARDINGS AND WALKWAYS (CONT'D)</b> |   |  |           |           |   |           |           |       |
|  |   | Erect, maintain,<br>take down and clear away |           |           | Erect, maintain<br>and left-in position |           |           |       |
|  |   | with walkway of<br>minimum clear width       |           |           | with walkway of<br>minimum clear width  |           |           |       |
|  |   | 1.10 m                                       | 1.40 m    | 2.00 m    | 1.10 m                                  | 1.40 m    | 2.00 m    |       |
|  | <i>Each</i>   | A<br>\$                                      | B<br>\$   | C<br>\$   | D<br>\$                                 | E<br>\$   | F<br>\$   |       |
| 10015                                  | Gateway for Type B hoarding – covered walkway as detailed on drawings 9711/B/A01 to 9711/B/A07 and 9711/B/S01 to 9711/B/S05.....  | 27,934.00                                    | 29,331.00 | 33,521.00 | 26,542.00                               | 27,865.00 | 31,845.00 | 10015 |
| 10016                                  | Gateway for Type C hoarding – covered walkway with single deck catch platform as detailed on drawings 9711/C/A01 to 9711/C/A07 and 9711/C/S01 to 9711/C/S05.....                                | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10016 |
| 10017                                  | Gateway for Type D hoarding – covered walkway with double deck catch platform as detailed on drawings 9711/D/A01 to 9711/D/A07 and 9711/D/S01 to 9711/D/S05.....                                | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10017 |
| 10018                                  | Gateway for Type F hoarding – covered walkway (surface-mounted footing) as detailed on drawings 9711/F/A01 to 9711/F/A07 and 9711/F/S01 to 9711/F/S05.....                                      | 26,817.00                                    | 28,158.00 | 32,180.00 | 25,476.00                               | 26,750.00 | 30,571.00 | 10018 |
|  |   | Erect, maintain,<br>take down and clear away |           |           | Erect, maintain<br>and left-in position |           |           |       |
|  |   | with walkway of<br>minimum clear width       |           |           | with walkway of<br>minimum clear width  |           |           |       |
|  |   | 1.35 m                                       | 1.60 m    | 1.85 m    | 1.35 m                                  | 1.60 m    | 1.85 m    |       |
|  | <i>Each</i>   | A<br>\$                                      | B<br>\$   | C<br>\$   | D<br>\$                                 | E<br>\$   | F<br>\$   |       |
| 10019                                  | Gateway for Type G1 hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G1/A01 to 9711/G1/A09 and 9711/G1/S01 to 9711/G1/S05..... | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10019 |
| 10020                                  | Gateway for Type H1 hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H1/A01 to 9711/H1/A09 and 9711/H1/S01 to 9711/H1/S05..... | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10020 |
|  |   | Erect, maintain,<br>take down and clear away |           |           | Erect, maintain<br>and left-in position |           |           |       |
|  |   | with walkway of<br>minimum clear width       |           |           | with walkway of<br>minimum clear width  |           |           |       |
|  |   | 1.85 m                                       | 2.43 m    | 3.00 m    | 1.85 m                                  | 2.43 m    | 3.00 m    |       |
|  | <i>Each</i>   | A<br>\$                                      | B<br>\$   | C<br>\$   | D<br>\$                                 | E<br>\$   | F<br>\$   |       |
| 10021                                  | Gateway for Type G2 hoarding – covered walkway with single deck catch platform (surface-mounted footing) as detailed on drawings 9711/G2/A01 to 9711/G2/A08 and 9711/G2/S01 to 9711/G2/S05..... | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10021 |
| 10022                                  | Gateway for Type H2 hoarding – covered walkway with double deck catch platform (surface-mounted footing) as detailed on drawings 9711/H2/A01 to 9711/H2/A08 and 9711/H2/S01 to 9711/H2/S05..... | 35,399.00                                    | 37,168.00 | 42,478.00 | 33,629.00                               | 35,317.00 | 40,354.00 | 10022 |

| Item  |  |  |  | Item  |
|-------|--|--|--|-------|
|       | <b>HOARDINGS AND WALKWAYS (CONT'D)</b>   |  |  |       |
|       | <i>Per linear metre</i>  |  |  |       |
| 10023 | Extra over either of Items 10003 to 10004, 10007 to 10014 inclusive for toe sheet as detailed on drawings 9711/A/A03, 9711/B/A03, 9711/C/A03, 9711/D/A03, 9711/E/A03, 9711/F/A03, 9711/G1/A08, 9711/G2/A08, 9711/H1/A08 and 9711/H2/A08.....         | Erect, maintain, take down and clear away<br>A<br>\$<br><br>16.20  | Erect, maintain, and left-in position<br>B<br>\$<br><br>13.90  | 10023 |
|       | <b>INTERNAL METAL/ALUMINIUM HOARDINGS</b>  |  |  |       |
|       | The following Items 10024 to 10026 inclusive will only be paid in accordance with Special Conditions Clause SC10.04 :-   |  |  |       |
|       | Note :- The drawings referred to in this Section are listed and attached in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule.   |  |  |       |
|       | <i>Per linear metre</i>  |  |  |       |
| 10024 | Hoarding as detailed on drawings PB(S)/97904/15B347/D3/FP001, PB(S)/97904/15B347/D3/FP002 and PB(S)/97904/15B347/D3/SW001 to PB(S)/97904/15B347/D3/SW007.....  | Erect, maintain, take down and clear away<br>A<br>\$<br><br>453.00 | Erect, maintain, and left-in position<br>B<br>\$<br><br>400.00 | 10024 |
|       | <i>Each</i>  |  |  |       |
| 10025 | Extra over Item 10024 for corner post with bullet hinges as detailed on drawings PB(S)/97904/15B347/D3/FP001, PB(S)/97904/15B347/D3/FP002, PB(S)/97904/15B347/D3/SW001 and PB(S)/97904/15B347/D3/SW002.....  | 218.00   | 186.00   | 10025 |
| 10026 | Extra over Item 10024 for door with door frames 1200 x 2000 mm high (overall) complete with ironmongery and all accessories (door lock measured separately) as detailed on drawings PB(S)/97904/15B347/D3/SW006 and PB(S)/97904/15B347/D3/SW007..... | 239.00   | 171.00   | 10026 |
|       | <b>ENHANCED TREATMENT TO HOARDINGS</b>   |  |  |       |
|       | (Note :- The following Items 10027 to 10030 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   |  |  |       |
|       | <i>Per square metre</i>  |  |  |       |
| 10027 | Apply graphic design proprietary graphical use film, plastic sheeting or painting to hoarding surface .....  |  | A<br>\$<br><br>291.60  | 10027 |
| 10028 | Apply "green" feature including suitable climbing plants and mesh to hoarding surface.....   |  | 145.80   | 10028 |
|       | <i>Per linear metre</i>  |  |  |       |
| 10029 | Transparent polycarbonate sheet hoarding 2 m high .....  |  | 2,617.00   | 10029 |
| 10030 | Hang flower pot at approximately 2 m intervals including support hanging brackets to hoarding .....  |  | 72.90  | 10030 |

| Item  |  |        |       |   |                          |                                       | Item     |
|-------|--|--------|-------|---|--------------------------|---------------------------------------|----------|
|       | <b>TEMPORARY WORK - FIRE PROTECTION ENCLOSURE</b>  |        |       |   |                          |                                       |          |
|       | The following Items 10031 to 10032 inclusive will only be paid in accordance with Special Conditions Clause SC10.06 :-               |        |       |   |                          |                                       |          |
|       | <i>Per square metre</i>  |        |       |   |                          |                                       |          |
|       |  |        |       | Erect, maintain, take down and clear away |                          | Erect, maintain, and left-in position |          |
|       |  |        |       | A \$                                      |                          | B \$                                  |          |
| 10031 | Temporary enclosure with fire protection material of 1 hour FRR.....   | 332.10 |       |   |                          | 407.30                                | 10031    |
| 10032 | Ditto but 2 hour FRR.....  | 789.20 |       |   |                          | 906.10                                | 10032    |
|       | <b>STRUCTURAL STEEL WORK</b>   |        |       |   |                          |                                       |          |
|       | <b>HOT ROLLED STEEL</b>  |        |       |   |                          |                                       |          |
|       | <i>Per kg</i>  |        |       |   |                          |                                       |          |
|       |  |        |       | Supply and fix                            | Take down and clear away | Take down and set aside for re-use    | Fix only |
|       |  |        |       | Grade S275                                | Grade S355               |                                       |          |
|       |  |        |       | A \$                                      | B \$                     | C \$                                  | D \$     |
|       |  |        |       | E \$                                      |                          |                                       |          |
| 10033 | Round rods, square rods, flat bars, plates, angle sections, tee sections, universal beams, columns, channels or "I" joists.....      | 25.60  | 25.50 | 5.20                                      | 5.90                     | 14.00                                 | 10033    |
| 10034 | Rectangular, square or circular hollow sections.....   | 27.90  | 27.90 | 5.20                                      | 5.90                     | 15.40                                 | 10034    |
| 10035 | Fabricated small items n.e. 2 kg each.....   | 29.10  | 29.10 | 5.20                                      | 7.40                     | 18.20                                 | 10035    |
|       | <b>COLD ROLLED STEEL TO BS EN 10162</b>  |        |       |   |                          |                                       |          |
|       | (Note :- The following Items 10036 to 10038 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)     |        |       |   |                          |                                       |          |
|       | <i>Per kg</i>  |        |       |   |                          |                                       |          |
|       |  |        |       | Supply and fix                            | Take down and clear away | Take down and set aside for re-use    | Fix only |
|       |  |        |       | A \$                                      | B \$                     | C \$                                  | D \$     |
| 10036 | Angle or tee sections, channels, lipped channels or lipped "Z" sections, non-standard purlin sections or other similar sections..... | 33.90  |       | 5.20                                      | 5.90                     | 14.00                                 | 10036    |
| 10037 | Rectangular, square or circular hollow sections.....   | 38.70  |       | 5.20                                      | 5.90                     | 15.40                                 | 10037    |
| 10038 | Fabricated small items n.e. 2 kg each.....   | 41.00  |       | 5.20                                      | 7.40                     | 18.20                                 | 10038    |
|       | <b>HOLDING DOWN BOLTS</b>  |        |       |   |                          |                                       |          |
|       | <i>Each</i>  |        |       |   |                          |                                       |          |
|       |  |        |       |   |                          |                                       |          |
|       |  |        |       | Size                                      |                          |                                       |          |
|       |  |        |       | M16                                       | M20                      | M24                                   |          |
|       |  |        |       | A \$                                      | B \$                     | C \$                                  |          |
| 10039 | Holding down bolt, Grade 4.6 to BS 7419, n.e. 300 mm long complete with nuts and washers .....                                       | 133.00 |       | 147.00                                    |                          | 166.00                                | 10039    |
| 10040 | Ditto but 300 - 450 mm long.....   | 174.00 |       | 186.00                                    |                          | 207.00                                | 10040    |
| 10041 | Ditto but 450 - 600 mm long.....   | 202.00 |       | 213.00                                    |                          | 236.00                                | 10041    |
| 10042 | Holding down bolt, Grade 8.8 to BS 7419, n.e. 300 mm long complete with nuts and washers .....                                       | 145.00 |       | 164.00                                    |                          | 190.00                                | 10042    |
| 10043 | Ditto but 300 - 450 mm long.....   | 188.00 |       | 204.00                                    |                          | 235.00                                | 10043    |
| 10044 | Ditto but 450 - 600 mm long.....   | 219.00 |       | 233.00                                    |                          | 267.00                                | 10044    |

| Item  |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|-------|---|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>MILD STEEL</b>   |                |                          |                                    |          |       |
|       | <b>ROLLED SECTIONS AND PLATE</b>  |                |                          |                                    |          |       |
|       | <i>Per kg</i>   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10045 | Round rods, square rods, flat bars, plates, chequer plates, angle sections, tee sections, universal beams, columns, channels or "I" joists.....   | 18.20          | 5.20                     | 5.90                               | 9.70     | 10045 |
| 10046 | Rectangular, square or circular hollow sections.....  | 19.80          | 5.20                     | 5.90                               | 9.70     | 10046 |
|       | <b>SHEET METAL WORK</b>   |                |                          |                                    |          |       |
|       | <i>Per kg</i>   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10047 | Flat or formed sheet covering .....   | 24.30          | 3.70                     | 4.40                               | 8.80     | 10047 |
| 10048 | Sheet lining to brick or concrete duct, sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like, sheet as ducting, sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like, sheet in square or rectangular tanks, storage cisterns and the like, and including angle stiffeners, corner plates and cover..... | 31.10          | 4.40                     | 6.60                               | 12.70    | 10048 |
| 10049 | Ventilator formed to detail (gross weight measured) .....   | 34.00          | 4.40                     | 7.40                               | 12.70    | 10049 |
|       | <b>COLLAPSIBLE GATES</b>  |                |                          |                                    |          |       |
|       | <i>Per kg</i>   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10050 | Mild steel collapsible gates, diamond pattern, welded and riveted connections.....  | 27.80          | 3.70                     | 5.20                               | 10.80    | 10050 |
| 10051 | Ditto but galvanized.....   | 31.20          | 3.70                     | 5.90                               | 11.70    | 10051 |
| 10052 | Ditto but stainless steel AISI Type 304.....  | 107.70         | 5.20                     | 6.50                               | 13.00    | 10052 |

| Item                    |   |  |         |      | Item   |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|-------------------------|---|--|---------|------|--------|-------------------------|--|--|--|--------|-------|--------|---------|---|---|---|---|----|----|----|----|------|------|------|------|--|--|
|                         | <b>SUNDRY REPAIRS</b>   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="4">Thickness of metal (mm)</th> </tr> <tr> <th>N.e. 3</th> <th>3 - 6</th> <th>6 - 12</th> <th>12 - 20</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>B</td> <td>C</td> <td>D</td> </tr> <tr> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> <tr> <td>2.40</td> <td>3.10</td> <td>5.60</td> <td>8.80</td> </tr> </tbody> </table> |         |      |        | Thickness of metal (mm) |  |  |  | N.e. 3 | 3 - 6 | 6 - 12 | 12 - 20 | A | B | C | D | \$ | \$ | \$ | \$ | 2.40 | 3.10 | 5.60 | 8.80 |  |  |
| Thickness of metal (mm) |   |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| N.e. 3                  | 3 - 6   | 6 - 12   | 12 - 20 |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| A                       | B   | C  | D       |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| \$                      | \$  | \$   | \$      |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 2.40                    | 3.10  | 5.60   | 8.80    |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | <i>Per linear metre</i>   |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10053                   | Straight, raking or circular cutting on any type of metal including filing edges clean.....   | 2.40   | 3.10    | 5.60 | 8.80   | 10053                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | <i>Each</i>   |  |         |      | A      |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         |   |  |         |      | \$     |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10054                   | Cut screw thread on end of steel or iron rod or tube for length upto twice the girth of the steel rod or tube upto 50 mm in thread length.....  |  |         |      | 13.70  | 10054                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10055                   | Add to Item 10054 for each additional 25 mm thread length or part thereof in length.....  |  |         |      | 1.70   | 10055                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10056                   | Cut off end of bolt or rod of upto 50 mm diameter for threading or re-threading.....  |  |         |      | 4.90   | 10056                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10057                   | Drill hole of upto 50 mm diameter in metal n.e. 50 mm deep including countersinking if required.....  |  |         |      | 4.90   | 10057                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10058                   | Add to Item 10057 for each additional 25 mm or part thereof in depth.....   |  |         |      | 0.90   | 10058                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10059                   | Drill and tap hole in metal n.e. 50 mm deep.....  |  |         |      | 7.90   | 10059                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10060                   | Add to Item 10059 for each additional 25 mm or part thereof in depth.....   |  |         |      | 2.90   | 10060                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | <i>Each</i>   |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10061                   | Punch small hole for nail, screw and the like through any type of sheet metal not thicker than 3 mm.....  |  |         |      | 0.90   | 10061                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | Execute the following welding including providing all plant, welding rods, etc., filing weld on completion and preparing and chamfering ends, edges and surfaces to be welded as required : - |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | <i>Per linear metre</i>   |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10062                   | Fillet weld in lengths n.e. 300 mm at connections (net length of fillet measured - allowance made for angles, etc.).....  |  |         |      | 110.70 | 10062                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10063                   | Fillet seam weld in lengths n.e. 300 mm at lapped joints (ditto).....   |  |         |      | 92.30  | 10063                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10064                   | Single butt weld in lengths exceeding 300 mm at butt joints and connections (net length of joint measured on one face only).....  |  |         |      | 110.70 | 10064                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10065                   | Double butt weld in lengths exceeding 300 mm when ordered at butt joints and connections where metal exceeds 6 mm thick (net length of joint measured on both faces).....                     |  |         |      | 92.30  | 10065                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
|                         | <i>Each</i>   |  |         |      |        |                         |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |
| 10066                   | Spot weld end of wire or rod n.e. 12 mm diameter, or bar n.e. 50 mm girth, and the like.....  |  |         |      | 5.60   | 10066                   |  |  |  |        |       |        |         |   |   |   |   |    |    |    |    |      |      |      |      |  |  |

| Item                         |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|------------------------------|---|----------------|--------------------------|------------------------------------|----------|-------|
|                              |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| <b>GALVANIZED MILD STEEL</b> |   |                |                          |                                    |          |       |
|                              | <i>Per kg</i>   |                |                          |                                    |          |       |
| 10067                        | Round rods, square rods, flat bars, plates, chequer plates, angle sections, tee sections, universal beams, columns, channels or "I" joists.....   | 20.10          | 5.20                     | 5.90                               | 9.70     | 10067 |
| 10068                        | Rectangular, square or circular hollow sections excluding galvanized mild steel tubing.....   | 21.10          | 5.20                     | 5.90                               | 9.70     | 10068 |
| 10069                        | Water bar.....  | 23.30          | 3.70                     | 5.20                               | 10.80    | 10069 |
| 10070                        | Wall tie, frame holdfast, single piece ceiling hanger or bracket, and the like.....   | 27.60          | 5.90                     | 8.10                               | 13.70    | 10070 |
| 10071                        | Composite ceiling hanger, bracket and the like of two or more pieces including assembling, supplying and fixing nuts, bolts and washers, or welding.....  | 26.40          | 4.40                     | 5.90                               | 12.70    | 10071 |
| 10072                        | Chains, including hooks, rings, shackles, etc., complete.....   | 29.60          | 3.70                     | 5.20                               | 3.90     | 10072 |
| 10073                        | Flat / formed sheet covering.....   | 26.40          | 3.70                     | 5.20                               | 10.80    | 10073 |
| 10074                        | Perforated flat or formed sheet covering.....   | 20.10          | 3.70                     | 5.20                               | 10.80    | 10074 |
| 10075                        | Sheet lining to brick or concrete duct, sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like, sheet as ducting, sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like, sheet in square or rectangular tanks, storage cisterns and the like, and including angle stiffeners, corner plates and cover..... | 35.90          | 4.40                     | 7.40                               | 12.70    | 10075 |
| 10076                        | Ventilator formed to detail (gross weight measured).....  | 39.10          | 4.40                     | 7.40                               | 12.30    | 10076 |
| 10077                        | Stopcock or meter box and the like with hinged or loose lid to detail (ironmongery measured separately).....  | 23.30          | 4.40                     | 7.40                               | 13.70    | 10077 |
|                              | <i>Each</i>   |                |                          |                                    | A<br>\$  |       |
| 10078                        | 16 mm Diameter dowel 75 mm long including letting 40 mm in a frame, cutting mortice in concrete floor or paving if required, and grouting in and making good.....   |                |                          |                                    | 10.20    | 10078 |
|                              |   | Diameter (mm)  |                          |                                    |          |       |
|                              |   | 40             | 50                       | 65                                 | 75       |       |
|                              | Thickness (mm)  | 1.00           | 1.00                     | 1.26                               | 1.26     |       |
|                              | <i>Each</i>   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10079                        | Single sided round toothed timber connector plate holed for bolt (measured separately) and fixing.....  | 7.50           | 7.90                     | 8.30                               | 8.60     | 10079 |
| 10080                        | Double sided ditto.....   | 10.60          | 11.00                    | 11.50                              | 11.90    | 10080 |

| Item  |   |                      |                                      |  | Item        |       |
|---|---|----------------------|--------------------------------------|--|-------------|-------|
| <b>GALVANIZED STEEL WINDOWS AND GLAZED DOORS</b>  |   |                      |                                      |  |             |       |
| Galvanized steel windows and glazed doors (all glazing measured separately) :-  |   |                      |                                      |  |             |       |
| <i>Per square metre</i>   |   |                      |                                      |  |             |       |
|   |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 10081   | Galvanised steel window medium sections.....  | 760.00               | 28.00                                | 29.50  | 54.70       | 10081 |
| 10082   | Extra over Item 10081 for openable portions.....  | 399.70               | -                                    | -  | -           | 10082 |
| 10083   | Galvanised steel window large (38 mm) sections.....   | 907.80               | 33.20                                | 35.40  | 65.50       | 10083 |
| 10084   | Extra over Item 10083 for openable portions.....  | 474.80               | -                                    | -  | -           | 10084 |
| 10085   | Galvanised steel door medium sections.....  | 654.60               | 25.80                                | 26.60  | 48.80       | 10085 |
| 10086   | Extra over Item 10085 for openable portions.....  | 339.20               | -                                    | -  | -           | 10086 |
| 10087   | Galvanised steel door large (38 mm) sections.....   | 778.80               | 30.20                                | 31.70  | 58.70       | 10087 |
| 10088   | Extra over Item 10087 for openable portions.....  | 403.20               | -                                    | -  | -           | 10088 |
| <b>FIRE RESISTING GALVANIZED STEEL WINDOWS</b>  |   |                      |                                      |  |             |       |
| Approved fire resisting galvanised steel windows and glazed with and including clear tempered glass panels tested in accordance with BS 476: Part 20-24 including any finish :- |   |                      |                                      |  |             |       |
| <i>Per square metre</i>   |   |                      |                                      |  |             |       |
|   |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 10089   | Galvanised steel window with 1 hour FRR .....   | 2,440.80             | 53.40                                | 56.00  | 98.20       | 10089 |
| 10090   | Ditto with 2 hour FRR.....  | 2,847.60             | 53.40                                | 56.00  | 98.20       | 10090 |
| <b>REPAIRS TO GALVANIZED STEEL WINDOWS AND DOORS</b>  |   |                      |                                      |  |             |       |
| <i>Per linear metre</i>   |   |                      |                                      |  |             |       |
|   |   |                      |                                      |  | A<br>\$     |       |
| 10091   | Coupling mullion for window complete with mastic for assembly.....  |                      |                                      |  | 48.80       | 10091 |
| 10092   | Coupling mullion for door or side light ditto.....  |                      |                                      |  | 48.80       | 10092 |
| 10093   | Coupling transom for window ditto.....  |                      |                                      |  | 51.80       | 10093 |
| 10094   | Coupling transom for door or side light with ventilator over ditto.....   |                      |                                      |  | 54.90       | 10094 |
| <i>Per square metre</i>   |   |                      |                                      |  |             |       |
| 10095   | Take down and clear away openable sash, ventilator, window or door of any size or section including cutting hinges away from frame..... |                      |                                      |  | 11.70       | 10095 |
| 10096   | Take down and set aside for re-use ditto.....   |                      |                                      |  | 9.60        | 10096 |
| 10097   | Fix only openable sash, ventilator, window or door of any size or section to existing frame including welding or riveting hinges.....   |                      |                                      |  | 19.90       | 10097 |





| Item  |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|---|--|----------------|--------------------------|------------------------------------|----------|-------|
|   |  | A              | B                        | C                                  | D        |       |
|   |  | \$             | \$                       | \$                                 | \$       |       |
| <b>GALVANIZED STEEL SHEET CLADDING<br/>(FACE WORK OTHER THAN ROOFING)</b> |  |                |                          |                                    |          |       |
| <i>Per square metre</i>   |  |                |                          |                                    |          |       |
| 10123   | Corrugated steel sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to timber framing (measured separately).....        | 85.50          | 5.20                     | 13.30                              | 23.50    | 10123 |
| 10124   | Ditto but 0.60 - 0.80 mm thick.....  | 90.10          | 5.20                     | 14.00                              | 24.40    | 10124 |
| 10125   | Ditto but 0.80 - 1.00 mm thick.....  | 103.70         | 5.90                     | 14.80                              | 27.30    | 10125 |
| 10126   | Corrugated steel sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to curved timber framing (measured separately)..... | 89.00          | 5.90                     | 14.80                              | 25.50    | 10126 |
| 10127   | Ditto but 0.60 - 0.80 mm thick.....  | 92.90          | 5.90                     | 15.50                              | 26.40    | 10127 |
| 10128   | Ditto but 0.80 - 1.00 mm thick.....  | 106.60         | 6.60                     | 16.20                              | 28.40    | 10128 |
| 10129   | Corrugated steel sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to steel framing (measured separately).....         | 87.00          | 5.20                     | 13.30                              | 28.40    | 10129 |
| 10130   | Ditto but 0.60 - 0.80 mm thick.....  | 90.80          | 5.20                     | 14.00                              | 29.30    | 10130 |
| 10131   | Ditto but 0.80 - 1.00 mm thick.....  | 104.30         | 5.90                     | 14.80                              | 31.20    | 10131 |
| 10132   | Corrugated steel sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to curved steel framing (measured separately).....  | 89.80          | 5.90                     | 14.80                              | 31.20    | 10132 |
| 10133   | Ditto but 0.60 - 0.80 mm thick.....  | 90.80          | 5.90                     | 15.50                              | 33.20    | 10133 |
| 10134   | Ditto but 0.80 - 1.00 mm thick.....  | 104.40         | 6.60                     | 16.20                              | 34.30    | 10134 |
| <i>Per linear metre</i>   |  |                |                          |                                    |          |       |
| 10135   | Drip or flashing n.e. 0.60 mm thick and up to 150 mm girth fixed over door or window head, lapped 150 mm at end laps (measured net).....   | 17.90          | 1.50                     | 3.70                               | 6.80     | 10135 |
| 10136   | Ditto but 0.60 - 0.80 mm thick.....  | 19.60          | 1.50                     | 3.70                               | 6.80     | 10136 |
| 10137   | Ditto but 0.80 - 1.00 mm thick.....  | 22.70          | 2.20                     | 4.40                               | 7.90     | 10137 |

| Item  |   |                      |                                      |  | Item        |       |
|-------|---|----------------------|--------------------------------------|--|-------------|-------|
|       | <b>PROPRIETARY PROFILED STEEL SHEET CLADDING<br/>(FACE WORK OTHER THAN ROOFING)</b>   |                      |                                      |  |             |       |
|       | Proprietary profiled steel sheet cladding, trapezoidal ribbed, roll-formed walling profile; has bold, widely spaced ribs and is formed from steel; minimum base metal thickness is 0.42 mm (BMT), grade of steel G550 (550 N/mm yield strength); coating class AZ150, total coated thickness in 0.47 mm (TCT); and available in a range of steel paint systems and colours : -  |                      |                                      |  |             |       |
|       |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|       | <i>Per square metre</i>   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 10138 | 0.47 mm Thick proprietary profiled steel sheeting fixed to timber framing.....  | 399.00               | 4.40                                 | 9.60   | 18.60       | 10138 |
| 10139 | Ditto but fixed to curved timber framing.....   | 405.10               | 5.20                                 | 10.30  | 20.50       | 10139 |
| 10140 | 0.47 mm Thick proprietary profiled steel sheeting fixed to steel framing.....   | 401.90               | 4.40                                 | 10.30  | 18.60       | 10140 |
| 10141 | Ditto but fixed to curved steel framing.....  | 405.90               | 5.20                                 | 11.10  | 21.50       | 10141 |
|       | Proprietary profiled steel sheet cladding, roll-formed from steel, lock-action rib for positive concealed clip fixing; profile with an effective cover width of 406 mm and a rib height of 41 mm; minimum base metal thickness is 0.48 mm (BMT), grade of steel G550 (550 N/mm yield strength); coating class AZ150, total coated thickness in 0.53 mm (TCT); and available in a range of steel paint systems and colours : - |                      |                                      |  |             |       |
|       | <i>Per square metre</i>   |                      |                                      |  |             |       |
| 10142 | 0.53 mm Thick proprietary profiled steel sheet cladding fixed to timber framing.....  | 482.00               | 4.40                                 | 9.60   | 19.60       | 10142 |
| 10143 | Ditto but 0.65 mm thick.....  | 541.70               | 5.20                                 | 10.30  | 20.50       | 10143 |
| 10144 | 0.53 mm Thick proprietary profiled steel sheet cladding fixed to curved timber framing.....   | 486.00               | 5.20                                 | 11.10  | 20.50       | 10144 |
| 10145 | Ditto but 0.65 mm thick.....  | 546.30               | 5.20                                 | 11.80  | 22.40       | 10145 |
| 10146 | 0.53 mm Thick proprietary profiled steel sheet cladding fixed to steel framing.....   | 483.00               | 5.20                                 | 10.30  | 19.60       | 10146 |
| 10147 | Ditto but 0.65 mm thick.....  | 543.00               | 5.20                                 | 11.10  | 20.50       | 10147 |
| 10148 | 0.53 mm Thick proprietary profiled steel sheet cladding fixed to curved steel framing.....  | 487.50               | 5.20                                 | 11.80  | 21.50       | 10148 |
| 10149 | Ditto but 0.65 mm thick.....  | 547.40               | 5.20                                 | 11.80  | 22.40       | 10149 |
|       | <i>Each</i>   |                      |                                      |  | A<br>\$     |       |
| 10150 | Cut hole through existing sheet cladding for pipes or articles in any size and thickness.....   |                      |                                      |  | 19.80       | 10150 |

| Item                                    |  |                      |                                      |  | Item        |       |
|---|--|----------------------|--------------------------------------|--|-------------|-------|
| <b>GALVANIZED MILD STEEL TUBING</b>     |  |                      |                                      |  |             |       |
| <i>Per linear metre</i>                 |  |                      |                                      |  |             |       |
|   |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 10151                                   | 15 mm Bore medium series galvanized mild steel tubing.....   | 31.80                | 2.20                                 | 3.00   | 7.90        | 10151 |
| 10152                                   | 20 mm Ditto.....   | 41.40                | 3.00                                 | 3.70   | 9.80        | 10152 |
| 10153                                   | 25 mm Ditto.....   | 58.30                | 3.70                                 | 4.40   | 12.70       | 10153 |
| 10154                                   | 32 mm Ditto.....   | 73.50                | 4.40                                 | 5.20   | 15.60       | 10154 |
| 10155                                   | 40 mm Ditto.....   | 86.60                | 5.90                                 | 6.60   | 20.50       | 10155 |
| 10156                                   | 50 mm Ditto.....   | 126.40               | 8.10                                 | 10.30  | 26.40       | 10156 |
| 10157                                   | 80 mm Ditto.....   | 210.80               | 11.10                                | 13.30  | 34.30       | 10157 |
| 10158                                   | 100 mm Ditto.....  | 275.50               | 12.60                                | 15.50  | 39.10       | 10158 |
| 10159                                   | 150 mm Ditto.....  | 403.70               | 14.80                                | 17.70  | 45.90       | 10159 |
|   | Add to either of Items 10151 to 10159 inclusive for bending to radius n.e. 15.00 m.....  | 5%                   | -                                    | -  | -           |       |
| <b>GALVANIZED STEEL WIRE ROPE, ETC.</b> |  |                      |                                      |  |             |       |
| <i>Per linear metre</i>                 |  |                      |                                      |  |             |       |
|   |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 10160                                   | 3 mm Diameter flexible galvanized steel wire rope in flagstaff guys and the like including all binding<br>and splicing, and splicing to existing rope.....             | 11.00                | 1.50                                 | 2.20   | 3.90        | 10160 |
| 10161                                   | 4 mm Ditto.....  | 11.30                | 1.50                                 | 2.20   | 3.90        | 10161 |
| 10162                                   | 6 mm Ditto.....  | 12.40                | 1.50                                 | 2.20   | 3.90        | 10162 |
| 10163                                   | 8 mm Ditto.....  | 13.30                | 2.20                                 | 2.20   | 4.90        | 10163 |
| 10164                                   | 10 mm Ditto.....   | 14.00                | 2.20                                 | 2.20   | 4.90        | 10164 |
| <i>Each</i>                             |  |                      |                                      |  |             |       |
| 10165                                   | Galvanized steel sail thimble for rope n.e. 6 mm diameter.....   | 7.30                 | -                                    | -  | -           | 10165 |
| 10166                                   | Ditto but exceeding 6 mm and n.e. 10 mm diameter.....  | 8.10                 | -                                    | -  | -           | 10166 |
| 10167                                   | Galvanized wrought iron "D" shaped shackle with 6 mm diameter metal rod or bolt at centre of bow.....  | 16.10                | 1.50                                 | 2.20   | 4.90        | 10167 |
| 10168                                   | Ditto but with 8 mm diameter metal rod or bolt at centre of bow.....   | 19.10                | 1.50                                 | 2.20   | 4.90        | 10168 |
| 10169                                   | Ditto but with 10 mm diameter metal rod or bolt at centre of bow.....  | 19.10                | 2.20                                 | 2.20   | 4.90        | 10169 |
| 10170                                   | Heavy duty galvanized steel rope strainer with central body, screw hook on one end and screw eye<br>on the other end, 375 mm long overall to take load of 1 tonne..... | 46.40                | 4.40                                 | 5.20   | 9.80        | 10170 |
| 10171                                   | Ditto but 475 mm long overall to take load of 2 tonnes.....  | 80.40                | 7.40                                 | 8.90   | 12.70       | 10171 |

| Item  |  |  |  |  |  |  |  |  |  |                                      | Item                                 |   |             |         |       |       |
|---|--|--|--|--|--|--|--|--|--|--------------------------------------|--------------------------------------|---|-------------|---------|-------|-------|
| <b>REPAIRS TO GRATES, RANGES, ETC.</b>  |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
|   |  |  |  |  |  |  |  |  |  | Take<br>down<br>and<br>clear<br>away | Fix<br>only                          |   |             |         |       |       |
| <i>Each</i>   |  |  |  |  |  |  |  |  |  | A<br>\$                              | B<br>\$                              |   |             |         |       |       |
| 10172   | Oven or side boiler .....  |  |  |  |  |  |  |  |  |                                      | 64.20                                | 198.00  | 10172       |         |       |       |
| 10173   | Set of front bars, bottom grating, pair of iron fire cheeks, oven door, damper rod, soot door, smoke box, register plane, falling door, etc. ....  |  |  |  |  |  |  |  |  |                                      | 8.10                                 | 24.40   | 10173       |         |       |       |
| <b>STAINLESS STEEL</b>  |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
| <b>SHEET METAL WORK</b>   |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
|   |  |  |  |  |  |  |  |  |  | Supply and fix                       | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and<br>set<br>aside for<br>re-use | Fix<br>only |         |       |       |
|   |  |  |  |  |  |  |  |  |  | AISI<br>304                          | AISI<br>316                          |   |             |         |       |       |
| <i>Per kg</i>   |  |  |  |  |  |  |  |  |  | A<br>\$                              | B<br>\$                              | C<br>\$   | D<br>\$     | E<br>\$ |       |       |
| 10174   | Chequer plate.....   |  |  |  |  |  |  |  |  |                                      | 79.20                                | -   | 7.40        | 8.10    | 18.60 | 10174 |
| 10175   | Flat or formed sheet covering.....   |  |  |  |  |  |  |  |  |                                      | 71.80                                | 83.20   | 8.10        | 9.60    | 15.60 | 10175 |
| 10176   | Perforated flat or formed sheet covering.....  |  |  |  |  |  |  |  |  |                                      | 53.20                                | 61.60   | 6.60        | 9.60    | 15.60 | 10176 |
| 10177   | Sheet lining to brick or concrete duct, sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like, sheet as ducting, sheet as pipes, gutters, funnels, hoods, chimney cowl, roof plates and the like, sheet in square or rectangular tanks, storage cisterns and the like, and including angle stiffeners, corner plates and cover..... |  |  |  |  |  |  |  |  |                                      | 89.20                                | 124.10  | 9.60        | 11.80   | 23.50 | 10177 |
| 10178   | Ventilator formed to detail (gross weight measured).....   |  |  |  |  |  |  |  |  |                                      | 83.90                                | 116.70  | 9.60        | 10.30   | 19.60 | 10178 |
| <b>METAL SECTIONS</b>   |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
|   |  |  |  |  |  |  |  |  |  | Supply and fix                       |                                      | Fix<br>only                                       |             |         |       |       |
|   |  |  |  |  |  |  |  |  |  | AISI<br>304                          | AISI<br>316                          |   |             |         |       |       |
| <i>Per kg</i>   |  |  |  |  |  |  |  |  |  | A<br>\$                              | B<br>\$                              | C<br>\$   |             |         |       |       |
| 10179   | Round rods, square rods, flat bars, plates, angle sections, tees, channels and other similar sections.....   |  |  |  |  |  |  |  |  |                                      | 75.80                                | 82.30   | 15.60       | 10179   |       |       |
| 10180   | Rectangular, square or circular hollow sections .....  |  |  |  |  |  |  |  |  |                                      | 86.40                                | 86.70   | 16.70       | 10180   |       |       |
| <i>Per square metre</i>   |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
| 10181   | Add to either of Items 10174 to 10180 inclusive for Finish No. 4 - polished with fine grit or hair line finish.....  |  |  |  |  |  |  |  |  |                                      | 6.60                                 | 10.90   | -           | 10181   |       |       |
| 10182   | Add to either of Items 10174 to 10180 inclusive for Finish No. 8 - mirror finish.....  |  |  |  |  |  |  |  |  |                                      | 16.40                                | 27.40   | -           | 10182   |       |       |
| (Note : - The above Items 10174 to 10180 inclusive for stainless steel in grade AISI 316 will only be paid for, if ordered by the Maintenance Surveyor in writing.) |  |  |  |  |  |  |  |  |  |                                      |                                      |   |             |         |       |       |
| <i>Per kg</i>   |  |  |  |  |  |  |  |  |  |                                      |                                      | A<br>\$   |             |         |       |       |
| 10183   | Take down and clear away any of the above sections (Items 10179 to 10180 inclusive).....   |  |  |  |  |  |  |  |  |                                      |                                      |   | 5.20        | 10183   |       |       |
| 10184   | Take down and set aside for re-use (ditto).....  |  |  |  |  |  |  |  |  |                                      |                                      |   | 6.60        | 10184   |       |       |

| Item  |  | Supply and fix |          | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|---|--|----------------|----------|--------------------------|------------------------------------|----------|-------|
|   |  | AISI 304       | AISI 316 |                          |                                    |          |       |
|   |  | A              | B        | C                        | D                                  | E        |       |
|   |  | \$             | \$       | \$                       | \$                                 | \$       |       |
| <b>STAINLESS STEEL (CONT'D)</b>   |  |                |          |                          |                                    |          |       |
| <b>METAL SECTIONS (CONT'D)</b>  |  |                |          |                          |                                    |          |       |
|   | <i>Each</i>  |                |          |                          |                                    |          |       |
| 10185   | Flange plate to 25 mm diameter tubing.....   | 24.60          | 37.00    | 1.50                     | 2.20                               | 4.90     | 10185 |
| 10186   | Ditto but to 38 mm diameter tubing.....  | 33.20          | 49.90    | 2.20                     | 3.00                               | 5.90     | 10186 |
| 10187   | Ditto but to 50 mm diameter tubing.....  | 40.20          | 60.30    | 2.20                     | 3.00                               | 6.80     | 10187 |
| 10188   | Ditto but to 75 mm diameter tubing.....  | 51.00          | 76.60    | 3.00                     | 3.70                               | 7.90     | 10188 |
| 10189   | Add to either of Items 10185 to 10188 inclusive for Finish No. 4 - polished with fine grit or hair line finish ..... | 3.50           | 5.60     | -                        | -                                  | -        | 10189 |
| 10190   | Add to either of Items 10185 to 10188 inclusive for Finish No. 8 - mirror finish.....                                | 8.70           | 12.80    | -                        | -                                  | -        | 10190 |
| (Note : - The above Items 10185 to 10188 inclusive for stainless steel in grade AISI 316 will only be paid for, if ordered by the Maintenance Surveyor in writing.)                               |  |                |          |                          |                                    |          |       |
| <b>FIRE RESISTING STAINLESS STEEL WINDOWS</b>   |  |                |          |                          |                                    |          |       |
| Approved fire resisting stainless steel Grade 316 windows and glazed with and including clear tempered glass panels tested in accordance with BS 476 : Part 20-24 : -                             |  |                |          |                          |                                    |          |       |
|   | <i>Per square metre</i>  |                |          |                          |                                    |          |       |
| 10191   | Stainless steel window with 1 hour FRR.....  | 4,520.00       | 53.40    | 56.00                    | 98.20                              |          | 10191 |
| 10192   | Ditto with 2 hour FRR.....   | 5,650.00       | 53.40    | 56.00                    | 98.20                              |          | 10192 |
| <b>BOLTS AND ANCHOR BOLTS FOR ISOLATED REPAIRS</b>  |  |                |          |                          |                                    |          |       |
| (Note : - Items 10193 to 10199 inclusive shall only be measured when they are required for replacement in isolated repair items as stipulated in Special Conditions Clauses SC10.13 and SC10.42.) |  |                |          |                          |                                    |          |       |
|   | <i>Per kg</i>  |                |          |                          |                                    |          |       |
| 10193   | Bolt with nut and washer.....  |                |          | 65.50                    | 20.10                              |          | 10193 |

| Item   |  |        |       |       |       |                                | Item                     |                                    |          |    |    |  |  |
|--|--|--------|-------|-------|-------|--------------------------------|--------------------------|------------------------------------|----------|----|----|--|--|
| <b>BOLTS AND ANCHOR BOLTS FOR ISOLATED REPAIRS (CONT'D)</b>    |  |        |       |       |       |                                |                          |                                    |          |    |    |  |  |
| <i>Each</i>  |  |        |       |       |       |                                |                          |                                    |          |    |    |  |  |
|  |  |        |       |       |       | Nominal diameter of shank (mm) |                          |                                    |          |    |    |  |  |
|  |  |        |       |       |       | 6                              | 8                        | 10                                 | 12       | 16 | 20 |  |  |
|  |  |        |       |       |       | A                              | B                        | C                                  | D        | E  | F  |  |  |
|  |  |        |       |       |       | \$                             | \$                       | \$                                 | \$       | \$ | \$ |  |  |
| 10194  | Steel ragbolt n.e 150 mm long overall.....   | 7.90   | 9.70  | 11.60 | 13.30 | 16.70                          | 21.60                    | 10194                              |          |    |    |  |  |
| 10195  | Ditto but 150 - 300 mm long overall.....   | 8.40   | 10.50 | 12.50 | 13.90 | 17.60                          | 22.80                    | 10195                              |          |    |    |  |  |
| 10196  | Steel ragbolt (loose bolt or bolt projecting type) n.e. 150 mm long overall.....   | 6.70   | 8.20  | 9.80  | 14.20 | 27.40                          | 40.30                    | 10196                              |          |    |    |  |  |
| 10197  | Ditto but 150 - 300 mm long overall.....   | 9.60   | 11.80 | 14.00 | 17.40 | 30.00                          | 49.30                    | 10197                              |          |    |    |  |  |
| 10198  | Non-drilling or self drilling anchor bolt of any length.....   | 6.60   | 7.40  | 9.00  | 10.60 | 15.20                          | 20.70                    | 10198                              |          |    |    |  |  |
| 10199  | Stud anchor bolt of any length.....  | 8.10   | 8.30  | 8.90  | 11.90 | 18.60                          | 29.70                    | 10199                              |          |    |    |  |  |
| <b>ALUMINIUM SHEET CLADDING (FACE WORK OTHER THAN ROOFING)</b> |  |        |       |       |       |                                |                          |                                    |          |    |    |  |  |
| <i>Per square metre</i>  |  |        |       |       |       |                                |                          |                                    |          |    |    |  |  |
|  |  |        |       |       |       | Supply and fix                 | Take down and clear away | Take down and set aside for re-use | Fix only |    |    |  |  |
|  |  |        |       |       |       | A                              | B                        | C                                  | D        |    |    |  |  |
|  |  |        |       |       |       | \$                             | \$                       | \$                                 | \$       |    |    |  |  |
| 10200  | Corrugated aluminium sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to timber framing (measured separately).....        | 362.60 | 4.90  | 9.80  | 17.60 | 10200                          |                          |                                    |          |    |    |  |  |
| 10201  | Ditto but 0.60 - 0.80 mm thick.....  | 433.30 | 5.20  | 10.30 | 20.50 | 10201                          |                          |                                    |          |    |    |  |  |
| 10202  | Ditto but 0.80 - 1.00 mm thick.....  | 548.20 | 5.90  | 11.10 | 22.40 | 10202                          |                          |                                    |          |    |    |  |  |
| 10203  | Corrugated aluminium sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to curved timber framing (measured separately)..... | 367.60 | 5.90  | 11.10 | 22.40 | 10203                          |                          |                                    |          |    |    |  |  |
| 10204  | Ditto but 0.60 - 0.80 mm thick.....  | 435.20 | 5.90  | 11.10 | 23.50 | 10204                          |                          |                                    |          |    |    |  |  |
| 10205  | Ditto but 0.80 - 1.00 mm thick.....  | 549.90 | 5.90  | 11.80 | 25.50 | 10205                          |                          |                                    |          |    |    |  |  |
| 10206  | Corrugated aluminium sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to steel framing (measured separately).....         | 366.30 | 5.20  | 10.30 | 20.50 | 10206                          |                          |                                    |          |    |    |  |  |
| 10207  | Ditto but 0.60 - 0.80 mm thick.....  | 433.70 | 5.90  | 11.10 | 21.50 | 10207                          |                          |                                    |          |    |    |  |  |
| 10208  | Ditto but 0.80 - 1.00 mm thick.....  | 548.50 | 5.90  | 11.10 | 23.50 | 10208                          |                          |                                    |          |    |    |  |  |
| 10209  | Corrugated aluminium sheet cladding n.e. 0.60 mm thick in any corrugation and colour fixed to curved steel framing (measured separately).....  | 368.20 | 5.90  | 11.10 | 23.50 | 10209                          |                          |                                    |          |    |    |  |  |
| 10210  | Ditto but 0.60 - 0.80 mm thick.....  | 435.70 | 5.90  | 11.80 | 24.40 | 10210                          |                          |                                    |          |    |    |  |  |
| 10211  | Ditto but 0.80 - 1.00 mm thick.....  | 550.50 | 6.60  | 12.60 | 26.40 | 10211                          |                          |                                    |          |    |    |  |  |
| <i>Per linear metre</i>  |  |        |       |       |       |                                |                          |                                    |          |    |    |  |  |
| 10212  | Drip or flashing n.e. 0.60 mm and up to 150 mm girth fixed over door or window head, lapped 150 mm at end laps (measured net).....             | 38.70  | 1.50  | 3.70  | 6.80  | 10212                          |                          |                                    |          |    |    |  |  |
| 10213  | Ditto but 0.60 - 0.80 mm thick.....  | 44.40  | 2.20  | 3.70  | 6.80  | 10213                          |                          |                                    |          |    |    |  |  |
| 10214  | Ditto but 0.80 - 1.00 mm thick.....  | 55.50  | 2.20  | 3.70  | 7.90  | 10214                          |                          |                                    |          |    |    |  |  |

| Item   |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>ALUMINIUM</b>   |   |                |                          |                                    |          |       |
| <b>SHEET METAL WORK</b>  |   |                |                          |                                    |          |       |
| <i>Per kg</i>  |   |                |                          |                                    |          |       |
| 10215  | Chequer plate.....  | 52.40          | 6.60                     | 8.10                               | 19.60    | 10215 |
| 10216  | Flat or formed sheet covering.....  | 54.80          | 11.70                    | 8.90                               | 17.60    | 10216 |
| 10217  | Perforated flat or formed sheet covering.....   | 40.60          | 6.60                     | 8.90                               | 17.60    | 10217 |
| 10218  | Sheet as pipes, gutters, funnels, hoods, chimney cowls, roof plates and the like.....               | 63.40          | 10.30                    | 13.30                              | 32.30    | 10218 |
| 10219  | Ventilator formed to detail (gross weight measured).....  | 67.70          | 8.90                     | 11.10                              | 26.40    | 10219 |
| 10220  | Round rods, square rods, flat bars, plates, angle sections, tees, channels or similar sections..... | 75.80          | 6.60                     | 8.90                               | 45.00    | 10220 |
| 10221  | Rectangular, square or circular hollow sections.....  | 75.50          | 6.60                     | 8.90                               | 45.90    | 10221 |
| 10222  | Segmental or moulded edge trim in any thickness.....  | 55.60          | 8.90                     | 11.10                              | 22.40    | 10222 |
| <b>ALUMINIUM WINDOWS AND GLAZED DOORS</b>                                |   |                |                          |                                    |          |       |
| Aluminium windows and glazed doors (all glazing measured separately) : - |   |                |                          |                                    |          |       |
| <i>Per square metre</i>  |   |                |                          |                                    |          |       |
| 10223  | Aluminium window .....  | 1,464.00       | 22.10                    | 22.90                              | 58.70    | 10223 |
| 10224  | Extra over Item 10223 for openable portions.....  | 263.60         | -                        | -                                  | -        | 10224 |
| 10225  | Aluminium door.....   | 1,346.30       | 19.90                    | 20.70                              | 51.80    | 10225 |
| 10226  | Extra over Item 10225 for openable portions.....  | 214.40         | -                        | -                                  | -        | 10226 |

| Item  |   |                |                          |                                    |          |       |
|-------|---|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>FIRE RESISTING ALUMINIUM WINDOWS</b>   |                |                          |                                    |          |       |
|       | Approved fire resisting aluminium windows and glazed with and including clear tempered glass panels tested in accordance with BS 476 : Part 20-24 : - |                |                          |                                    |          |       |
|       | <i>Per square metre</i>   |                |                          |                                    |          |       |
|       |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |   | A \$           | B \$                     | C \$                               | D \$     |       |
| 10227 | Aluminium window with 1 hour FRR.....   | 3,254.40       | 53.40                    | 56.00                              | 98.20    | 10227 |
| 10228 | Ditto with 2 hour FRR.....  | 3,525.60       | 53.40                    | 56.00                              | 98.20    | 10228 |
|       | <b>REPAIRS TO ALUMINIUM WINDOWS AND DOORS</b>   |                |                          |                                    |          |       |
|       | <i>Per linear metre</i>   |                |                          |                                    | A \$     |       |
| 10229 | Coupling mullion for window complete with mastic for assembly.....  |                |                          |                                    | 48.80    | 10229 |
| 10230 | Coupling mullion for door or side light ditto.....  |                |                          |                                    | 48.80    | 10230 |
| 10231 | Coupling transom for window ditto.....  |                |                          |                                    | 51.80    | 10231 |
| 10232 | Coupling transom for door or side light with ventilator over ditto.....   |                |                          |                                    | 54.90    | 10232 |
| 10233 | Positive pressure neoprene gasket seal.....   |                |                          |                                    | 9.60     | 10233 |
| 10234 | Neoprene wiping primary seal.....   |                |                          |                                    | 14.90    | 10234 |
| 10235 | Glazing gasket for fixing.....  |                |                          |                                    | 7.30     | 10235 |
|       | <i>Per square metre</i>   |                |                          |                                    |          |       |
| 10236 | Take down and clear away openable sash, ventilator, window or door of any size or section including cutting hinges away from frame.....               |                |                          |                                    | 11.70    | 10236 |
| 10237 | Take down and set aside for re-use ditto.....   |                |                          |                                    | 9.60     | 10237 |
| 10238 | Fix only openable sash, ventilator, window or door of any size or section to existing frame including welding or riveting hinges.....                 |                |                          |                                    | 19.90    | 10238 |
|       | <i>Each</i>   |                |                          |                                    |          |       |
| 10239 | Oil only hinges and fittings to openable sash, ventilator, window or door.....  |                |                          |                                    | 3.70     | 10239 |
| 10240 | Weld joint, corner, etc., of sash, ventilator, window, door or frame.....   |                |                          |                                    | 14.80    | 10240 |



| Item   |  |                      |                                      |  | Item        |       |
|--|--|----------------------|--------------------------------------|--|-------------|-------|
| <b>REPAIRS TO ALUMINIUM WINDOWS AND DOORS (CONT'D)</b> |  |                      |                                      |  |             |       |
|  |  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|  |  | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
|  | <i>Per linear metre</i>  |                      |                                      |  |             |       |
| 10241  | Aluminium glazing bar of any diameters.....  | 21.60                | 3.70                                 | 5.20   | 11.70       | 10241 |
| 10242  | Aluminium channel bead fixed to existing window and door.....  | 25.00                | 3.80                                 | 6.20   | 14.70       | 10242 |
|  | <i>Each</i>  |                      |                                      |  |             |       |
| 10243  | Pair of butt hinges n.e. 75 mm long.....   | 36.30                | 8.10                                 | 10.30  | 11.70       | 10243 |
| 10244  | Pair of locally manufactured sliding shoes 200 to 400mm long, pivots and friction side arm for projecting window.....    | 155.00               | 25.10                                | 31.00  | 36.20       | 10244 |
| 10245  | Ditto but 400 - 600 mm .....   | 265.00               | 42.80                                | 53.10  | 59.60       | 10245 |
| 10246  | Pair of patent sliding shoes 200 to 400 mm long, pivots and friction side arms for projecting windows.....               | 256.00               | 19.90                                | 24.40  | 36.20       | 10246 |
| 10247  | Ditto but 400 - 600 mm long.....   | 436.00               | 33.90                                | 42.10  | 59.60       | 10247 |
| 10248  | Barrel bolt n.e. 150 mm long.....  | 40.60                | 6.60                                 | 8.90   | 12.70       | 10248 |
| 10249  | Ditto but 150 - 300 mm long.....   | 63.40                | 6.60                                 | 8.90   | 13.70       | 10249 |
| 10250  | Flush bolt n.e. 150 mm long .....  | 56.10                | 6.60                                 | 8.10   | 13.70       | 10250 |
| 10251  | Ditto but 150 - 300 mm long.....   | 68.00                | 6.60                                 | 8.90   | 12.70       | 10251 |
| 10252  | Cam catch.....   | 47.60                | 3.00                                 | 3.70   | 8.80        | 10252 |
| 10253  | Mortice lock with brass dead bolt and spring bolt, striking plate and four lever mechanism including labelling keys..... | 151.00               | 21.40                                | 28.00  | 66.40       | 10253 |
| 10254  | Set of lever handle furniture.....   | 95.70                | 5.90                                 | 8.10   | 20.50       | 10254 |
| 10255  | Mortice lock with brass expanding claw bolt for sliding door and flush furniture.....                                    | 169.00               | 20.70                                | 27.30  | 66.40       | 10255 |
| 10256  | Casement fastener with 115 mm handle and standard wedge plate.....   | 43.70                | 8.10                                 | 10.30  | 20.50       | 10256 |

| Item   |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>REPAIRS TO ALUMINIUM WINDOWS AND DOORS (CONT'D)</b> |   |                |                          |                                    |          |       |
|  |   | A              | B                        | C                                  | D        |       |
|  | <i>Each</i>   | \$             | \$                       | \$                                 | \$       |       |
| 10257  | Two throw ditto with steel connecting rod.....  | 91.80          | 16.20                    | 20.70                              | 40.00    | 10257 |
| 10258  | Through-the-frame type casement fastener.....   | 62.00          | 11.10                    | 14.00                              | 26.40    | 10258 |
| 10259  | Two throw ditto with steel connecting rod.....  | 135.00         | 16.20                    | 21.40                              | 40.00    | 10259 |
| 10260  | Casement stay of sliding bar type n.e. 300 mm long.....   | 61.80          | 5.20                     | 5.90                               | 11.70    | 10260 |
| 10261  | Casement stay with two stud pins n.e. 300 mm long.....  | 36.60          | 5.90                     | 6.60                               | 11.70    | 10261 |
| 10262  | Set of adjustable rollers to suit sliding windows including all necessary guide, etc.....   | 112.00         | 14.00                    | 19.20                              | 45.90    | 10262 |
| 10263  | Ditto but for sliding door.....   | 135.00         | 14.00                    | 19.90                              | 47.90    | 10263 |
| 10264  | 100 mm Pull handle.....   | 30.10          | 3.70                     | 4.40                               | 7.90     | 10264 |
| 10265  | 100 mm Flush pull handle.....   | 46.20          | 3.70                     | 4.40                               | 8.80     | 10265 |
| <b>BRASS</b>   |   |                |                          |                                    |          |       |
|  |   | A              | B                        | C                                  | D        |       |
|  | <i>Per kg</i>   | \$             | \$                       | \$                                 | \$       |       |
| 10266  | Casting, trimmed from mould, rough filed, drilled and countersunk as required.....  | 94.40          | 5.20                     | 5.90                               | 12.70    | 10266 |
| 10267  | Ditto but fine filed, buffed and polished, drilled and countersunk, turned, threaded and brazed as required .....   | 106.60         | 5.20                     | 5.90                               | 12.70    | 10267 |
| 10268  | Strip set in screed or paving as dividing strip.....  | 103.70         | 5.20                     | 5.90                               | 10.80    | 10268 |
| 10269  | Ditto but bent in addition at expansion joints.....   | 123.10         | 5.20                     | 5.90                               | 11.70    | 10269 |
| 10270  | Flat or formed sheet covering.....  | 107.20         | 5.20                     | 5.90                               | 10.80    | 10270 |
| 10271  | Sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like, sheet as pipes, gutters, hoods, chimney cowls, roof plates and the like and sheet as square or rectangular tanks, storage cisterns, etc., including all stiffeners, corner plates and covers..... | 125.30         | 11.10                    | 14.00                              | 27.30    | 10271 |
| 10272  | Ventilator formed to detail (gross weight measured).....  | 121.90         | 10.30                    | 13.30                              | 24.40    | 10272 |

| Item  |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|---|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>COPPER</b>   |   |                |                          |                                    |          |       |
| <i>Per kg</i>   |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10273   | Casting, trimmed from mould, rough filed, drilled and countersunk as required, including making pattern and preparing mould .....   | 127.30         | 5.20                     | 5.90                               | 12.70    | 10273 |
| 10274   | Ditto but fine filed, buffed and polished, drilled and countersunk, turned, threaded and brazed as required .....   | 131.90         | 5.20                     | 5.90                               | 12.70    | 10274 |
| 10275   | Flat or formed sheet covering.....  | 145.50         | 5.20                     | 5.90                               | 10.80    | 10275 |
| 10276   | Sheet covering to roofs, domes, etc., including all rolls, welts, flashings and the like, sheet as pipes, gutters, hoods, chimney cowls, roof plates and the like and sheet as square or rectangular tanks, storage cisterns, etc., including all stiffeners, corner plates and covers..... | 163.70         | 11.10                    | 14.00                              | 28.40    | 10276 |
| 10277   | Ventilator formed to detail (gross weight measured).....  | 159.10         | 10.30                    | 13.30                              | 25.50    | 10277 |
| <b>ROLLER SHUTTERS</b>  |   |                |                          |                                    |          |       |
| Supply and fix manually operated roller shutters to suit any opening by an approved roller shutter manufacturer : - |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
| <i>Per square metre</i>   |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10278   | Galvanised mild steel rolling shutter Type K2 or B2.....  | 1,073.50       | 183.80                   | 236.20                             | 464.20   | 10278 |
| 10279   | Extra over Item 10278 for wicket door.....  | 386.50         | -                        | -                                  | -        | 10279 |
| 10280   | Stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....  | 1,906.90       | 183.80                   | 236.20                             | 464.20   | 10280 |
| 10281   | Extra over Item 10280 for wicket door.....  | 686.50         | -                        | -                                  | -        | 10281 |
| 10282   | Stainless steel rolling shutter, Finish No. 8 - mirror finish.....  | 2,898.50       | 183.80                   | 236.20                             | 464.20   | 10282 |
| 10283   | Extra over Item 10282 for wicket door.....  | 1,043.50       | -                        | -                                  | -        | 10283 |
| 10284   | Stainless steel link grilles shutters Type 12F.....   | 1,652.60       | 183.80                   | 236.20                             | 464.20   | 10284 |
| 10285   | Stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish.....  | 2,477.70       | 183.80                   | 236.20                             | 464.20   | 10285 |
| 10286   | Ditto but Finish No. 8 - mirror finish.....   | 2,846.10       | 183.80                   | 236.20                             | 464.20   | 10286 |
| 10287   | Aluminium rolling shutters Type OEC2 or EK2, clear anodized.....  | 1,118.70       | 183.80                   | 236.20                             | 464.20   | 10287 |
| 10288   | Extra over Item 10287 for wicket door.....  | 402.70         | -                        | -                                  | -        | 10288 |

| Item   |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|--|----------------|--------------------------|------------------------------------|----------|-------|
|  |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| <b>ROLLER SHUTTERS (CONT'D)</b>  |  |                |                          |                                    |          |       |
| Supply and fix manually operated roller shutters to suit any opening by an approved roller shutter manufacturer : - (Cont'd)   |  |                |                          |                                    |          |       |
| <i>Per square metre</i>  |  |                |                          |                                    |          |       |
| 10289  | Aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....                                      | 1,118.70       | 183.80                   | 236.20                             | 464.20   | 10289 |
| 10290  | Extra over Item 10289 for wicket door.....   | 402.70         | -                        | -                                  | -        | 10290 |
| 10291  | Aluminium link grilles shutters Type 12F.....  | 1,538.40       | 183.80                   | 236.20                             | 464.20   | 10291 |
| 10292  | Aluminium semi-grilles shutters, clear anodized.....   | 1,722.70       | 183.80                   | 236.20                             | 464.20   | 10292 |
| 10293  | Ditto but bronze anodized.....   | 1,722.70       | 183.80                   | 236.20                             | 464.20   | 10293 |
| Supply and fix electrically operated roller shutters to suit any opening by an approved roller shutter manufacturer including provision of connection to nearest power point by a registered electrical worker : - |  |                |                          |                                    |          |       |
| <i>Per square metre</i>  |  |                |                          |                                    |          |       |
| 10294  | Galvanised mild steel rolling shutter Type K2 or B2.....   | 1,423.80       | 228.80                   | 295.20                             | 586.40   | 10294 |
| 10295  | Extra over Item 10294 for wicket door.....   | 512.60         | -                        | -                                  | -        | 10295 |
| 10296  | Stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....       | 2,313.70       | 228.80                   | 295.20                             | 586.40   | 10296 |
| 10297  | Extra over Item 10296 for wicket door.....   | 832.90         | -                        | -                                  | -        | 10297 |
| 10298  | Stainless steel rolling shutter, Finish No. 8 - mirror finish.....                                     | 3,051.00       | 228.80                   | 295.20                             | 586.40   | 10298 |
| 10299  | Extra over Item 10298 for wicket door.....   | 1,098.40       | -                        | -                                  | -        | 10299 |
| 10300  | Stainless steel link grilles shutters Type 12F.....  | 2,186.60       | 228.80                   | 295.20                             | 586.40   | 10300 |
| 10301  | Stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish..... | 3,483.20       | 228.80                   | 295.20                             | 586.40   | 10301 |
| 10302  | Ditto but Finish No. 8 - mirror finish.....  | 3,787.70       | 228.80                   | 295.20                             | 586.40   | 10302 |
| 10303  | Aluminium rolling shutters Type OEC2 or EK2, clear anodized.....                                       | 1,698.40       | 228.80                   | 295.20                             | 586.40   | 10303 |
| 10304  | Extra over Item 10303 for wicket door.....   | 611.40         | -                        | -                                  | -        | 10304 |
| 10305  | Aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....                                      | 1,698.40       | 228.80                   | 295.20                             | 586.40   | 10305 |
| 10306  | Extra over Item 10305 for wicket door.....   | 611.40         | -                        | -                                  | -        | 10306 |
| 10307  | Aluminium link grilles shutters Type 12F.....  | 1,802.50       | 228.80                   | 295.20                             | 586.40   | 10307 |
| 10308  | Aluminium semi-grilles shutters, clear anodized.....   | 1,941.10       | 228.80                   | 295.20                             | 586.40   | 10308 |
| 10309  | Ditto but bronze anodized.....   | 1,941.10       | 228.80                   | 295.20                             | 586.40   | 10309 |

| Item  |   |          |        |        | Item   |       |
|-------|---|----------|--------|--------|--------|-------|
|       | <b>TRANSPARENT SHUTTERS</b>   |          |        |        |        |       |
|       | Supply and fix transparent security roller shutter manually operated constructed with UV-resistant and top grade polycarbonate panels, aluminium extruded frame and support, complete with housing, track mechanism and accessories, by an approved roller shutter manufacturer : - |          |        |        |        |       |
|       | <i>Per square metre</i>   |          |        |        |        |       |
| 10310 | Transparent security roller shutter.....  | 2,466.20 | 243.60 | 339.50 | 557.00 | 10310 |
| 10311 | Extra over Item 10310 for wicket door.....  | 888.70   | -      | -      | -      | 10311 |
|       | <b>SUNDRIES FOR SHUTTERS</b>  |          |        |        |        |       |
|       | <i>Per linear metre</i>   |          |        |        |        |       |
| 10312 | Shutter hood, galvanized mild steel including access door and all necessary ironmongery.....  | 794.30   | 243.60 | 339.50 | 547.20 | 10312 |
| 10313 | Ditto but stainless steel, hair line finish.....  | 2,215.70 | 243.60 | 339.50 | 547.20 | 10313 |
| 10314 | Ditto but stainless steel, mirror face finish.....  | 2,534.80 | 243.60 | 339.50 | 547.20 | 10314 |
| 10315 | Ditto but aluminium, clear anodized.....  | 1,762.90 | 243.60 | 339.50 | 547.20 | 10315 |
| 10316 | Ditto but aluminium, bronze anodized.....   | 1,762.90 | 243.60 | 339.50 | 547.20 | 10316 |
| 10317 | Typhoon shutter guide with locking device.....  | 425.40   | 49.40  | 68.60  | 110.40 | 10317 |
|       | Replacement parts only : -  |          |        |        |        |       |
|       | <i>Per set</i>  |          |        |        |        |       |
| 10318 | Lock and malleable iron shoot bolts.....  | 297.90   | 14.00  | 17.00  | 41.10  | 10318 |
| 10319 | Coil spring with barrel, shutter n.e. 2.4 m width.....  | 1,559.90 | 42.10  | 54.20  | 67.50  | 10319 |
| 10320 | Add to Item 10319 for each additional 600 mm width of shutter or part thereof in width.....   | 417.60   | 10.30  | 13.30  | 16.70  | 10320 |
| 10321 | Pair of aluminium guide rail, shutter n.e. 2.4 m height.....  | 1,559.90 | 49.40  | 68.60  | 110.40 | 10321 |
| 10322 | Add to Item 10321 for each additional 600 mm height of shutter or part thereof in height.....   | 416.60   | 12.60  | 17.00  | 27.30  | 10322 |

| Item                                  |   |                      |                                      |  | Item        |       |
|---------------------------------------|---|----------------------|--------------------------------------|--|-------------|-------|
| <b>SUNDRIES FOR SHUTTERS (CONT'D)</b> |   |                      |                                      |  |             |       |
| Replacement parts only : - (Cont'd)   |   |                      |                                      |  |             |       |
|                                       |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|                                       |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
|                                       | <i>Per set</i>  |                      |                                      |  |             |       |
| 10323                                 | Pair of stainless steel guide rail, shutter n.e. 2.4 m height.....  | 3,469.90             | 49.40                                | 68.60  | 110.40      | 10323 |
| 10324                                 | Add to Item 10323 for each additional 600 mm height of shutter or part thereof in height.....                   | 867.40               | 12.60                                | 17.00  | 27.30       | 10324 |
| 10325                                 | Pair of galvanized mild steel guide rail, shutter n.e. 2.4 m height.....  | 964.30               | 49.40                                | 68.60  | 110.40      | 10325 |
| 10326                                 | Add to Item 10325 for each additional 600 mm height of shutter or part thereof in height.....                   | 234.00               | 12.60                                | 17.00  | 27.30       | 10326 |
|                                       | <i>Per square metre</i>   |                      |                                      |  |             |       |
| 10327                                 | Slat for galvanised mild steel rolling shutter Type K2 or B2.....   | 509.60               | 118.20                               | 154.90   | 307.80      | 10327 |
| 10328                                 | Slat for stainless steel rolling shutter, Finish No. 4 - polished with fine grit or hair line finish.....       | 709.00               | 118.20                               | 154.90   | 307.80      | 10328 |
| 10329                                 | Slat for stainless steel rolling shutter, Finish No. 8 - mirror finish.....                                     | 853.60               | 118.20                               | 154.90   | 307.80      | 10329 |
| 10330                                 | Slat for stainless steel link grilles shutters Type 12F.....  | 842.00               | 118.20                               | 154.90   | 307.80      | 10330 |
| 10331                                 | Slat for stainless steel semi-grilles shutters, Finish No. 4 - polished with fine grit or hair line finish..... | 886.30               | 118.20                               | 154.90   | 307.80      | 10331 |
| 10332                                 | Ditto but Finish No. 8 - mirror finish.....   | 1,037.00             | 118.20                               | 154.90   | 307.80      | 10332 |
| 10333                                 | Slat for aluminium rolling shutters Type OEC2 or EK2, clear anodized.....                                       | 686.90               | 118.20                               | 154.90   | 307.80      | 10333 |
| 10334                                 | Slat for aluminium rolling shutters Type OEC2 or EK2, bronze anodized.....                                      | 686.90               | 118.20                               | 154.90   | 307.80      | 10334 |
| 10335                                 | Slat for aluminium link grilles shutters Type 12F.....  | 766.00               | 118.20                               | 154.90   | 307.80      | 10335 |
| 10336                                 | Slat for aluminium semi-grilles shutters, clear anodized.....   | 797.70               | 118.20                               | 154.90   | 307.80      | 10336 |
| 10337                                 | Ditto but bronze anodized.....  | 797.70               | 118.20                               | 154.90   | 307.80      | 10337 |

| Item  |  | Supply and fix  |                                    | Item     |       |
|-------|--|---|------------------------------------|----------|-------|
|       | <b>METAL LOUVRE FRAMES</b>   | Galvanized steel with aluminum lacquer or stove baked enamel finish | Plain or anodized aluminum         |          |       |
|       | Metal adjustable louvre frames complete with clips, operating handle, etc., and all necessary mullion coupling clips and spacers for 100, 150 or 225 mm glass blades (measured separately), including any assembling, screwing to wood, plugging and screwing to concrete, brick, stone or other jamb or coupled to form mullion, and bedding with and including providing mastic in accordance with the manufacturer's instructions : - |   |                                    |          |       |
|       | Set of two metal adjustable louvre frames complete with clips for glass, operating handle, etc., and any necessary mullion coupling clips and spacers : -  |   |                                    |          |       |
|       | <i>Per set</i>   | A \$  | B \$                               |          |       |
| 10338 | Set of two frames with clips for three 100 mm wide glass blades (285 mm overall height).....   | 189.00  | 259.00                             | 10338    |       |
| 10339 | Add to Item 10338 for each additional clip (each additional 90 mm in overall height) or part thereof in height.....  | 36.10   | 58.10                              | 10339    |       |
| 10340 | Set of two frames with clips for two 150 mm wide glass blades (300 mm overall height).....   | 207.00  | 284.00                             | 10340    |       |
| 10341 | Add to Item 10340 for each additional clip (each additional 140 mm in overall height) or part thereof in height.....   | 63.20   | 99.50                              | 10341    |       |
| 10342 | Set of two frames with clips for two 225 mm wide glass blades (440 mm overall height).....   | 262.00  | 395.00                             | 10342    |       |
| 10343 | Add to Item 10342 for each additional clip (each additional 200 mm in overall height) or part thereof in height.....   | 86.90   | 149.00                             | 10343    |       |
|       | <i>Per linear metre</i>  |   |                                    |          |       |
| 10344 | Top weather strip to louvres.....  | 85.30   | 115.00                             | 10344    |       |
| 10345 | Bottom ditto.....  | 88.90   | 115.00                             | 10345    |       |
|       |  | Take down and clear away  | Take down and set aside for re-use | Fix only |       |
|       | <i>Per linear metre</i>  | A \$  | B \$                               | C \$     |       |
| 10346 | Set of two frames with clips as above described (net height of each set of two frames measured).....   | 14.80   | 30.30                              | 73.30    | 10346 |
| 10347 | Top or bottom weather strip.....   | 3.70  | 6.60                               | 16.70    | 10347 |

| Item  |   |  |  |  |  |  |                       |                          |                                    |                          | Item                               |          |       |       |       |       |       |
|---|---|--|--|--|--|--|-----------------------|--------------------------|------------------------------------|--------------------------|------------------------------------|----------|-------|-------|-------|-------|-------|
| <b>SLOTTED ANGLES</b>   |   |  |  |  |  |  |                       |                          |                                    |                          |                                    |          |       |       |       |       |       |
| Slotted steel angle, rust protected and stove enamelled, fixed complete and including all cutting, fitting, supplying and fixing screws, bolts, nuts, washers, corner stiffeners and rubber pads, plugging to concrete, brick, stone or other surfaces and making good :- |   |  |  |  |  |  | Supply and fix        | Take down and clear away | Take down and set aside for re-use | Fix only                 |                                    |          |       |       |       |       |       |
| <i>Per linear metre</i>   |   |  |  |  |  |  | A \$                  | B \$                     | C \$                               | D \$                     |                                    |          |       |       |       |       |       |
| 10348   | 36 x 36 x 1.80 mm Slotted angle section in brackets, shelving racks, stands and the like.....   |  |  |  |  |  | 44.40                 | 4.40                     | 8.90                               | 21.50                    | 10348                              |          |       |       |       |       |       |
| 10349   | 40 x 40 x 2.00 mm Ditto.....  |  |  |  |  |  | 49.10                 | 4.40                     | 8.90                               | 21.50                    | 10349                              |          |       |       |       |       |       |
| 10350   | 62 x 41 x 2.00 mm Ditto.....  |  |  |  |  |  | 51.50                 | 4.40                     | 8.90                               | 21.50                    | 10350                              |          |       |       |       |       |       |
| 10351   | 66 x 45 x 2.50 mm Ditto.....  |  |  |  |  |  | 61.40                 | 4.40                     | 8.90                               | 21.50                    | 10351                              |          |       |       |       |       |       |
| <b>STEEL NETTING, MESH AND EXPANDED METAL</b>   |   |  |  |  |  |  |                       |                          |                                    |                          |                                    |          |       |       |       |       |       |
|   |   |  |  |  |  |  | Supply and fix        |                          |                                    | Take down and clear away | Take down and set aside for re-use | Fix only |       |       |       |       |       |
|   |   |  |  |  |  |  | Wire (mm)             | 0.80                     | 1.00                               | 1.00                     | 1.00                               | 1.12     |       |       |       |       |       |
|   |   |  |  |  |  |  | Mesh (mm)             | 15                       | 25                                 | 30                       | 40                                 | 50       |       |       |       |       |       |
| <i>Per square metre</i>   |   |  |  |  |  |  | A \$                  | B \$                     | C \$                               | D \$                     | E \$                               | F \$     | G \$  | H \$  |       |       |       |
| 10352   | Galvanized iron wire netting lapped 75 mm at joints and bedded in floor screeds, paving, etc.....   |  |  |  |  |  | 10.60                 | 10.40                    | 9.70                               | 9.30                     | 9.00                               | -        | -     | 5.90  | 10352 |       |       |
| 10353   | Ditto but fixed to walls, wall lining or other vertical surfaces as key for plaster or screed.....  |  |  |  |  |  | 12.60                 | 12.40                    | 11.70                              | 11.20                    | 10.90                              | -        | -     | 7.90  | 10353 |       |       |
| 10354   | Ditto but fixed to soffits, or sides and soffits of beams as key for plaster or screeds.....  |  |  |  |  |  | 14.60                 | 14.20                    | 13.70                              | 13.20                    | 12.80                              | -        | -     | 9.80  | 10354 |       |       |
| 10355   | Ditto but fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, grilles, panels and the like .....                       |  |  |  |  |  | 16.50                 | 16.20                    | 15.60                              | 15.20                    | 14.80                              | 3.00     | 5.20  | 10.80 | 10355 |       |       |
|   |   |  |  |  |  |  | Supply and fix        |                          |                                    | Take down and clear away | Take down and set aside for re-use | Fix only |       |       |       |       |       |
|   |   |  |  |  |  |  | Straight lattice mesh |                          |                                    |                          | Diamond mesh                       |          |       |       |       |       |       |
|   |   |  |  |  |  |  | Wire (mm)             | 1.40                     | 1.80                               | 2.24                     | 2.50                               | 1.60     | 2.00  | 2.50  |       |       |       |
|   |   |  |  |  |  |  | Mesh (mm)             | 5                        | 10                                 | 13                       | 16                                 | 25       | 30    | 40    |       |       |       |
| <i>Per square metre</i>   |   |  |  |  |  |  | A \$                  | B \$                     | C \$                               | D \$                     | E \$                               | F \$     | G \$  | H \$  | I \$  | J \$  |       |
| 10356   | Galvanized steel wire woven mesh fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, grilles, panels and the like..... |  |  |  |  |  | 61.00                 | 57.50                    | 62.10                              | 62.70                    | 40.70                              | 42.00    | 43.70 | 3.70  | 7.40  | 15.60 | 10356 |



| Item  |   |                |         |         |         |                                      |  |             |                                      |  | Item        |         |       |  |
|-------|---|----------------|---------|---------|---------|--------------------------------------|--|-------------|--------------------------------------|--|-------------|---------|-------|--|
|       | <b>STEEL NETTING, MESH AND EXPANDED METAL (CONT'D)</b>  |                |         |         |         |                                      |  |             |                                      |  |             |         |       |  |
|       |   | Supply and fix |         |         |         | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |                                      |  |             |         |       |  |
|       | Wire (mm)   | 1.20           | 1.20    | 1.20    | 1.50    |                                      |  |             |                                      |  |             |         |       |  |
|       | Mesh (mm)   | 12 x 12        | 12 x 25 | 25 x 25 | 50 x 50 |                                      |  |             |                                      |  |             |         |       |  |
|       | <i>Per square metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$                              | F<br>\$  | G<br>\$     |                                      |  |             |         |       |  |
| 10357 | Galvanized steel welded wire mesh fixed to timber or steel posts or framing (measured separately) in fencing, gates, shelving, racks, screens, window guards, etc., including all galvanized staples, screws, typing wire and the like (measured net).....          | 39.30          | 37.30   | 34.70   | 33.80   | 3.00                                 | 5.20   | 10.80       |                                      |  | 10357       |         |       |  |
|       |   | Supply and fix |         |         |         |                                      |  |             | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |         |       |  |
|       |   | AISI 304       |         |         |         | AISI 316                             |  |             |                                      |  |             |         |       |  |
|       | Wire (mm)   | 2              | 3       | 3       | 4       | 2                                    | 3  | 3           |                                      |  |             | 4       |       |  |
|       | Mesh (mm)   | 12 x 12        | 15 x 15 | 40 x 40 | 40 x 40 | 12 x 12                              | 15 x 15  | 40 x 40     | 40 x 40                              |  |             |         |       |  |
|       | <i>Per square metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$                              | F<br>\$  | G<br>\$     | H<br>\$                              | I<br>\$  | J<br>\$     | K<br>\$ |       |  |
| 10358 | Stainless steel welded wire mesh fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates, shelving, racks, screens, window guards, etc., including all galvanized staples, screws, typing wire and the like (measured net)..... | 341.30         | 457.60  | 175.80  | 306.20  | 565.40                               | 700.80   | 269.20      | 469.10                               | 3.00   | 5.20        | 10.80   | 10358 |  |
|       |   | Supply and fix |         |         |         | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |                                      |  |             |         |       |  |
|       | Wire (mm)   | 2.50           | 3.15    | 5.30    | 4.00    |                                      |  |             |                                      |  |             |         |       |  |
|       | Mesh (mm)   | 25 x 75        | 25 x 75 | 25 x 75 | 75 x 75 |                                      |  |             |                                      |  |             |         |       |  |
|       | <i>Per square metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$                              | F<br>\$  | G<br>\$     |                                      |  |             |         |       |  |
| 10359 | Steel wire mesh fixed to timber, concrete or steel post framing (measured separately) in fencing, gates, shelving, grilles, panels and the like (measured net).....   | 48.10          | 50.70   | 45.20   | 45.90   | 3.00                                 | 5.20   | 10.80       |                                      |  | 10359       |         |       |  |
| 10360 | Ditto but galvanized (ditto).....   | 50.70          | 52.90   | 47.20   | 62.70   | 3.70                                 | 5.90   | 11.70       |                                      |  | 10360       |         |       |  |



| Item                       |   |                |         |         |         |                                      |  |  | Item        |       |
|----------------------------|---|----------------|---------|---------|---------|--------------------------------------|--|--|-------------|-------|
| <b>CHAIN LINK FENCING</b>  |   |                |         |         |         |                                      |  |  |             |       |
|                            |   | Supply and fix |         |         |         |                                      | Take<br>down<br>and<br>clear<br>away           | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|                            | Wire (mm)   | 2.50           | 3.00    | 3.00    | 3.00    | 4.00                                 |  |  |             |       |
|                            | Mesh (mm)   | 40             | 75      | 50      | 40      | 50                                   |  |  |             |       |
|                            | <i>Per square metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$                              | F<br>\$  | G<br>\$  | H<br>\$     |       |
| 10365                      | Galvanized steel chain link fencing fixed to timber, concrete or steelposts or framing (measured separately) in fencing, gates and the like.....  | 30.00          | 30.30   | 38.90   | 50.10   | 66.00                                | 3.00   | 5.20   | 10.80       | 10365 |
| 10366                      | Stainless steel chain link fencing ditto.....   | 120.60         | 119.00  | 128.90  | 155.60  | 178.20                               | 3.00   | 5.20   | 10.80       | 10366 |
| <b>CHAIN LINK FENCING</b>  |   |                |         |         |         |                                      |  |  |             |       |
|                            |   | Supply and fix |         |         |         | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only                                    |             |       |
|                            | Wire (mm)   | 3.00           | 3.00    | 2.50    | 2.50    |                                      |  |  |             |       |
|                            | Mesh (mm)   | 75             | 50      | 40      | 25      |                                      |  |  |             |       |
|                            | <i>Per square metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$                              | F<br>\$  | G<br>\$  |             |       |
| 10367                      | P.V.C. coated galvanised steel chain link fencing fixed to timber, concrete or steel posts or framing (measured separately) in fencing, gates and the like .....  | 40.30          | 48.00   | 38.00   | 64.70   | 3.00                                 | 5.20   | 10.80  | 10367       |       |
| <b>BARBED WIRE OR TAPE</b> |   |                |         |         |         |                                      |  |  |             |       |
|                            |   |                |         |         |         | Supply<br>and<br>fix                 | Take<br>down<br>and<br>clear<br>away           | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|                            | <i>Per linear metre</i>   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ |                                      |  |  |             |       |
| 10368                      | Galvanised barbed wire formed from 2 strands of 2.5 mm mild steel line wires and 2 mm mild steel pointed wires with set of two barbs at 125 mm centres, strained tight and fixed to fence top and steel posts including all necessary tying wire, staples and the like (measured straight)..... |                |         |         |         | 4.10                                 | 0.70   | 1.50   | 3.90        | 10368 |
| 10369                      | Ditto but with sets of four barbs at 75 mm centre (measured straight).....  |                |         |         |         | 5.20                                 | 0.70   | 1.50   | 3.90        | 10369 |
| 10370                      | Extra over either of Items 10368 to 10369 inclusive for forming into coils of any diameter.....   |                |         |         |         | 5.20                                 | -  | -  | 4.90        | 10370 |
| 10371                      | Extra over either of Items 10368 to 10369 inclusive for hand weaving into woven mat.....  |                |         |         |         | 5.20                                 | -  | -  | 4.90        | 10371 |
| 10372                      | Proprietary stainless steel razor barbed wire fence top and steel posts with any diameter coils including all necessary stainless steel wire (measured straight).....   |                |         |         |         | 20.60                                | 3.00   | 5.20   | 11.70       | 10372 |
| 10373                      | Proprietary stainless steel barbed wire fence top and steel posts with any diameter coils including all necessary stainless steel wire (measured straight).....   |                |         |         |         | 20.60                                | 3.00   | 5.20   | 11.70       | 10373 |

| Item   |   |                |                          |                                    | Item            |       |
|--|---|----------------|--------------------------|------------------------------------|-----------------|-------|
| <b>FIXING BOLTS FOR ISOLATED REPAIRS TO SECURITY FENCING</b>   |   |                |                          |                                    |                 |       |
| (Note :- Items 10374 to 10379 inclusive shall only be measured when they are required for replacement in isolated repair to security fencing as stipulated in Special Conditions Clauses SC10.13 and SC10.42.) |   |                |                          |                                    |                 |       |
| <i>Each</i>  |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only        |       |
|  |   | A \$           | B \$                     | C \$                               | D \$            |       |
| 10374  | Fixing bolt with shear nuts and washers 6 mm diameter.....  | 9.00           | 2.20                     | 3.00                               | 4.90            | 10374 |
| 10375  | Ditto but 8 mm diameter.....  | 10.60          | 2.20                     | 3.00                               | 4.90            | 10375 |
| 10376  | Ditto but 10 mm diameter.....   | 13.00          | 3.00                     | 2.20                               | 5.90            | 10376 |
| 10377  | Ditto but 12 mm diameter.....   | 15.00          | 3.00                     | 2.20                               | 5.90            | 10377 |
| 10378  | Ditto but 16 mm diameter.....   | 20.70          | 3.00                     | 3.70                               | 6.80            | 10378 |
| 10379  | U-bolt, hot dip galvanized with clamp plate and security shear nut.....   | 44.00          | 3.00                     | 3.70                               | 6.80            | 10379 |
| <b>GALVANIZING, ELECTRO-PLATING AND CHROMIUM PLATING</b>   |   |                |                          |                                    |                 |       |
| <i>Each</i>  |   | Zinc sprayed   | Electro plated           | Hot dipped                         | Chromium plated |       |
|  |   | A \$           | B \$                     | C \$                               | D \$            |       |
| 10380  | Steel or cast iron articles complete with nuts, bolts or other fixing accessories, n.e. 1 kg (weight of composite items measured) each in total weight..... | 7.90           | 8.80                     | 10.00                              | 22.40           | 10380 |
| 10381  | Ditto but brass or copper articles.....   | -              | -                        | -                                  | 18.50           | 10381 |
| <i>Per kg</i>  |   |                |                          |                                    |                 |       |
| 10382  | Steel or cast iron articles complete with nuts, bolts or other fixing accessories, 1 - 13 kg (weight of composite items measured) each in total weight..... | 5.60           | 6.40                     | 7.20                               | 19.90           | 10382 |
| 10383  | Ditto but exceeding 13 kg ditto.....  | 2.90           | 3.20                     | 3.60                               | 10.20           | 10383 |

| Item   |  | Supply<br>and<br>fix | Item  |
|--|--|----------------------|-------|
| <b>PROPRIETARY FIRE PROTECTION ENCLOSURE AND CEILING</b>   |  |                      |       |
| Proprietary fire protection enclosure and ceiling system complying with BS 476 : Parts 20-24 and statutory requirements, complete with fire resisting boarding/material to all exposed surfaces, steel framings, insulation, and all necessary accessories in accordance with the manufacturer's recommendations including providing test certificates : - |  | A<br>\$              |       |
| <i>Per square metre</i>  |  |                      |       |
| 10384  | Proprietary fire protection enclosure of non-combustible matrix engineered mineral boards, 1 hour FRR (finishes measured separately).....  | 559.30               | 10384 |
| 10385  | Ditto but 2 hours FRR (ditto).....   | 697.10               | 10385 |
| 10386  | Ditto but 4 hours FRR (ditto).....   | 878.30               | 10386 |
| 10387  | Proprietary fire protection enclosure of non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth surface on one face and a lightly textured sanded surface on the other, 1 hour FRR (finishes measured separately).....                     | 844.50               | 10387 |
| 10388  | Ditto but 2 hours FRR (ditto).....   | 1,184.50             | 10388 |
| 10389  | Proprietary fire protection enclosure of non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth finish on both faces, 4 hour FRR (finishes measured separately).....   | 1,356.40             | 10389 |
| 10390  | Proprietary fire protection enclosure of non-combustible composite panel of fibre reinforced cement, mechanically bonded to punched steel sheet on both surfaces, 1 hour FRR (finishes measured separately).....   | 1,531.70             | 10390 |
| 10391  | Ditto but 2 hours FRR (ditto).....   | 1,590.70             | 10391 |
| 10392  | Ditto but 4 hours FRR (ditto).....   | 1,694.50             | 10392 |
| 10393  | Proprietary fire protection enclosure of non-combustible board manufactured with a fibre reinforced cement core with outer facing of perforated galvanized steel or other suitable materials mechanically bonded to each surface of the core, 1 hour FRR (finishes measured separately)..... | 1,488.70             | 10393 |
| 10394  | Ditto but 2 hours FRR (ditto).....   | 1,537.00             | 10394 |
| 10395  | Ditto but 4 hours FRR (ditto).....   | 1,640.80             | 10395 |
| 10396  | Take down and clear away any type of fire protection enclosure or ceiling system.....  | 107.00               | 10396 |



| Item   |  |          |        |        | Item     |       |
|--|--|----------|--------|--------|----------|-------|
| <b>FIRE RESISTING DOOR SETS (CONT'D)</b>   |  |          |        |        |          |       |
| Approved stainless steel fire resisting door and frame set of specified FRR tested in accordance with BS 476 : Parts 20-23 : - (Cont'd)  |  |          |        |        |          |       |
| <b>FRR</b>   |  |          |        |        |          |       |
| ½ hour    1 hour    2 hours    4 hours   |  |          |        |        |          |       |
| <b>A                      B                      C                      D</b>  |  |          |        |        |          |       |
| <b>\$                      \$                      \$                      \$</b>  |  |          |        |        |          |       |
| 10404  | Extra over either of Items 10402 to 10403 inclusive for forming observation panel n.e. 0.10 m².....                        | 157.00   | 157.00 | 182.00 | 272.00   | 10404 |
| 10405  | Ditto but 0.10 - 0.20 m².....  | 392.00   | 392.00 | 454.00 | 681.00   | 10405 |
| 10406  | Ditto but 0.20 - 0.40 m².....  | 627.00   | 627.00 | 726.00 | 1,089.00 | 10406 |
| Approved fire resisting glazed doors and frame set of specified FRR tested in accordance with BS 476 : Parts 20-23 comprising fire resisting clear tempered glass panels and mirror finished stainless steel door frames : -       |  |          |        |        |          |       |
| <b>Supply and fix                      Take down and clear away                      Take down and set aside for re-use                      Fix only</b>  |  |          |        |        |          |       |
| <b>A                      B                      C                      D</b>  |  |          |        |        |          |       |
| <b>\$                      \$                      \$                      \$</b>  |  |          |        |        |          |       |
| 10407  | Single leaf door, 1 hour FRR with fire resisting clear tempered glass panels.....  | 6,727.30 | 21.40  | 21.40  | 41.10    | 10407 |
| 10408  | Ditto but double leaf door.....  | 6,333.70 | 19.20  | 19.20  | 37.10    | 10408 |
| 10409  | Single leaf door, 2 hours FRR with fire resisting clear tempered glass panels.....   | 9,432.60 | 22.90  | 22.90  | 45.00    | 10409 |
| 10410  | Ditto but double leaf door.....  | 8,897.50 | 21.40  | 21.40  | 41.10    | 10410 |
| <b>Per linear metre</b>  |  |          |        |        |          |       |
| 10411  | Fire and smoke door seals, tested in accordance with BS 476 : Parts 20/22 and BS 476 - 31.1:1983 including any finish..... | 74.30    | 2.20   | 3.70   | 7.90     | 10411 |
| <b>FIRE RESISTING PARTITIONS</b>   |  |          |        |        |          |       |
| Approved fire resisting glazed partition comprising fire resisting glass panels, galvanized mild steel frames, stainless steel beads and cladded with stainless steel facing in any finish complying with BS 476 : Parts 20-24 : - |  |          |        |        |          |       |
| <b>Per square metre</b>  |  |          |        |        |          |       |
| 10412  | Approved glazed partition with 6 mm thick fire resisting clear tempered glass with 1 hour FRR.....                         | 2,009.20 | 52.40  | 80.40  | 156.30   | 10412 |
| 10413  | Ditto but with 12 mm thick fire resisting clear tempered glass with 1 hour FRR.....  | 2,344.30 | 61.20  | 93.70  | 180.80   | 10413 |

| Item                                      |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|---|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>FIRE RESISTING PARTITIONS (CONT'D)</b> |   |                |                          |                                    |          |       |
|   | Proprietary fire resisting partition wall system comprising steel framing with gypsum board and versatile lining board, composed of calcium silicate and cellulose reinforced fibre, on both sides. The works shall include sealing up head and bottom and joint with tape and compound in accordance with the manufacturer's instructions and complying with BS 476 : Parts 20-24 :- |                |                          |                                    |          |       |
|   | <i>Per square metre</i>   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10414                                     | Proprietary fire resisting partition wall, 1 hour FRR.....  | 355.50         | 39.10                    | 51.60                              | 97.70    | 10414 |
| 10415                                     | Ditto, but 2 hours FRR.....   | 445.10         | 39.10                    | 51.60                              | 97.70    | 10415 |
|   | Proprietary fire resisting partition system comprising steel framing, insulation, and all necessary accessories in accordance with the manufacturer's recommendations and complying with BS 476 : Parts 20-24 :-  |                |                          |                                    |          |       |
|   | <i>Per square metre</i>   |                |                          |                                    |          |       |
| 10416                                     | Proprietary fire resisting partition comprising non-combustible composite panel of fibre reinforced cement, mechanically bonded to punched steel sheet, 1 hour FRR (finishes measured separately).....  | 1,877.80       | 73.00                    | 112.10                             | 215.00   | 10416 |
| 10417                                     | Ditto but 2 hours FRR (ditto).....  | 1,936.70       | 73.00                    | 112.10                             | 215.00   | 10417 |
| 10418                                     | Ditto but 4 hours FRR (ditto).....  | 2,248.20       | 73.00                    | 112.10                             | 215.00   | 10418 |
| 10419                                     | Proprietary fire resisting partition comprising non-combustible calcium silicate board reinforced with selected fibres and fillers. The board has smooth surface on one face and a lightly textured sanded surface on the other, 1 hour FRR (finishes measured separately).....   | 1,044.10       | 93.00                    | 116.60                             | 279.50   | 10419 |
| 10420                                     | Ditto but 2 hours FRR (ditto).....  | 1,208.30       | 93.00                    | 116.60                             | 279.50   | 10420 |
| 10421                                     | Ditto but 4 hours FRR (ditto).....  | 1,486.20       | 93.00                    | 116.60                             | 279.50   | 10421 |
| 10422                                     | Proprietary fire resisting partition comprising non-combustible matrix engineered mineral boards, 1 hour FRR, with or without lining (finishes measured separately).....  | 946.10         | 93.00                    | 116.60                             | 244.30   | 10422 |
| 10423                                     | Ditto but 2 hours FRR (ditto).....  | 1,085.30       | 93.00                    | 116.60                             | 244.30   | 10423 |
| 10424                                     | Ditto but 4 hours FRR (ditto).....  | 1,310.60       | 93.00                    | 116.60                             | 244.30   | 10424 |
| 10425                                     | Proprietary fire resisting partition comprising non-combustible board manufactured with fibre reinforced cement core with outer facing of perforated galvanized steel or other suitable materials mechanically bonded to each surface of the core, 1 hour FRR, with or without lining (finishes measured separately).....   | 1,940.90       | 93.00                    | 116.60                             | 244.30   | 10425 |
| 10426                                     | Ditto but 2 hours FRR (ditto).....  | 2,020.90       | 93.00                    | 116.60                             | 244.30   | 10426 |
| 10427                                     | Ditto but 4 hours FRR (ditto).....  | 2,332.50       | 93.00                    | 116.60                             | 244.30   | 10427 |



| Item  |  |                |          |                          |                                    | Item     |       |
|-------|--|----------------|----------|--------------------------|------------------------------------|----------|-------|
|       | <b>FIRE RESISTING ROLLER SHUTTERS</b>  |                |          |                          |                                    |          |       |
|       | Fire resisting roller shutters tested in accordance with BS 476 : Parts 20-24 comprising framing and shutter hood : -  | Supply and fix |          | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | FRR            |          |                          |                                    |          |       |
|       |  | 1 hour         | 2 hours  |                          |                                    |          |       |
|       | <i>Per square metre</i>  | A \$           | B \$     | C \$                     | D \$                               | E \$     |       |
| 10428 | Fire resisting roller shutter, galvanized mild steel, electrically operated including provision of connection to nearest power point by registered electrical workers..... | 2,021.80       | 2,157.80 | 229.60                   | 301.90                             | 586.40   | 10428 |
| 10429 | Fire resisting roller shutter, stainless steel, electrically operated including provision of connection to nearest power point by registered electrical workers.....       | 3,193.10       | 3,299.40 | 229.60                   | 301.90                             | 586.40   | 10429 |
|       | <b>CURTAIN WALLS</b>   |                |          |                          |                                    |          |       |
|       | Design, supply, fabricate and install aluminium curtain wall including framing, glazing, infill panels, components and sub-frames : -                                      | Supply and fix |          | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       | <i>Per square metre</i>  | A \$           | B \$     | C \$                     | D \$                               |          |       |
| 10430 | Aluminium curtain wall.....  | 2,669.30       |          | 214.80                   | 422.10                             | 1,016.30 | 10430 |
| 10431 | Ditto but circular on plan.....  | 3,073.90       |          | 230.30                   | 453.20                             | 1,084.60 | 10431 |
| 10432 | Extra over either of Items 10430 to 10431 inclusive for openable portion.....  | 211.30         |          | 16.20                    | 38.40                              | 74.30    | 10432 |
| 10433 | Extra over either of Items 10430 to 10431 inclusive for louvres.....   | 462.30         |          | 33.20                    | 77.50                              | 149.50   | 10433 |
|       | Design, supply, fabricate and install stainless steel curtain wall including framing, glazing, infill panels, components and sub-frames : -                                | Supply and fix |          | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       | <i>Per square metre</i>  | A \$           | B \$     | C \$                     | D \$                               |          |       |
| 10434 | Stainless steel curtain wall.....  | 3,449.70       |          | 205.90                   | 379.30                             | 908.70   | 10434 |
| 10435 | Ditto but circular on plan.....  | 4,085.10       |          | 221.40                   | 407.50                             | 977.10   | 10435 |
| 10436 | Extra over either of Items 10434 to 10435 inclusive for openable portion.....  | 275.70         |          | 26.60                    | 57.50                              | 112.40   | 10436 |
| 10437 | Extra over either of Items 10434 to 10435 inclusive for louvres.....   | 569.80         |          | 42.80                    | 96.70                              | 185.60   | 10437 |

| Item  |  |                |                          |                                    |                | Item  |
|-------|--|----------------|--------------------------|------------------------------------|----------------|-------|
|       | <b>PROPRIETARY COMPOSITE ALUMINIUM CLADDING</b>  |                |                          |                                    |                |       |
|       | Design, supply, fabricate and install proprietary composite aluminium cladding all in accordance with the manufacturer's instructions : -  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only       |       |
|       | <i>Per square metre</i>  | A \$           | B \$                     | C \$                               | D \$           |       |
| 10438 | Cladding minimum 3 mm thick internally.....  | 1,209.30       | 215.50                   | 381.50                             | 478.80         | 10438 |
| 10439 | Ditto but circular on plan.....  | 1,269.70       | 226.60                   | 416.90                             | 517.80         | 10439 |
| 10440 | Cladding minimum 3 mm thick externally.....  | 1,303.20       | 229.60                   | 408.10                             | 508.10         | 10440 |
| 10441 | Ditto but circular on plan.....  | 1,368.40       | 242.10                   | 445.10                             | 547.20         | 10441 |
|       | <b>COMPOSITE ALUMINIUM LINING</b>  |                |                          |                                    |                |       |
|       | Design, supply, fabricate and install composite aluminium lining all in accordance with the manufacturer's instructions : -  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only       |       |
|       | <i>Per square metre</i>  | A \$           | B \$                     | C \$                               | D \$           |       |
| 10442 | Lining minimum 3 mm thick as internal infill panelling.....  | 796.50         | 110.70                   | 147.70                             | 244.30         | 10442 |
| 10443 | Ditto but circular on plan.....  | 825.10         | 116.20                   | 154.90                             | 256.60         | 10443 |
|       | <b>PROPRIETARY AUTOMATIC SWING AND SLIDING DOORS</b>   |                |                          |                                    |                |       |
|       | Proprietary automatic swing or sliding door system in accordance with the manufacturer's instructions comprising clear tempered glass panels and mirror finished or other finished stainless steel door frames. The works shall include door operator to comply with BS 7036, safety unit, locks and all necessary accessories and provision of connection to nearest power point by registered electrical workers : - |                |                          |                                    | Supply and fix |       |
|       | <i>Per square metre</i>  |                |                          |                                    | A \$           |       |
| 10444 | Proprietary automatic swing door; single leaf door.....  |                |                          |                                    | 15,245.70      | 10444 |
| 10445 | Ditto but double leaf door.....  |                |                          |                                    | 14,669.50      | 10445 |
| 10446 | Proprietary automatic sliding door; single leaf door.....  |                |                          |                                    | 18,336.80      | 10446 |
| 10447 | Ditto but double leaf door.....  |                |                          |                                    | 17,917.70      | 10447 |

| Item   |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|--|----------------|--------------------------|------------------------------------|----------|-------|
| <b>STRONG ROOM DOORS AND FRAMES</b>  |  |                |                          |                                    |          |       |
| Supply and fix strong room door and frame, complete with all boltwork, locking, anti-explosive protection and fire protection, in accordance with G.S. Item 22.50 :- |  |                |                          |                                    |          |       |
| <i>Per square metre</i>  |  |                |                          |                                    |          |       |
|  |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10448  | Single leaf Treasury Grade "C" door.....   | 19,914.60      | 155.80                   | 286.40                             | 918.60   | 10448 |
| 10449  | Ditto but Treasury Grade "D".....  | 17,709.00      | 131.30                   | 242.10                             | 781.70   | 10449 |
| 10450  | Ditto but Treasury Grade "E".....  | 14,606.30      | 107.70                   | 197.80                             | 528.60   | 10450 |
| (Note :- The above Items 10448 to 10450 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   |  |                |                          |                                    |          |       |
| <b>FIBREGLASS HOUSE</b>  |  |                |                          |                                    |          |       |
| Fibreglass house equipped with windows, door, louvres and all necessary accessories in accordance with the manufacturer's instructions :-                            |  |                |                          |                                    |          |       |
| <i>Per set</i>   |  |                |                          |                                    |          |       |
|  |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 10451  | Fibreglass house 3 – 4 m <sup>3</sup> in volume.....   | 8,814.00       | 473.60                   | 36.40                              | 54.70    | 10451 |
| 10452  | Ditto 4 - 5 m <sup>3</sup> in volume.....  | 11,130.50      | 609.00                   | 46.80                              | 70.30    | 10452 |
| 10453  | Ditto 5 - 6 m <sup>3</sup> in volume.....  | 13,560.00      | 744.30                   | 57.30                              | 85.90    | 10453 |
| 10454  | Ditto 6 - 8 m <sup>3</sup> in volume.....  | 18,080.00      | 947.30                   | 72.90                              | 109.30   | 10454 |
| 10455  | Ditto 8 - 10 m <sup>3</sup> in volume.....   | 22,600.00      | 1,217.90                 | 93.70                              | 140.50   | 10455 |
| 10456  | Add to Item 10455 for each additional 3 m <sup>3</sup> or part thereof in volume.....                        | 6,780.00       | 406.00                   | 31.20                              | 46.80    | 10456 |
| 10457  | Add to either of Items 10451 to 10456 inclusive for 150 mm high sun cover n.e. 3 m <sup>2</sup> on plan..... | 7,345.00       | 92.40                    | 7.80                               | 10.40    | 10457 |
| 10458  | Ditto but 3 - 5 m <sup>2</sup> .....   | 12,430.00      | 244.60                   | 20.80                              | 26.00    | 10458 |
| 10459  | Ditto but 5 - 8 m <sup>2</sup> .....   | 19,775.00      | 398.20                   | 33.80                              | 42.90    | 10459 |
| 10460  | Ditto but 8 - 11 m <sup>2</sup> .....  | 27,120.00      | 581.60                   | 49.40                              | 62.50    | 10460 |
| 10461  | Ditto but 11 - 14 m <sup>2</sup> .....   | 33,900.00      | 765.10                   | 65.10                              | 82.00    | 10461 |
| 10462  | Ditto but 14 - 17 m <sup>2</sup> .....   | 41,245.00      | 948.60                   | 80.70                              | 101.50   | 10462 |
| 10463  | Ditto but 17 - 20 m <sup>2</sup> .....   | 49,720.00      | 1,132.00                 | 96.30                              | 121.00   | 10463 |
| 10464  | Add to Item 10463 for each additional 5 m <sup>2</sup> or part thereof in area.....                          | 11,300.00      | 153.50                   | 26.00                              | 32.50    | 10464 |

| Item  |  | Total No. of sets per visit |          |             | Item  |
|-------|--|-----------------------------|----------|-------------|-------|
|       | (Note : The following Items 10465 to 10469 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)  | 1 - 5                       | 6 - 20   | 21 or above |       |
|       | <i>Per inspection visit</i>  | A                           | B        | C           |       |
|       |  | \$                          | \$       | \$          |       |
| 10465 | Carry out periodic or ad-hoc examination and certification of existing proprietary fall arrest system by a competent person.....   | 4,520.00                    | -        | -           | 10465 |
| 10466 | Carry out periodic or ad-hoc examination, load test and certification on Class A1 anchor device of existing proprietary fall arrest system by a competent person.....                | 6,780.00                    | -        | -           | 10466 |
|       | <i>Each</i>  |                             |          |             |       |
| 10467 | Add to Item 10465 for periodic or ad-hoc examination of each extra set of existing proprietary fall arrest system by a competent person.....   | -                           | 904.00   | 814.00      | 10467 |
| 10468 | Add to Item 10466 for periodic or ad-hoc examination and load test on each extra set of Class A1 anchor device of existing proprietary fall arrest system by a competent person..... | -                           | 1,356.00 | 1,220.00    | 10468 |
|       | <i>Per item</i>  |                             |          |             |       |
| 10469 | Provide operation training of proprietary fall arrest system by a competent trainer for maximum 25 users.....  |                             |          | 3,673.00    | 10469 |
|       | <b>SUPPLY ONLY OF MATERIALS</b>  |                             |          |             |       |
|       | <b>MILD STEEL</b>  |                             |          |             |       |
|       | <i>Per kg</i>  |                             |          |             |       |
| 10470 | Square rods or flat bars, plates, angle sections, tee sections.....  |                             |          | 11.00       | 10470 |
|       | <b>GALVANIZED MILD STEEL</b>   |                             |          |             |       |
|       | <i>Per kg</i>  |                             |          |             |       |
| 10471 | Flat bars, round rods, square rods, plates, angle sections, tee sections and chequer plates.....   |                             |          | 12.30       | 10471 |
|       | <b>STAINLESS STEEL</b>   |                             |          |             |       |
|       | <i>Per kg</i>  |                             |          |             |       |
| 10472 | Square or flat bars, round bars, square or rectangular hollow tubes, hollow circular tubes, equal or unequal angle, tee or channel sections .....                                    |                             |          |             |       |
|       |  |                             | AISI 304 | AISI 316    |       |
|       |  |                             | A        | B           |       |
|       |  |                             | \$       | \$          |       |
|       |  |                             | 61.70    | 64.90       | 10472 |

| Item  |  |                  | Item          |
|---|--|------------------|---------------|
| <b>CAST IRON</b>  |  |                  |               |
| Supply only the following cast iron items including making patterns for articles as required (fixing measured in Brickwork and Blockwork Section of this Schedule) :- |  |                  |               |
|   | <i>Per kg</i>  | A<br>\$          |               |
| 10473   | Combined gate, tree grilles, covers, fireplace surround, mantel, range, damper and frame, soot door, fire door, fireplace fret, fire bar and the like except manhole covers and frames n.e. 6.0 kg in weight each..... | 11.00            | 10473         |
| 10474   | Ditto but exceeding 6.0 kg in weight each.....   | 10.50            | 10474         |
| <b>NON FERROUS METAL</b>  |  |                  |               |
|   | <i>Per kg</i>  | A<br>\$          |               |
| 10475   | Extruded aluminium sections in square or flat bars, round bars, square or rectangular hollow tubes, hollow circular tubes, equal or unequal angle, tee or channel sections.....  | 47.40            | 10475         |
| Approved stove enamelled slotted steel angel section complete with fixing screws, bolts, nuts washers and corner stiffeners :-  |  |                  |               |
|   | <i>Per linear metre</i>  |                  |               |
| 10476   | 36 x 36 x 1.8 mm Slotted angle section.....  | 26.00            | 10476         |
| 10477   | 40 x 40 x 2.00 mm Ditto.....   | 31.20            | 10477         |
| 10478   | 62 x 41 x 2.00 mm Ditto.....   | 34.50            | 10478         |
| 10479   | 66 x 45 x 2.50 mm Ditto.....   | 45.20            | 10479         |
| <b>EXPANDED METAL</b>   |  |                  |               |
|   |  |                  |               |
|   |  | 77<br>x 34       | 30.48<br>x 13 |
|   |  | 38.10<br>x 16.93 |               |
|   |  | 5.91             | 7.38          |
|   |  | 12               |               |
|   | <i>Per square metre</i>  | A<br>\$          | B<br>\$       |
|   |  | C<br>\$          |               |
| 10480   | Proprietary expanded metal mesh for security fencing with hot dip galvanized finish.....   | 265.80           | 270.80        |
|   |  | 349.90           | 10480         |
| <b>FENCING</b>  |  |                  |               |
|   |  | 2.50             | 3.00          |
|   |  | 3.00             | 3.00          |
|   |  | 4.00             |               |
|   |  | 40               | 75            |
|   |  | 50               | 40            |
|   |  | 50               |               |
|   | <i>Per square metre</i>  | A<br>\$          | B<br>\$       |
|   |  | C<br>\$          | D<br>\$       |
|   |  | E<br>\$          |               |
| 10481   | Galvanized iron wire chain link fencing.....   | 21.90            | 22.10         |
|   |  | 31.80            | 44.60         |
|   |  | 62.50            | 10481         |
|   |  |                  |               |
|   |  | 3.00             | 3.00          |
|   |  | 2.50             | 2.50          |
|   |  | 75               | 50            |
|   |  | 40               | 25            |
|   |  | 25               |               |
|   | <i>Per square metre</i>  | A<br>\$          | B<br>\$       |
|   |  | C<br>\$          | D<br>\$       |
| 10482   | P.V.C. coated galvanized steel chain link fencing.....   | 33.30            | 42.20         |
|   |  | 30.80            | 61.10         |
|   |  | 61.10            | 10482         |

**Section 11**

**PLASTERING AND FINISHES**

## SECTION 11

### PLASTERING AND FINISHES

#### SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Specification and Drawings</b>                                     | <b>SC11.01</b> | <p>The standard drawings referred to in this Section and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule can be viewed on the internet website via the pathway referred therein. The latest version of drawings posted shall be referred to when reading this Section.</p> <p>This Section shall generally be read and used in conjunction with the Specification adopted in the Contract.</p> |
| <b>Measurement generally</b>  | <b>SC11.02</b> | <p>All works shall be measured the net area covered. Unless otherwise stated, no deduction shall be made for voids or openings not exceeding 0.50 m<sup>2</sup>, nor for unbracketed cornice, mouldings and the like of any width. Thickness shall be measured from the general face of the surface being covered and exclusive of any grooves, raked out joints or other irregularities.</p>  |
| <b>Measurement of ceramic tiling</b>                                  | <b>SC11.03</b> | <p>Notwithstanding definitions of ceramic floor and wall tiles in BS EN 14411 and BS EN ISO 10545 :-</p> <p>(a) Measurement of ceramic tiles and quarry tiles shall include homogeneous ceramic, porcelain, stoneware or similar tiles.</p> <p>(b) Measurement of ceramic floor and wall tiles shall include glazed or unglazed tiles of engobed, matt, non-slip or similar properties.</p>  |
| <b>Measurement of mouldings</b>                                       | <b>SC11.04</b> | <p>Mouldings and moulded cornices shall be measured the net length on wall or beam face by the net visible girth.</p>  |
| <b>Measurement of skirting</b>  | <b>SC11.05</b> | <p>Skirting shall be measured the net height above finished floor or paving level. The thickness of skirting shall be measured at the centre point of the height.</p>  |
| <b>Measurement of "Hack out and replace tile in isolated patches"</b> | <b>SC11.06</b> | <p>Each isolated patch is defined as the isolated surface required for tile replacement up to an area not exceeding 0.50 m<sup>2</sup> irrespective of size of tiles.</p>  |
| <b>Measurement of suspended ceiling systems</b>                       | <b>SC11.07</b> | <p>Suspended ceiling systems shall be measured over the net area covered including air grilles, light fittings, access panels and the like. Deduction shall be made for areas covered by columns.</p> <p>Bulkheads shall be measured separately and paid for at the appropriate rates under applicable Work Sections in this Schedule.</p>   |

**SPECIAL CONDITIONS**

|  |                |  |
|--|----------------|--|
| <b>Measurement of raised accessed flooring</b> | <b>SC11.08</b> | Raised accessed flooring shall be measured over the net area covered including air grilles, access openings and the like.  |
| <b>Measurement of carpeting</b>                | <b>SC11.09</b> | All works shall be measured over the net area covered to horizontal or sloping surfaces and shall deem to include for vertical surfaces of upstands curbs, channels and the like.  |
| <b>Measurement of entrance matting</b>         | <b>SC11.10</b> | Entrance matting shall be measured the net area fixed. Forming matt well shall be measured separately under applicable Works Sections in this Schedule.  |
| <b>Rates generally</b>                         | <b>SC11.11</b> | <p>The rates shall generally include for the following : -</p> <ul style="list-style-type: none"> <li>(a) Narrow widths and small quantities.</li> <li>(b) Preparation of surfaces to receive the finishing and any necessary dubbing out of irregularities on the surface being covered.</li> <li>(c) Working into channels and recessed covers and working around pipes, metal sections and the like.</li> <li>(d) Laying or executing work in bays or between strips, circular or pattern.</li> <li>(e) Laying level or to slopes and finishing to falls or currents.</li> <li>(f) All temporary formwork or rules.</li> <li>(g) All cutting and wastes, holes, notches, cutting and fitting and making good.</li> <li>(h) Executing internally or externally, working in any position, at any height and on new or existing surfaces including any scaffolding and all temporary works.</li> <li>(i) All quoin points and other intersections of curved surfaces.</li> <li>(j) All making good up to existing finishes, door and window frames, around pipes, brackets and the like, and dishing to outlets.</li> <li>(k) All internal and external angles, fair ends, stopped ends and similar labours.</li> <li>(l) All joints (including forming movement joints, expansion joints and the like) as required between different types of materials and joints between new and existing surfaces including wire netting as G.S. Item 18.14 and approved non-acidic and anti-mould joint sealants.</li> <li>(m) Any dressing around pipes passing through roofs as G.S. Item 18.82.</li> <li>(n) Covering up and protecting where necessary.</li> <li>(o) Construction and subsequent demolition of trial panels of finishings.</li> </ul> |



**SPECIAL CONDITIONS**

|  |                             |  |
|--|-----------------------------|--|
| <b>Rates generally<br/>(Cont'd)</b>              | <b>SC11.11<br/>(Cont'd)</b> | <p>(p) Provision of samples and tests including submission of records and reports for approval by the Maintenance Surveyor.</p> <p>(q) All necessary tests as specified under the Specification and provision of test certificates when required.</p>  |
| <b>Rates for proprietary plaster and screeds</b> | <b>SC11.12</b>              | <p>The rates for proprietary plaster and screeds shall further include for : -</p> <p>(a) Supplying and laying in accordance with the manufacturer's instruction.</p> <p>(b) Cleaning existing surfaces by high pressure water jets.</p> <p>(c) Repairing cracks and applying floor primer or bonding agent.</p> <p>(d) Submission of catalogues and technical literature.</p> <p>(e) Submission of manufacturer's guarantee.</p>  |
| <b>Rates for metal lathing</b>                   | <b>SC11.13</b>              | <p>The rates for metal lathing shall further include for : -</p> <p>(a) Preparing and applying one coat of bituminous paint to cut ends.</p> <p>(b) Fixing to supports with staples or tying wire.</p> <p>(c) Allowing for bending and laps.</p> <p>(d) All cutting and waste including circular cutting.</p>  |
| <b>Rates for screeds and in-situ finishes</b>    | <b>SC11.14</b>              | <p>The rates for screeds, rendering, plastering, granolithic and terrazzo works and any other in-situ finishes shall further include for : -</p> <p>(a) Spatterdashing, hacking, raking out joints, washing over with cement grout, brushing down, cleaning and all other preparation works required to new or existing surfaces to provide key or bonding.</p> <p>(b) All internal angles, arrises, quirks, throats, drips, rounded angles and coves and similar labours, and forming "V" or square edged grooves in surface when required.</p> <p>(c) Scratching undercoats, and steel trowel, wood float, trowelled stucco, brushed, or combed finish as ordered.</p> <p>(d) All metal beads as G.S. Items 18.25 and 18.53.</p> |

**SPECIAL CONDITIONS**

|   |                |  |
|---|----------------|--|
| <b>Rates for proprietary waterproofing floor screeds</b>                              | <b>SC11.15</b> | <p>The rates for proprietary waterproofing floor screeds shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Supplying and laying in accordance with the manufacturer's instruction.</li> <li>(b) Cleaning existing surfaces by high pressure water jets.</li> <li>(c) Repairing cracks and applying floor primer or bonding agent.</li> <li>(d) Submission of catalogues and technical literature.</li> <li>(e) Submission of manufacturer's guarantee.</li> </ul> |
| <b>Rates for acoustic plaster or fire resisting cementitious fireproofing plaster</b> | <b>SC11.16</b> | <p>The rates for acoustic plaster or cementitious fireproofing plaster shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Application by special spray equipment.</li> <li>(b) Coloured top coat.</li> <li>(c) Supply and spraying in accordance with the manufacturer's recommendations.</li> <li>(d) Submission of catalogues and technical literature.</li> <li>(e) Submission of manufacturer's guarantee.</li> </ul>  |
| <b>Rates for terrazzo</b>   | <b>SC11.17</b> | <p>The rates for terrazzo shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Preparing and applying one coat of wax polish to wall and floor finishes in accordance with G.S. Item 18.97.</li> </ul>   |
| <b>Rates for floor tiles generally</b>  | <b>SC11.18</b> | <p>Rates for floor tiles shall generally include slip resistant tiles and sheet finishes complying with all non-slip classifications in accordance with DIN 51130, and DIN 51097 where specifically stated.</p>  |
| <b>Rates for terrazzo tiles</b>   | <b>SC11.19</b> | <p>The rates for terrazzo tiles shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Forming rounded, squared or splayed edges as required.</li> <li>(b) Pointing in natural or coloured cement slurry.</li> <li>(c) Preparing and applying one coat of wax polish to wall tiles or two coats non-slip, matt emulsion polish or other anti-slip coating on floor tiles.</li> </ul>   |
| <b>Rates for tiling, slabs or paving blocks</b>                                       | <b>SC11.20</b> | <p>The rates for tiling, slabs or paving blocks shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Special tiles or fittings. In the case of no special tiles or fittings, mitring edges to external corners and the like.</li> <li>(b) All slurry, grout, mortar and the like of approved type.</li> </ul>  |

## SPECIAL CONDITIONS

|  |                         |  |
|--|-------------------------|--|
| <b>Rates for tiling, slabs or paving blocks (Cont'd)</b>                                 | <b>SC11.20 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(c) Tile adhesives of approved proprietary type to BS EN 12004.</li> <li>(d) Pointing joints with natural or coloured cement slurry or cement and sand grout to match colours of tiles.</li> <li>(e) Grouting up joints in approved grout or a proprietary grout to BS EN 13888.</li> <li>(f) Cutting and laying or fixing to patterns including graphics.</li> <li>(g) Unless otherwise stated, tiles of any configuration or dimension.</li> <li>(h) Unless otherwise stated, any type of finish.</li> </ul>  |
| <b>Rates for “Extra over tiling” for rounded edge tiles, skirting tiles and the like</b> | <b>SC11.21</b>          | <p>The rates for “Extra over tiling” for rounded edge tiles, skirting tiles and the like shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All internal and external corner tiles, corner end tiles and the like.</li> </ul>  |
| <b>Rates for “Hack out and replace tiling in isolated patches”</b>                       | <b>SC11.22</b>          | <p>The rates for “Hack out and replace tiling in isolated patches” shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Hacking up existing screeds, preparing surfaces, applying new backing screeds and making good to receive new tilings.</li> </ul>   |
| <b>Rates for flexible tiles and sheet finishes, or rubber tiles and sheet finishes</b>   | <b>SC11.23</b>          | <p>The rates for flexible tiles and sheet finishes, or rubber tiles and sheet finishes shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Providing and laying tiles or sheets with adhesives in accordance with the manufacturer's instructions.</li> <li>(b) Laying tiles or sheets in plain or pattern including graphics.</li> <li>(c) Polyurethane reinforcement as required.</li> <li>(d) Preheating process with preheating tools as required.</li> <li>(e) Any welding joints between sheets including approved P.V.C. welding rods.</li> <li>(f) Treating surfaces of tiles or sheets as G.S. Item 18.140.</li> <li>(g) Execution by approved specialist contractor.</li> </ul> |

**SPECIAL CONDITIONS**

**Rates for swimming pool tiles**

**SC11.24**

The rates for swimming pool tiles shall further include for : -

- (a) Provision of tile adhesive that is able to withstand continual immersion in water and has acid resistant and hygiene properties.
- (b) Pointing and grouting joints with cement based, water repellent floor grouting with hard abrasion resistant finish, and resistant to dirt penetration.

**Rates for pavers**

**SC11.25**

The rates for pavers shall further include for : -

- (a) Excavation to reduced level or filling to make up levels, compacting bottom properly to receive granular sub-base.
- (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting granular sub-base.
- (c) Sand filling, mortar bedding and the like.
- (d) Cutting and making good at boundaries, manholes, cable and draw pits and the like.
- (e) Laying at any designated pattern or design as specified by the Maintenance Surveyor using multi-coloured paving slabs and paving blocks as required.
- (f) Use of recycled aggregate as specified in G.S. Items 6.42.3 (xiii) and 8.22 for designed concrete mixes and prescribed concrete mixes respectively, when required.
- (g) In case of recycled glass pavers, compliance with the Part 7 : Precast Concrete Units for Paving under Section 11 of the General Specification for Civil Engineering Works.

**Rates for stone or marble slabs / tiles**

**SC11.26**

The rates for stone or marble slabs/tiles shall further include for : -

- (a) Forming rounded, squared or splayed edges as required.
- (b) Pointing in natural or coloured grout.
- (c) Preparing and applying one coat of wax polish to wall slabs or two coats non-slip, matt emulsion polish or other anti-slip coating on floor slabs.
- (d) Providing and fixing copper cramps and "S" hooks as G.S. Item 18.126 or stainless steel fixing as ordered.
- (e) Laying level or to slopes and finishing to falls, or falls and currents.
- (f) Preparing surfaces ready to receive cement and sand bedding or sand bedding to receive stone paving or slabs.
- (g) Flushing up around pipes, floor drains, outlets and the like.

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for stone or marble slabs / tiles (Cont'd)</b>         | <b>SC11.26 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(h) Anti-stain treatment including providing one coat of approved water repellent or sealer to all exposed surfaces and edges of stone slabs/tiles.</li> <li>(i) Submission of design and calculations endorsed by Registered Structural Engineer for fixing of stone or marble slabs to vertical or sloping surfaces.</li> <li>(j) Unless otherwise stated, natural stone or marble are of origin from China or Asian countries (other than Japan).</li> </ul>   |
| <b>Rates for division strips</b>                                | <b>SC11.27</b>          | The rates for division strips, cover angles, strips at expansion joints etc. to finishes and pavings shall include for cutting to required lengths, splay cut ends, drilling, fixing with brass or stainless steel screws or the like and for countersinking the heads of all exposed screws.  |
| <b>Rates for suspended ceiling systems</b>                      | <b>SC11.28</b>          | <p>The rates for suspended ceiling systems shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Design, supply and install the suspended ceiling systems complete with necessary linings and including all types of metal suspension framing, edge trims, runners, hangers and the like, and fixing to concrete soffits and the like.</li> <li>(b) Metal ceiling panels or strips in all sizes.</li> <li>(c) All cutting and narrow widths, including cutting ceiling tiles, panels and strips to sizes accommodating light fittings, air grilles and the like.</li> <li>(d) Unless otherwise stated, any drop length from soffits.</li> <li>(e) Fixing acoustic ceiling tiles to soffits or walls, or to suspension system.</li> <li>(f) Forming all openings and trimming around sprinkler and detector heads, pipes, conduits, power points, air grilles, light fittings, access panels and the like and including extra supports and trimmers for the same.</li> <li>(g) Additional framing and supports etc. to bridge across ducts and the like.</li> <li>(h) Submission of catalogues, technical literature, data and the like on the suspended ceiling systems.</li> <li>(i) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation.</li> <li>(j) Submission of test certificates and manufacturer's guarantee.</li> </ul> |
| <b>Rates for forming openings to existing suspended ceiling</b> | <b>SC11.29</b>          | <p>The rates for forming openings to existing suspended ceiling shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Additional trimmer/suspension, stiffening plates, brackets, etc.</li> <li>(b) Sealing edges.</li> </ul>   |

**SPECIAL CONDITIONS**

**Rates for raised accessed flooring**

**SC11.30**

The rates for raised accessed flooring shall further include for : -

- (a) Design, supply and installation in accordance with the manufacturer's instructions.
- (b) Additional supports and framing for cut panels.
- (c) All air grilles, skirting trims, integral fittings and the like.
- (d) Forming openings for power points, trunking and other building services installations including sealing edges.
- (e) Providing and laying insulation under floor as required.
- (f) All preparation works, cleaning and protection of completed works.
- (g) Submission of design drawings, working details and shop drawings for Maintenance Surveyor's approval prior to commencement of installation.
- (h) Submission of test certificate, manual and manufacturer's guarantee.

**Rates for carpeting or carpeting with underlays generally**

**SC11.31**

The rates for carpeting (including carpet tiles) or carpeting with underlays shall generally include for : -

- (a) Working to narrow widths and small areas.
- (b) Working to flat or sloping surfaces.
- (c) New and existing surfaces.
- (d) All necessary cleaning and preparation of substrate prior to the laying of carpet, carpet tiles or underlays.
- (e) Proprietary release bond agent, approved non-acidic and anti-mould sealants, tapes, adhesive, carpet grippers and seaming cement, where necessary.
- (f) Providing underlays in accordance with G.S. Item 18.155 and fixing underlays in accordance with G.S. Item 18.160.
- (g) Laying of carpet including straight, raking or circular cutting and waste, seaming and jointing as G.S. Item 18.161, sewing and fixing all smooth edges and carpet trims.
- (h) Fixing and trimming, cutting and fitting carpets to floor mounted services outlets including electric power point, telephone box, recessed removable covers and the like including binding edges as required.
- (i) Bonding to match existing works.
- (j) Protective treatment and cleaning.
- (k) Provision of test certificates and manufacturer's guarantee.
- (l) Provision of manufacturer's literature on maintenance and cleaning of carpets.

**SPECIAL CONDITIONS**

|   |                |   |
|---|----------------|---|
| <b>Rates for entrance matting</b>   | <b>SC11.32</b> | <p>The rates for entrance matting shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Working to narrow widths and small areas.</li> <li>(b) Working to flat or sloping surfaces.</li> <li>(c) New and existing surfaces.</li> <li>(d) All necessary framing and fixing accessories.</li> <li>(e) All necessary cleaning and preparation of substrate prior to the fixing of entrance matting.</li> <li>(f) Protection and cleaning.</li> <li>(g) Provision of samples, literature, test certificates and manufacturer's guarantee.</li> </ul> |
| <b>Rates for taking down existing finishes</b>                                      | <b>SC11.33</b> | <p>The rates for taking down existing plaster, paving, tiling, etc., shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Cutting back edges of the retaining work.</li> <li>(b) Cutting and clearing away metal lathing and wire netting as required.</li> <li>(c) Cutting by manual or mechanical means including saw cutting.</li> <li>(d) Making good adjoining surfaces disturbed in the taking down process.</li> <li>(e) Preparing joints for new work.</li> <li>(f) Preparing surfaces to receive new finish.</li> </ul>                |
| <b>Rates for "Take up and clear away existing carpet or carpet tiles" generally</b> | <b>SC11.34</b> | <p>The rates for "Take up and clear away existing carpet or carpet tiles" shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Taking up and clearing away existing carpet by hand or power tools or both.</li> <li>(b) Removal of associated adhesive and release bond agent.</li> <li>(c) Removal of associated underlays and carpet grippers.</li> <li>(d) Making good affected surfaces.</li> </ul>   |
| <b>G.S. clauses for suspended ceiling systems</b>                                   | <b>SC11.35</b> | <p>G.S. clauses for suspended ceiling systems can be found in the Carpentry and Joinery Section of the General Specification for Building.</p>  |

| Item  | Item  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
|---|---|---|---|----|----|----|----|---|---|----|----|----|----|----|----|----|
| <b>METAL LATHING</b>  |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>Supply and fix</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <table border="1"> <tr> <td style="text-align: center;">Plain<br/>expanded<br/>metal<br/>lathing<br/>type<br/>1.6kg/m<sup>2</sup></td> <td style="text-align: center;">Ribbed<br/>expanded<br/>metal<br/>lathing<br/>type<br/>2.25kg/m<sup>2</sup></td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </table>  |   | Plain<br>expanded<br>metal<br>lathing<br>type<br>1.6kg/m <sup>2</sup> | Ribbed<br>expanded<br>metal<br>lathing<br>type<br>2.25kg/m <sup>2</sup> | A  | B  | \$ | \$ |   |   |    |    |    |    |    |    |    |
| Plain<br>expanded<br>metal<br>lathing<br>type<br>1.6kg/m <sup>2</sup>   | Ribbed<br>expanded<br>metal<br>lathing<br>type<br>2.25kg/m <sup>2</sup>   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| A   | B   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| \$  | \$  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11001   | Vertical or horizontal surfaces..... 24.90 35.10 11001  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11002   | Soffits or sloping soffits including beams and the like..... 25.90 36.10 11002  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>SAND BEDDING</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>Thickness (mm)</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <table border="1"> <tr> <td style="text-align: center;">25</td> <td style="text-align: center;">50</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </table>  |   | 25  | 50  | A  | B  | \$ | \$ |   |   |    |    |    |    |    |    |    |
| 25  | 50  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| A   | B   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| \$  | \$  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11003   | Sand bedding to receive paving slab or block, pavers, etc..... 19.00 27.90 11003  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>LIGHTWEIGHT FLOOR AND ROOF SCREEDS</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>Thickness (mm)</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <table border="1"> <tr> <td style="text-align: center;">40</td> <td style="text-align: center;">50</td> <td style="text-align: center;">65</td> <td style="text-align: center;">75</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </table>  |   | 40  | 50  | 65 | 75 | A  | B  | C | D | \$ | \$ | \$ | \$ |    |    |    |
| 40  | 50  | 65  | 75  |    |    |    |    |   |   |    |    |    |    |    |    |    |
| A   | B   | C   | D   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| \$  | \$  | \$  | \$  |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11004   | Cement and vermiculite (1:8 by volume) roof screed..... 85.00 106.30 138.20 159.50 11004  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11005   | Cement and vermiculite (1:6 by volume) floor screed..... 80.80 101.00 131.30 151.50 11005   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11006   | Air entrained screed having a dry density of not more than 1,200 kg/m <sup>3</sup> ..... 112.60 138.10 189.10 214.50 11006  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>CEMENT PAVING, FLOOR SCREEDS, ETC.</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>Cement and sand (1:3) or cement and granite fines (1:3)</b>  |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <b>Thickness (mm)</b>   |   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| <table border="1"> <tr> <td style="text-align: center;">15</td> <td style="text-align: center;">20</td> <td style="text-align: center;">25</td> <td style="text-align: center;">30</td> <td style="text-align: center;">40</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">E</td> </tr> <tr> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> </table> |   | 15  | 20  | 25 | 30 | 40 | A  | B | C | D  | E  | \$ | \$ | \$ | \$ | \$ |
| 15  | 20  | 25  | 30  | 40 |    |    |    |   |   |    |    |    |    |    |    |    |
| A   | B   | C   | D   | E  |    |    |    |   |   |    |    |    |    |    |    |    |
| \$  | \$  | \$  | \$  | \$ |    |    |    |   |   |    |    |    |    |    |    |    |
| 11007   | Paving or floor screeds..... 34.70 38.40 42.00 45.70 53.00 11007  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11008   | Paving or screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like..... 46.40 49.50 54.00 57.20 64.80 11008 |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11009   | Extra over either of Items 11007 to 11008 inclusive for approved admixture of hardener and/or dust proofer..... 20.00 24.90 29.60 34.50 44.10 11009                             |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11010   | Extra over either of Items 11007 to 11008 inclusive for approved admixture of waterproofing..... 5.00 6.20 7.10 8.20 10.20 11010  |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |
| 11011   | Extra over either of Items 11007 to 11008 inclusive for approved colour cement or pigments..... 5.40 6.60 7.60 9.30 11.50 11011   |   |   |    |    |    |    |   |   |    |    |    |    |    |    |    |



| Item  |  |   |       |       | Item  |       |       |                  |  |       |
|-------|--|---|-------|-------|-------|-------|-------|------------------|--|-------|
|       | <b>CEMENT PAVING, FLOORS SCREEDS, ETC. (CONT'D)</b>  |   |       |       |       |       |       |                  |  |       |
|       |  | Cement, sand or granite fines and coarse aggregate Grade 10 (1:1.5:3) |       |       |       |       |       |                  |  |       |
|       |  | Thickness (mm)  |       |       |       |       |       |                  |  |       |
|       |  | 50  | 60    |       |       |       |       |                  |  |       |
|       |  | A   | B     |       |       |       |       |                  |  |       |
|       |  | \$  | \$    |       |       |       |       |                  |  |       |
| 11012 | Paving or floor screeds.....   | 55.20   | 62.30 |       | 11012 |       |       |                  |  |       |
| 11013 | Paving or screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....                                  | 59.70   | 66.80 |       | 11013 |       |       |                  |  |       |
| 11014 | Extra over either of Items 11012 to 11013 inclusive for approved admixture of hardener and/or dust proofer.....  | 34.60   | 45.00 |       | 11014 |       |       |                  |  |       |
| 11015 | Extra over either of Items 11012 to 11013 inclusive for approved admixture of waterproofing.....   | 13.30   | 17.50 |       | 11015 |       |       |                  |  |       |
| 11016 | Extra over either of Items 11012 to 11013 inclusive for approved coloured cement or pigments.....  | 11.90   | 14.20 |       | 11016 |       |       |                  |  |       |
|       |  | Cement and sand (1:4) or cement and granite fines (1:4)               |       |       |       |       |       |                  |  |       |
|       |  | Thickness (mm)  |       |       |       |       |       |                  |  |       |
|       |  | 15  | 20    | 25    | 30    | 40    | 50    | 65               |  |       |
|       |  | A   | B     | C     | D     | E     | F     | G                |  |       |
|       |  | \$  | \$    | \$    | \$    | \$    | \$    | \$               |  |       |
| 11017 | Floor screeds.....   | 31.00   | 34.30 | 38.30 | 41.80 | 48.80 | 56.20 | 66.50            |  | 11017 |
| 11018 | Screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....  | 33.60   | 37.10 | 41.40 | 45.00 | 53.10 | 61.80 | 72.70            |  | 11018 |
|       |  | <b>ROOF SCREEDS</b>   |       |       |       |       |       |                  |  |       |
|       |  | <i>Per square metre</i>   |       |       |       |       |       |                  |  |       |
| 11019 | Screed on roofs.....   | 33.60   | 37.00 | 41.40 | 45.00 | 53.10 | 61.80 | 72.70            |  | 11019 |
| 11020 | Screed to treads and risers, strings, sides and top of upstand kerbs, sides and bottom of channels and sinkings and the like.....  | 36.50   | 40.20 | 41.40 | 48.60 | 57.00 | 66.20 | 77.80            |  | 11020 |
|       |  | <b>LEVELLING SKIM COAT</b>  |       |       |       |       |       |                  |  |       |
|       |  | <i>Per square metre</i>   |       |       |       |       |       |                  |  |       |
| 11021 | Apply resin based gypsum and cement skim coat of any thickness to level up floor before receiving rubber and vinyl floor tiles, sheets or carpet (measured separately) ..... |   |       |       |       |       |       | A<br>\$<br>23.60 |  | 11021 |

| Item   |   | Average thickness (mm)  |        |        |         | Item  |
|--|---|-------------------------|--------|--------|---------|-------|
|  |   | 3 - 5                   | 5 - 8  | 8 - 10 | 10 - 12 |       |
|  |   | A                       | B      | C      | D       |       |
|  |   | \$                      | \$     | \$     | \$      |       |
| <b>PROPRIETARY FLOOR SCREED SYSTEM</b>   |   |                         |        |        |         |       |
| Prepare and apply proprietary floor screed in accordance with manufacturer's instructions :-   |   |                         |        |        |         |       |
|  |   | <i>Per square metre</i> |        |        |         |       |
| 11022  | Proprietary floor screed (with laying to fall property).....                      | 77.30                   | 88.50  | 95.60  | 102.70  | 11022 |
| 11023  | Proprietary heavy duty floor screed (ditto).....                                  | 85.90                   | 98.30  | 106.20 | 114.10  | 11023 |
| 11024  | Proprietary self-levelling floor screed.....                                      | 109.80                  | 137.30 | 145.40 | 167.80  | 11024 |
| 11025  | Proprietary heavy duty self-levelling floor screed.....                           | 139.30                  | 188.50 | 227.80 | 263.90  | 11025 |
|  |   | <i>Per square metre</i> |        |        |         |       |
| 11026  | Heavy duty mechanical scrubbling to existing surface.....                         |                         |        |        | 27.00   | 11026 |
|  |   | <i>Per linear metre</i> |        |        |         |       |
| 11027  | Point existing movement joint with rubber granular based material and binder..... |                         |        |        | 17.70   | 11027 |
| <b>PROPRIETARY WATERPROOFING FLOOR SCREEDS</b>   |   |                         |        |        |         |       |
| (Note :- The following Items 11028 to 11035 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   |   |                         |        |        |         |       |
| Waterproofing floor screeds including mixing of 1 part of proprietary waterproofing and bonding liquid additive, 1 part of water, 1 part of cement and 2 parts of sands including bond coat/primer all in strict accordance with manufacturer's instructions, and wood floated or steel trowelled as required :- |   |                         |        |        |         |       |
|  |   | <i>Per square metre</i> |        |        |         |       |
| 11028  | 20 mm Thick on floors.....  |                         |        |        | 79.60   | 11028 |
| 11029  | Add to Item 11028 for each additional 5 mm or part thereof in thickness.....      |                         |        |        | 12.60   | 11029 |
| 11030  | 10 mm Thick on walls, columns, vertical surfaces or top of benchings.....         |                         |        |        | 58.40   | 11030 |
| 11031  | Add to Item 11030 for each additional 5 mm or part thereof in thickness.....      |                         |        |        | 10.40   | 11031 |
| 11032  | 10 mm Thick on soffits or sloping soffits including beams and the like.....       |                         |        |        | 65.50   | 11032 |
| 11033  | Add to Item 11032 for each additional 5 mm or part thereof in thickness.....      |                         |        |        | 10.40   | 11033 |
| Proprietary rapid hardening polymer modified waterproof concrete in a blend of non-shrink cement, rapid hardening fillers and waterproofing admixtures and including primer, all in strict accordance with manufacturer's instructions :-  |   |                         |        |        |         |       |
|  |   | <i>Per square metre</i> |        |        |         |       |
| 11034  | 20 mm Thick on floors.....  |                         |        |        | 401.40  | 11034 |
| 11035  | Add to Item 11034 for each additional 5 mm or part thereof in thickness.....      |                         |        |        | 85.60   | 11035 |

| Item  |   |                        |                             |              |             |             |              |              | Item  |
|-------|---|------------------------|-----------------------------|--------------|-------------|-------------|--------------|--------------|-------|
|       | <b>RENDERING OR BACKING SCREEDS</b>                                     |                        |                             |              |             |             |              |              |       |
|       | 20 mm Thick   |                        |                             |              | 25 mm Thick |             |              |              |       |
|       | Height (mm)   |                        |                             |              | Height (mm) |             |              |              |       |
|       | n.e.<br>75  | 75 -<br>150            | 150 -<br>225                | 225 -<br>300 | n.e.<br>75  | 75 -<br>150 | 150 -<br>225 | 225 -<br>300 |       |
|       | A   | B                      | C                           | D            | E           | F           | G            | H            |       |
|       | \$  | \$                     | \$                          | \$           | \$          | \$          | \$           | \$           |       |
| 11036 | Cement and sand (1:3) screed to :-                                      |                        |                             |              |             |             |              |              |       |
|       | <i>Per linear metre</i>   |                        |                             |              |             |             |              |              |       |
| 11036 | 25.50   | 27.80                  | 30.20                       | 32.50        | 27.00       | 29.60       | 32.30        | 34.80        | 11036 |
| 11037 | 26.80   | 29.60                  | 32.30                       | 34.90        | 30.30       | 33.40       | 36.70        | 39.90        | 11037 |
| 11038 | 0.50  | 1.40                   | 2.00                        | 2.70         | 0.60        | 1.40        | 2.30         | 3.00         | 11038 |
|       | Cement and sand (1:3) or cement and granite fines (1:3) rendering to :- |                        |                             |              |             |             |              |              |       |
|       | <i>Per square metre</i>   |                        |                             |              |             |             |              |              |       |
|       | Thickness (mm)  |                        |                             |              |             |             |              |              |       |
|       | 10  | 15                     | 20                          | 25           |             |             |              |              |       |
|       | A   | B                      | C                           | D            |             |             |              |              |       |
|       | \$  | \$                     | \$                          | \$           |             |             |              |              |       |
| 11039 | 31.50   | 35.40                  | 39.70                       | 43.50        |             |             |              |              | 11039 |
| 11040 | 34.30   | 38.40                  | 42.60                       | 46.50        |             |             |              |              | 11040 |
| 11041 | 3.70  | 4.60                   | 5.90                        | 7.20         |             |             |              |              | 11041 |
| 11042 | 3.80  | 5.40                   | 7.10                        | 10.80        |             |             |              |              | 11042 |
|       | Cement and sand (1:4) or cement and granite fines (1:4) rendering to :- |                        |                             |              |             |             |              |              |       |
|       | <i>Per square metre</i>   |                        |                             |              |             |             |              |              |       |
|       | Thickness (mm)  |                        |                             |              |             |             |              |              |       |
|       | 10  | 15                     | 20                          | 25           |             |             |              |              |       |
|       | A   | B                      | C                           | D            |             |             |              |              |       |
|       | \$  | \$                     | \$                          | \$           |             |             |              |              |       |
| 11043 | 27.70   | 30.80                  | 33.90                       | 37.00        |             |             |              |              | 11043 |
|       | <b>INTERNAL LIME PLASTER</b>  |                        |                             |              |             |             |              |              |       |
|       | <i>Per square metre</i>   |                        |                             |              |             |             |              |              |       |
|       | 5 mm<br>first<br>coat   | 10 mm<br>first<br>coat | 5 mm<br>finish-<br>ing coat | Two<br>coats |             |             |              |              |       |
|       | A   | B                      | C                           | D            |             |             |              |              |       |
|       | \$  | \$                     | \$                          | \$           |             |             |              |              |       |
| 11044 | -   | 27.90                  | 25.60                       | 53.30        |             |             |              |              | 11044 |
| 11045 | 27.80   | -                      | 32.40                       | 60.30        |             |             |              |              | 11045 |

Item

Item

**GYPSUM PLASTER**

Mix of first coat : Browning plaster and sand (1:2) or cement and sand (1:3). Finishing coat as G.S. Item 18.49 (ii) with smooth finish 5 mm maximum : -

| Thickness (mm) |       |       |
|----------------|-------|-------|
| 5              | 10    | 13    |
| A              | B     | C     |
| \$             | \$    | \$    |
| -              | 46.60 | -     |
| -              | 53.50 | -     |
| -              | -     | 49.10 |
| -              | -     | 55.80 |
| 34.60          | -     | -     |
| 41.40          | -     | -     |

*Per square metre*

|       |   |       |       |       |       |
|-------|---|-------|-------|-------|-------|
| 11046 | On walls, columns or vertical surfaces.....   | -     | 46.60 | -     | 11046 |
| 11047 | On soffits or sloping soffits including beams and the like surfaces.....  | -     | 53.50 | -     | 11047 |
| 11048 | On walls, columns or vertical surfaces of expanded metal lathing (measured separately).....                               | -     | -     | 49.10 | 11048 |
| 11049 | On soffits or sloping soffits including beams and the like, surfaces of expanded metal lathing (measured separately)..... | -     | -     | 55.80 | 11049 |
| 11050 | On walls, columns or vertical plasterboard surfaces.....  | 34.60 | -     | -     | 11050 |
| 11051 | On soffits or sloping soffits including beams and the like, plasterboard surfaces.....                                    | 41.40 | -     | -     | 11051 |

**MOULDING AND MOULDED CORNICES**

Lime putty and paper pulp or Plaster of Paris (1:1) moulding and moulded cornices on and including rough plaster backing, all necessary bracketing, lathing, dubbing out, moulds, mitres, stops and the like, and finishing true to details : -

| Girth (mm) |       |        |        |
|------------|-------|--------|--------|
| n.e.       | 75 -  | 150 -  | 225 -  |
| 75         | 150   | 225    | 300    |
| A          | B     | C      | D      |
| \$         | \$    | \$     | \$     |
| 29.20      | 38.50 | 51.50  | 65.60  |
| 43.00      | 55.30 | 75.20  | 93.50  |
| 73.90      | 83.30 | 93.00  | 102.10 |
| 83.70      | 94.30 | 106.80 | 117.60 |

*Per linear metre*

|       |   |       |       |        |        |       |
|-------|---|-------|-------|--------|--------|-------|
| 11052 | Moulding or moulded cornice.....                      | 29.20 | 38.50 | 51.50  | 65.60  | 11052 |
| 11053 | Ditto but circular on plan to radius n.e. 7.50 m..... | 43.00 | 55.30 | 75.20  | 93.50  | 11053 |
| 11054 | Preformed cornices.....                               | 73.90 | 83.30 | 93.00  | 102.10 | 11054 |
| 11055 | Ditto but circular on plan to radius n.e. 7.50 m..... | 83.70 | 94.30 | 106.80 | 117.60 | 11055 |

**ACOUSTIC AND CEMENTITIOUS FIREPROOFING PLASTER**

(Note : - The following Items 11056 to 11059 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)

Prepare and apply acoustic plaster in accordance with G.S. Items 18.35 and 18.56 and the minimum thickness and coats as recommended by the manufacturer : -

*Per square metre*

|       |  |         |        |       |
|-------|--|---------|--------|-------|
| 11056 | On walls, columns, vertical surfaces, soffits or sloping soffits including beams and the like..... | A<br>\$ | 122.10 | 11056 |
|-------|--|---------|--------|-------|

Prepare and spray cementitious fireproofing plaster on the following structural steel surfaces in accordance with manufacturer's recommendation : -

| FRR    |         |         |
|--------|---------|---------|
| 1 hour | 2 hours | 4 hours |
| A      | B       | C       |
| \$     | \$      | \$      |
| 135.60 | 203.40  | 406.80  |
| 200.60 | 236.20  | 461.10  |
| 259.90 | 367.30  | 478.00  |

*Per square metre*

|       |   |        |        |        |       |
|-------|---|--------|--------|--------|-------|
| 11057 | Interior concealed structural steel surfaces with spray-texture finish.....                   | 135.60 | 203.40 | 406.80 | 11057 |
| 11058 | Interior exposed structural steel surfaces with spray-texture or trowelled smooth finish..... | 200.60 | 236.20 | 461.10 | 11058 |
| 11059 | Exterior exposed structural steel surfaces with spray-texture or trowelled smooth finish..... | 259.90 | 367.30 | 478.00 | 11059 |

| Item              |   |   | Item                |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|-------------------|---|---|---------------------|------------|---------------------|---------------------|----------------|----|----------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|--|
|                   | <b>PROPRIETARY WALL PLASTER FOR SQUASH COURT</b>  |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | Prepare and apply proprietary plaster for squash court in accordance with the manufacturer's instruction :-   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <i>Per square metre</i>   | A<br>\$   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11060             | On walls, columns, vertical surfaces, soffits or sloping soffits including beams and the like.....  | 803.50  | 11060               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <b>EXTERNAL RENDERING</b>   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">First coat</th> <th style="width: 15%;">Finish-<br/>ing coat</th> <th style="width: 15%;">Two coats rendering</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Thickness (mm)</td> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> <td style="text-align: center;">20</td> </tr> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> <td style="text-align: center;">C<br/>\$</td> <td></td> </tr> </tbody> </table>   |                     | First coat | Finish-<br>ing coat | Two coats rendering | Thickness (mm) | 10 | 10             | 20     | A<br>\$ | B<br>\$ | C<br>\$ |         |         |         |         |         |  |
|                   | First coat  | Finish-<br>ing coat   | Two coats rendering |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| Thickness (mm)    | 10  | 10  | 20                  |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| A<br>\$           | B<br>\$   | C<br>\$   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <i>Per square metre</i>   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11061             | On walls, columns or vertical surfaces.....   | 40.60    50.50    91.00   | 11061               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11062             | On soffits or sloping soffits including beams and the like.....   | 48.60    54.90    95.10   | 11062               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <b>EXPOSED AGGREGATE RENDERING (SHANGHAI PLASTER)</b>   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | Exposed aggregate rendering applied in two coats as G.S. Item 18.55 :-  |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <i>Per square metre</i>   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">20 mm Thick</th> </tr> <tr> <th colspan="3" style="text-align: center;">Colour</th> </tr> <tr> <th style="width: 33%;">Dark</th> <th style="width: 33%;">Medium</th> <th style="width: 33%;">White</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> <td style="text-align: center;">C<br/>\$</td> </tr> </tbody> </table>   | 20 mm Thick         |            |                     | Colour              |                |    | Dark           | Medium | White   | A<br>\$ | B<br>\$ | C<br>\$ |         |         |         |         |  |
| 20 mm Thick       |   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| Colour            |   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| Dark              | Medium  | White   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| A<br>\$           | B<br>\$   | C<br>\$   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11063             | On walls, columns or vertical surfaces.....   | 87.90    90.30    101.30  | 11063               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11064             | On soffits or sloping soffits including beams and the like.....   | 95.00    97.20    108.30  | 11064               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <b>GRANOLITHIC FINISH</b>   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | Granolithic paving, etc., of the mix and finish required :-   |   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
|                   | <i>Per square metre</i>   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Mix A (Trowelled)</th> <th colspan="2" style="text-align: center;">Mix B (Trowelled)</th> </tr> <tr> <th colspan="2" style="text-align: center;">Thickness (mm)</th> <th colspan="2" style="text-align: center;">Thickness (mm)</th> </tr> <tr> <th style="width: 25%;">15</th> <th style="width: 25%;">20</th> <th style="width: 25%;">15</th> <th style="width: 25%;">20</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> <td style="text-align: center;">C<br/>\$</td> <td style="text-align: center;">D<br/>\$</td> </tr> </tbody> </table> | Mix A (Trowelled)   |            | Mix B (Trowelled)   |                     | Thickness (mm) |    | Thickness (mm) |        | 15      | 20      | 15      | 20      | A<br>\$ | B<br>\$ | C<br>\$ | D<br>\$ |  |
| Mix A (Trowelled) |   | Mix B (Trowelled)   |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| Thickness (mm)    |   | Thickness (mm)  |                     |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 15                | 20  | 15  | 20                  |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| A<br>\$           | B<br>\$   | C<br>\$   | D<br>\$             |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11065             | On floors.....  | 56.00    65.70    63.10    75.30  | 11065               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11066             | To treads and risers, ends of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, tops, sides, soffits and edges of shelves, working slabs and the like..... | 63.00    72.90    69.90    81.50  | 11066               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11067             | On walls, columns or vertical surfaces.....   | -    69.40    -    78.10  | 11067               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11068             | Add to either of Items 11065 to 11067 inclusive for rubbed finish.....  | 44.00    44.00    44.00    44.00  | 11068               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11069             | Extra over either of Items 11065 to 11067 inclusive for paving, etc., hardened with approved liquid hardener and/or dust proofer.....   | 12.50    16.20    12.50    16.20  | 11069               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |
| 11070             | Extra over either of Items 11065 to 11067 inclusive for approved coloured cement or pigments.....   | 6.70    8.70    6.70    8.70  | 11070               |            |                     |                     |                |    |                |        |         |         |         |         |         |         |         |         |  |

| Item   |   |  |  |             |      |                |       |                | Item   |       |       |       |       |       |
|--|---|--|--|-------------|------|----------------|-------|----------------|--------|-------|-------|-------|-------|-------|
| <b>GRANOLITHIC FINISH (CONT'D)</b>                                   |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
| Granolithic paving, etc., of the mix and finish required :- (Cont'd) |   |  |  |             |      | Mix C (Washed) |       | Mix D (Washed) |        |       |       |       |       |       |
|  |   |  |  |             |      | Thickness (mm) |       | Thickness (mm) |        |       |       |       |       |       |
|  |   |  |  |             |      | 15             | 20    | 15             | 20     |       |       |       |       |       |
|  |   |  |  |             |      | A              | B     | C              | D      |       |       |       |       |       |
|  |   |  |  |             |      | \$             | \$    | \$             | \$     |       |       |       |       |       |
| <i>Per square metre</i>  |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
| 11071  | On floors.....  |  |  |             |      | 73.50          | 84.90 | 81.20          | 94.80  | 11071 |       |       |       |       |
| 11072  | To treads and risers, ends of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, tops, sides, soffits and edges of shelves, working slabs and the like.....       |  |  |             |      | 82.50          | 94.40 | 91.10          | 105.00 | 11072 |       |       |       |       |
| 11073  | On walls, columns or vertical surfaces.....   |  |  |             |      | -              | 89.80 | -              | 100.00 | 11073 |       |       |       |       |
| 11074  | Extra over either of Items 11071 to 11073 inclusive for paving, etc., hardened with approved liquid hardener and/or dust proofer.....   |  |  |             |      | 12.30          | 16.20 | 12.30          | 16.20  | 11074 |       |       |       |       |
| 11075  | Extra over either of Items 11071 to 11073 inclusive for approved coloured cement or pigments.....   |  |  |             |      | 7.80           | 9.70  | 7.80           | 9.70   | 11075 |       |       |       |       |
|  |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
|  |   |  |  | 20 mm Thick |      |                |       | 25 mm Thick    |        |       |       |       |       |       |
|  |   |  |  | Height (mm) |      |                |       | Height (mm)    |        |       |       |       |       |       |
|  |   |  |  | n.e.        | 75 - | 150 -          | 225 - | n.e.           | 75 -   | 150 - | 225 - |       |       |       |
|  |   |  |  | 75          | 150  | 225            | 300   | 75             | 150    | 225   | 300   |       |       |       |
|  |   |  |  | A           | B    | C              | D     | E              | F      | G     | H     |       |       |       |
|  |   |  |  | \$          | \$   | \$             | \$    | \$             | \$     | \$    | \$    |       |       |       |
| <i>Per linear metre</i>  |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
| 11076  | Granolithic Mix A skirting with splayed, rounded or rebated top edge, and square, splayed or coved bottom trowelled finish.....   |  |  |             |      | 8.70           | 17.90 | 26.60          | 35.80  | 9.30  | 19.10 | 30.00 | 41.00 | 11076 |
| 11077  | Granolithic Mix B ditto.....  |  |  |             |      | 9.30           | 18.60 | 28.10          | 38.30  | 9.60  | 21.80 | 31.90 | 44.00 | 11077 |
| 11078  | Add to either of Items 11076 to 11077 inclusive for rubbed finish.....  |  |  |             |      | 3.40           | 6.70  | 10.00          | 13.30  | 3.30  | 6.80  | 10.10 | 13.40 | 11078 |
| 11079  | Granolithic Mix C skirting with splayed, rounded or rebated top edge, and square, splayed or coved bottom washed finish.....  |  |  |             |      | 11.30          | 24.10 | 35.80          | 49.50  | 12.20 | 26.60 | 40.00 | 55.30 | 11079 |
| 11080  | Granolithic Mix D ditto.....  |  |  |             |      | 11.70          | 24.80 | 36.30          | 52.70  | 12.60 | 28.00 | 42.50 | 58.10 | 11080 |
| 11081  | Add to either of Items 11076 to 11077 inclusive and Items 11079 to 11080 inclusive for labour forming open string or stepped wall string at side of stairs.....                                   |  |  |             |      | 1.30           | 2.30  | 3.10           | 4.50   | 1.40  | 2.50  | 3.20  | 4.60  | 11081 |
| 11082  | Add to either of Items 11076 to 11077 inclusive and Items 11079 to 11080 inclusive for full thickness in coloured cement or pigments.....   |  |  |             |      | 0.60           | 1.60  | 2.40           | 3.40   | 0.80  | 1.60  | 2.80  | 3.80  | 11082 |
|  |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
|  |   |  |  | Mix A and B |      |                |       | Mix C and D    |        |       |       |       |       |       |
|  |   |  |  | Height (mm) |      |                |       | Height (mm)    |        |       |       |       |       |       |
|  |   |  |  | n.e.        | 75 - | 150 -          | 225 - | n.e.           | 75 -   | 150 - | 225 - |       |       |       |
|  |   |  |  | 75          | 150  | 225            | 300   | 75             | 150    | 225   | 300   |       |       |       |
|  |   |  |  | A           | B    | C              | D     | E              | F      | G     | H     |       |       |       |
|  |   |  |  | \$          | \$   | \$             | \$    | \$             | \$     | \$    | \$    |       |       |       |
| <i>Per linear metre</i>  |   |  |  |             |      |                |       |                |        |       |       |       |       |       |
| 11083  | Add to either of Items 11076, 11077, 11079 and 11080 inclusive for skirting of any thickness if executed in two coats with finishing coat 10 mm thick mixed with coloured cement or pigments..... |  |  |             |      | 0.50           | 0.90  | 1.40           | 2.00   | 0.50  | 0.90  | 1.50  | 2.20  | 11083 |

| Item                    | Type A<br>(white<br>or<br>coloured<br>cement)   | Type B<br>(white<br>or<br>coloured<br>cement) | Type C<br>(white<br>or<br>coloured<br>cement) | Item   |       |
|-------------------------|---|---|---|--------|-------|
| <b>TERRAZZO WORK</b>    |   |   |   |        |       |
| <i>Per square metre</i> |   |   |   |        |       |
|                         | A<br>\$   | B<br>\$                                       | C<br>\$                                       |        |       |
| 11084                   | 25 mm Thick on floors.....  | 119.90  | 119.50  | 119.30 | 11084 |
| 11085                   | 25 mm Thick on treads of stairs.....  | 125.00  | 125.00  | 125.00 | 11085 |
| 11086                   | 15 mm Thick to risers and ends of stair, sides and top of upstand kerbs, sides and bottom of channels and sinkings, and the like.....                                       | 126.80  | 126.70  | 126.40 | 11086 |
| 11087                   | 20 mm Thick on walls, columns or vertical surfaces including 1 coat of wax polish on finished surface.....  | 147.10  | 146.60  | 146.30 | 11087 |
| 11088                   | 15 mm Thick to tops, sides, soffits and edges of shelves, working slabs, sinks, cills and the like.....   | 129.60  | 129.30  | 128.90 | 11088 |
| <i>Per linear metre</i> |   |   |   |        |       |
| 11089                   | 20 mm Thick skirting n.e. 75 mm high with splayed, rounded or rebated top edge, and square, splayed or coved bottom including 1 coat of wax polish on finished surface..... | 13.10   | 13.10   | 13.10  | 11089 |
| 11090                   | Ditto but 75 - 150 mm high.....   | 28.40   | 28.20   | 28.20  | 11090 |
| 11091                   | Ditto but 150 - 225 mm high.....  | 49.20   | 49.20   | 49.10  | 11091 |
| 11092                   | Ditto but 225 - 300 mm high.....  | 67.70   | 67.70   | 67.50  | 11092 |
|                         | Add to either of Items 11089 to 11092 inclusive for labour forming open string or stepped wall string at side of stairs.....  | 20%   | 20%   | 20%    |       |

| Item   | Thickness (mm)   |                          |                               |                          | Item                          |
|--|--|--------------------------|-------------------------------|--------------------------|-------------------------------|
|  | n.e. 9.5   |                          | exceeding 9.5                 |                          |                               |
|  | Tile size  | n.e. 0.36 m <sup>2</sup> | Exceeding 0.36 m <sup>2</sup> | n.e. 0.36 m <sup>2</sup> | Exceeding 0.36 m <sup>2</sup> |
|  |  | A                        | B                             | C                        | D                             |
|  |  | \$                       | \$                            | \$                       | \$                            |
| <b>CERAMIC AND QUARRY FLOOR TILES</b>                        |  |                          |                               |                          |                               |
| Ceramic floor tiles and quarry floor tiles in any colour : - |  |                          |                               |                          |                               |
| <i>Per square metre</i>                                      |  |                          |                               |                          |                               |
| 11093  | Tiling on floors.....  | 170.40                   | 180.70                        | 186.40                   | 196.70                        |
| 11094  | Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like.....                                   | 174.50                   | 186.70                        | 190.50                   | 202.90                        |
| <i>Per linear metre</i>                                      |  |                          |                               |                          |                               |
| 11095  | Extra over Item 11094 for stair tread tile.....  | 7.40                     | 7.40                          | 7.40                     | 7.40                          |
| 11096  | Skirting 100 mm high with rounded top edges and coved bottom.....  | 32.10                    | -                             | 35.80                    | -                             |
| 11097  | Ditto but 150 mm high.....   | 40.20                    | -                             | 45.10                    | -                             |
| 11098  | Ditto but 200 mm high.....   | 51.90                    | -                             | 57.50                    | -                             |
|  | Add to either of Items 11096 to 11098 inclusive for labour forming open string or stepped wall string at side of stairs.....                               | 20%                      | -                             | 20%                      | -                             |
| <i>Per square metre</i>                                      |  |                          |                               |                          |                               |
| 11099  | Lay only tiling on floors.....   | 69.20                    | 75.50                         | 69.20                    | 75.50                         |
| 11100  | Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like.....                             | 73.40                    | 81.60                         | 73.40                    | 81.60                         |
| 11101  | Rake out joints between tiles and point in natural or coloured cement and sand grout on existing tiled surface.....  | 34.10                    | 32.60                         | 34.10                    | 32.60                         |
| 11102  | Hack out and replace tiling on floor in isolated patches and point to match existing.....  | 199.80                   | 211.20                        | 217.30                   | 228.70                        |
|  | Add to either of Items 11093 to 11094 inclusive, Items 11096 to 11098 inclusive and Item 11102 for ceramic and quarry floor tiles of specific quality..... |                          |                               |                          | 65%                           |



| Item   |  |        |        |        | Item   |       |
|--|--|--------|--------|--------|--------|-------|
| <b>CONCRETE FLOOR TILES</b>  |  |        |        |        |        |       |
| Concrete floor tiles to BS 1197 in any colour and size :-  |  |        |        |        |        |       |
| 30 mm thick (maximum)  |  |        |        |        |        |       |
| Finish   |  |        |        |        |        |       |
| Concrete   |  |        |        |        |        |       |
| Granolithic  |  |        |        |        |        |       |
| Tile Size  |  |        |        |        |        |       |
| n.e. 0.05 m <sup>2</sup>   |  |        |        |        |        |       |
| Exceeding 0.05 m <sup>2</sup>  |  |        |        |        |        |       |
| n.e. 0.05 m <sup>2</sup>   |  |        |        |        |        |       |
| Exceeding 0.05 m <sup>2</sup>  |  |        |        |        |        |       |
| A B C D  |  |        |        |        |        |       |
| \$ \$ \$ \$  |  |        |        |        |        |       |
| 11103  | Tiling on floors.....  | 137.50 | 98.40  | 220.60 | 188.50 | 11103 |
| 11104  | Tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like.....          | 145.60 | 104.40 | 229.20 | 192.90 | 11104 |
| <i>Per linear metre</i>  |  |        |        |        |        |       |
| 11105  | Extra over either of Items 11103 to 11104 inclusive for tile with rounded edge.....  | 10.80  | 15.20  | 8.90   | 10.90  | 11105 |
| 11106  | Skirting 100 mm high with rounded top edges and coved bottom.....  | 38.20  | 40.70  | 51.00  | 54.30  | 11106 |
| 11107  | Ditto but 150 mm high.....   | 55.00  | 58.20  | 74.20  | 78.90  | 11107 |
| 11108  | Ditto but 200 mm high.....   | 70.70  | 73.50  | 95.00  | 99.80  | 11108 |
| Add to either of Items 11106 to 11108 inclusive for labour forming open string or stepped wall string at side of stairs..... |  |        |        |        |        |       |
| 20% 20% 20% 20%  |  |        |        |        |        |       |
| <i>Per square metre</i>  |  |        |        |        |        |       |
| 11109  | Lay only tiling on floors.....   | 50.60  | 35.90  | 50.60  | 35.90  | 11109 |
| 11110  | Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like..... | 57.30  | 40.40  | 57.30  | 40.40  | 11110 |

| Item  |  | Thickness (mm) |        | Item   |       |
|-------|--|----------------|--------|--------|-------|
|       |  | 20             | 30     |        |       |
|       | <b>TERRAZZO FLOOR TILES</b>  |                |        |        |       |
|       | Terrazzo floor tiles to BS EN 13748 in any size, colour and surface finish :-  |                |        |        |       |
|       | <i>Per square metre</i>  | A              | B      |        |       |
|       |  | \$             | \$     |        |       |
| 11111 | Tiling on floors.....  | 170.30         | 192.20 | 11111  |       |
| 11112 | Tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like.....          | 178.30         | 203.10 | 11112  |       |
|       | <i>Per linear metre</i>  |                |        |        |       |
| 11113 | Extra over Item 11112 for stair tread tile.....  | 24.10          | 25.30  | 11113  |       |
| 11114 | Skirting 100 mm high with rounded top edges and coved bottom.....  | 44.80          | 50.00  | 11114  |       |
| 11115 | Ditto but 150 mm high.....   | 57.90          | 64.20  | 11115  |       |
| 11116 | Ditto but 200 mm high.....   | 73.00          | 79.70  | 11116  |       |
|       | Add to either of Items 11114 to 11116 inclusive for labour forming open string or stepped wall string at side of stairs.....   | 20%            | 20%    |        |       |
|       | <i>Per square metre</i>  |                |        |        |       |
| 11117 | Lay only tiling on floors.....   | 49.90          | 56.70  | 11117  |       |
| 11118 | Lay only tiling to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like..... | 57.70          | 65.70  | 11118  |       |
| 11119 | Hack out and replace tiling on floor in isolated patches and point to match existing.....                                      | 176.10         | 201.80 | 11119  |       |
|       | <b>CORK TILING</b>   |                |        |        |       |
|       | Cork tiles of any size laid and fixed with adhesive including cleaning down and polishing with wax emulsion :-                 |                |        |        |       |
|       | <i>Per square metre</i>  |                |        |        |       |
|       |  | A              | B      | C      |       |
|       |  | \$             | \$     | \$     |       |
| 11120 | Tiling on floors.....  | 123.90         | 169.10 | 207.90 | 11120 |
| 11121 | Tiling to walls, columns and vertical surfaces.....  | 125.80         | 170.90 | 209.80 | 11121 |
| 11122 | Tiling to ceilings .....   | 127.50         | 172.90 | 211.70 | 11122 |
| 11123 | Lay only tiling on floors.....   | 37.70          | 37.70  | 37.70  | 11123 |
| 11124 | Ditto to walls, columns and vertical surfaces.....   | 38.90          | 38.90  | 38.90  | 11124 |
| 11125 | Ditto to ceilings.....   | 41.20          | 41.20  | 41.20  | 11125 |

| Item  |   | Thickness (mm)                 |                                |  | Item                             |                                    |
|-------|---|--------------------------------|--------------------------------|--|----------------------------------|------------------------------------|
|       |   | 2                              | 2.5                            | 3.2                                    |                                  |                                    |
|       | <b>FLEXIBLE TILES OR SHEET FINISHES</b>   |                                |                                |  |                                  |                                    |
|       | Supply and lay flexible tiles as G.S. Items 18.130, 18.131 and 18.134 in any colour and patterns :-                               |                                |                                |  |                                  |                                    |
|       | <i>Per square metre</i>   |                                |                                |  |                                  |                                    |
|       |   | Unbacked flexible vinyl tiles  | Semi-flexible p.v.c. tiles     | Lino-leum tiles                        |                                  |                                    |
|       |   | A                              | B                              | C                                      |                                  |                                    |
|       |   | \$                             | \$                             | \$                                     |                                  |                                    |
| 11126 | Tiling on floors.....   | 118.10                         | 142.30                         | 200.00                                 | 11126                            |                                    |
| 11127 | Tiling to treads and risers of stairs.....  | 126.70                         | 152.70                         | 210.50                                 | 11127                            |                                    |
| 11128 | Lay only tiling on floors.....  | 38.40                          | 38.40                          | 38.40                                  | 11128                            |                                    |
| 11129 | Lay only tiling to treads and risers of stairs.....   | 43.60                          | 43.60                          | 43.60                                  | 11129                            |                                    |
|       | Supply and lay flexible sheet as G.S. Items 18.132 to 18.134 in any colour and patterns :-  | Overall thickness (mm)         |                                |  |                                  |                                    |
|       |   | 1.2                            | 2                              | 3                                      | 3.2                              | 4.5                                |
|       |   | Un-backed flexible vinyl sheet | Un-backed flexible vinyl sheet | Foam backed (1.5 mm thick) vinyl sheet | Lino-leum sheet                  | Lino-leum sheet                    |
|       | <i>Per square metre</i>   | A                              | B                              | C                                      | D                                | E                                  |
|       |   | \$                             | \$                             | \$                                     | \$                               | \$                                 |
| 11130 | Sheeting on floors.....   | -                              | 120.90                         | 136.20                                 | 218.20                           | 286.50                             |
| 11131 | Sheeting to treads and risers of stairs.....  | -                              | 138.00                         | 145.60                                 | 231.10                           | 303.10                             |
| 11132 | Sheeting to walls.....  | 121.20                         | -                              | -                                      | -                                | -                                  |
| 11133 | Lay only sheeting on floors.....  | -                              | 40.30                          | 40.30                                  | 43.40                            | 49.70                              |
| 11134 | Lay only sheeting to treads and risers of stairs.....   | -                              | 45.00                          | 45.00                                  | 48.20                            | 57.60                              |
| 11135 | Lay only sheeting to walls.....   | 60.00                          | -                              | -                                      | -                                | -                                  |
|       | Supply and lay in any colour and patterns :-  |                                |                                |  | Vinyl tiles or sheets 2 mm thick | Vinyl tiles or sheets 3.2 mm thick |
|       | (Note :- The following Items 11136 and 11137 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.) |                                |                                |  | A                                | B                                  |
|       | <i>Per square metre</i>   |                                |                                |  | \$                               | \$                                 |
| 11136 | Proprietary vinyl flooring in tiles or sheets with chemical resistance property complying with ASTM F925.....                     |                                |                                |  | 277.80                           | 318.90                             |
| 11137 | Ditto and with electrical resistance property complying with ASTM F150 including all necessary conductive media.....              |                                |                                |  | 311.50                           | 416.80                             |

| Item  |   |                  | Item   |       |
|-------|---|------------------|--------|-------|
|       | <b>FLEXIBLE TILES OR SHEET FINISHES (CONT'D)</b>  |                  |        |       |
|       | <i>Per linear metre</i>   | A<br>\$          |        |       |
| 11138 | Preformed flexible P.V.C. skirting 100 mm high coved bottom and rounded or bevelled at top edge.....  | 54.20            | 11138  |       |
| 11139 | L' shape PVC skirting of size 100 x 45 x 2 mm thick.....  | 56.10            | 11139  |       |
| 11140 | Cove former and capping strip for vinyl roll-up skirting.....   | 90.50            | 11140  |       |
| 11141 | Vinyl heavy duty safety roll-up skirting.....   | 80.10            | 11141  |       |
| 11142 | PVC stair nosing 75 x 34 mm.....  | 79.10            | 11142  |       |
|       | <i>Per square metre</i>   |                  |        |       |
| 11143 | Take up loose tiles of any description and size, clean back of tiles, prepare bed for and re-lay tiles, in plain or in patterns, with approved mastic or adhesive to match existing and wax polish to an approved finish..... | 49.90            | 11143  |       |
| 11144 | Ditto but sheeting on floors.....   | 67.90            | 11144  |       |
| 11145 | Ditto but sheeting to walls.....  | 100.60           | 11145  |       |
| 11146 | Scrub, clean and apply two coats wax polish with machine buffed on floors.....  | 7.90             | 11146  |       |
| 11147 | Scrub, clean and apply sealer and two coats machine applied polish on floors.....   | 10.10            | 11147  |       |
|       | <i>Per linear metre</i>   |                  |        |       |
| 11148 | Take up loose skirting of any description and size, clean back of skirting, prepare bed for and re-fix skirting with approved mastic or adhesive to match existing and wax polish to an approved finish.....                  | 5.90             | 11148  |       |
|       | <b>RUBBER TILES AND SHEET</b>   |                  |        |       |
|       | Supply and lay as G.S. Item 18.135 in any size, colour and patterns :-  |                  |        |       |
|       | <i>Per square metre</i>   |                  |        |       |
|       |   | Thickness (mm)   |        |       |
|       |   | 4      4         |        |       |
|       |   | Tiles      Sheet |        |       |
|       |   | A      B         |        |       |
|       |   | \$      \$       |        |       |
| 11149 | Tiling/Sheeting on floors.....  | 408.40           | 474.30 | 11149 |
| 11150 | Tiling/Sheeting to treads and risers of stairs.....   | 433.30           | 503.50 | 11150 |
| 11151 | Lay only tiling/sheeting on floors.....   | 34.40            | 55.80  | 11151 |
| 11152 | Lay only tiling/sheeting to treads and risers of stairs.....  | 40.00            | 64.80  | 11152 |

| Item  |   |                         | Item                                |
|-------|---|-------------------------|-------------------------------------|
|       | <b>RUBBER TILES AND SHEET (CONT'D)</b>  |                         |                                     |
|       | <i>Per square metre</i>   | A<br>\$                 |                                     |
| 11153 | Take up loose tiles of any description and size, clean back of tiles, prepare bed for and re-lay tiles, in plain or in patterns, with approved mastic or adhesive to match existing and wax polish to an approved finish..... | 42.00                   | 11153                               |
| 11154 | Ditto but sheeting on floors.....   | 56.60                   | 11154                               |
| 11155 | Scrub, clean and apply two coats wax polish with machine buffed on floors.....  | 7.90                    | 11155                               |
| 11156 | Scrub, clean and apply sealer and two coats machine applied polish on floors.....   | 8.70                    | 11156                               |
|       | <b>MOSAIC FLOOR AND WALL TILES</b>  |                         |                                     |
|       | Supply and lay as G.S. Item 18.110 but of any colour, size and surface finish :-  |                         |                                     |
|       | <i>Per square metre</i>   | Glass<br>mosaic<br>tile | Glazed<br>ceramic<br>mosaic<br>tile |
|       |   | A<br>\$                 | B<br>\$                             |
|       |   | C<br>\$                 | C<br>\$                             |
| 11157 | Tiling on floors.....   | 139.70                  | 163.30                              |
| 11158 | Tiling on walls or columns.....   | 139.80                  | 166.80                              |
| 11159 | Tiling to treads and risers, return ends, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitments, working benches and the like.....  | 150.20                  | 178.40                              |
|       | <i>Per linear metre</i>   |                         |                                     |
| 11160 | Extra over either of Items 11157 to 11159 inclusive for setting one row of tiles on splay at internal angle or junction of floor and wall tiling and the like.....  | 3.70                    | 3.70                                |
| 11161 | Skirting n.e. 75 mm high, with square top edge and square or splay bottom edge.....   | 10.10                   | 11.10                               |
| 11162 | Ditto but 75 - 150 mm high.....   | 15.50                   | 18.50                               |
| 11163 | Ditto but 150 - 225 mm high.....  | 20.90                   | 25.90                               |
| 11164 | Ditto but 225 - 300 mm high.....  | 26.30                   | 33.30                               |
|       | Add to either of Items 11161 to 11164 inclusive for labour forming open string or stepped wall string at side of stairs.....  | 20%                     | 20%                                 |
|       | <i>Per square metre</i>   |                         |                                     |
| 11165 | Lay only tiling on floors.....  | 46.50                   | 46.50                               |
| 11166 | Lay only tiling on walls or columns.....  | 49.90                   | 49.90                               |
| 11167 | Lay only tiling to treads and risers, end of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitment, working slabs and the like.....  | 54.40                   | 54.40                               |
| 11168 | Rake out joints between tiles and point in natural or coloured cement and sand grout on existing tiled surface.....   | 46.90                   | 46.90                               |

| Item  |  | Thickness (mm) |                          |                               |                          |                               |
|---|--|----------------|--------------------------|-------------------------------|--------------------------|-------------------------------|
|   |  | n.e. 9.5       |                          | exceeding 9.5                 |                          |                               |
|   |  | Tile size      | n.e. 0.05 m <sup>2</sup> | Exceeding 0.05 m <sup>2</sup> | n.e. 0.05 m <sup>2</sup> | Exceeding 0.05 m <sup>2</sup> |
|   |  |                | A                        | B                             | C                        | D                             |
|   |  |                | \$                       | \$                            | \$                       | \$                            |
| <b>CERAMIC WALL TILES</b>   |  |                |                          |                               |                          |                               |
| Ceramic wall tiles in any colour and surface finish :-  |  |                |                          |                               |                          |                               |
|   |  |                |                          |                               |                          |                               |
| <i>Per square metre</i>   |  |                |                          |                               |                          |                               |
| 11169   | Tiling on walls, columns, cills, top and edges of slabs, surfaces of fitment and the like.....                       |                | 156.60                   | 150.30                        | 175.80                   | 169.60                        |
| 11170   | Lay only tiling on walls, columns, cills, top edges of slabs and the like.....                                       |                | 60.00                    | 53.80                         | 60.00                    | 53.80                         |
| 11171   | Rake out joints between tiles and point in natural or coloured cement and sand grout on existing tiled surface ..... |                | 36.80                    | 34.10                         | 36.80                    | 34.10                         |
| 11172   | Hack out and replace tiling in isolated patches and point to match existing.....                                     |                | 184.70                   | 177.90                        | 205.80                   | 198.90                        |
|   | Add to either of Items 11169 and 11172 inclusive for ceramic wall tiles of specific quality.....                     |                |                          |                               |                          | 65%                           |
| <b>SWIMMING POOL TILES</b>  |  |                |                          |                               |                          |                               |
| Approved glazed ceramic swimming pool tiles of non-decaying and corrosion-proof, resistant to aggressive water treated with chlorine and ozone, cleaning agents and disinfectants and slip resistant complying with DIN 51097, in any size, colour, surface finish and thickness, all in accordance with the Specification :- |  |                |                          |                               |                          |                               |
|   |  |                |                          |                               | Supply and fix           | Fix only                      |
|   |  |                |                          |                               | A                        | B                             |
|   |  |                |                          |                               | \$                       | \$                            |
| <i>Per square metre</i>   |  |                |                          |                               |                          |                               |
| 11173   | Pool wall tiles; laid in pattern.....  |                |                          |                               | 313.60                   | 75.80                         |
| 11174   | Pool floor tiles.....  |                |                          |                               | 298.50                   | 66.80                         |
| 11175   | Ditto; sloping.....  |                |                          |                               | 302.20                   | 69.00                         |
| 11176   | Pool tiles to steps, reveal, sides and soffit of recess.....   |                |                          |                               | 330.60                   | 86.00                         |
| <i>Per linear metre</i>   |  |                |                          |                               |                          |                               |
| 11177   | Extra over Item 11173 for pool edging tile with safety marking.....  |                |                          |                               | 191.90                   | -                             |
| 11178   | Extra over Item 11173 for pool edging tile with grooved and safety marking.....                                      |                |                          |                               | 333.60                   | -                             |
| 11179   | Extra over Item 11173 for tile with coved bottom between sides and bottom of swimming pool.....                      |                |                          |                               | 198.80                   | -                             |
| 11180   | Extra over Item 11173 for tile with coved bottom between sides and bottom of overflow channel.....                   |                |                          |                               | 188.40                   | -                             |

| Item  |   |                      |                  | Item  |
|-------|---|----------------------|------------------|-------|
|       | <b>SWIMMING POOL TILES (CONT'D)</b>   |                      |                  |       |
|       | Approved glazed ceramic swimming pool tiles of non-decaying and corrosion-proof, resistant to aggressive water treated with chlorine and ozone, cleaning agents and disinfectants and slip resistant complying with DIN 51097, in any size, colour, surface finish and thickness, all in accordance with the Specification : - (Cont'd) |                      |                  |       |
|       |   | Supply<br>and<br>fix | Fix<br>only      |       |
|       |   | A<br>\$              | B<br>\$          |       |
|       | <b>Per linear metre</b>   |                      |                  |       |
| 11181 | Extra over Item 11173 for corner tiles.....   | 235.60               | -                | 11181 |
| 11182 | Extra over Item 11174 for lane marking tiles in any size, colour and thickness.....   | 7.20                 | -                | 11182 |
| 11183 | Coved skirting tiles in any size, colour and thickness.....   | 106.80               | -                | 11183 |
| 11184 | Nosing tiles with embossed surface and finger grip in any size, colour and thickness.....   | 87.80                | -                | 11184 |
| 11185 | Overflow channel in any size, colour and thickness.....   | 1,254.90             | -                | 11185 |
| 11186 | PVC channel grating of any size, colour and thickness.....  | 217.40               | -                | 11186 |
| 11187 | Ditto but including stainless steel wire.....   | 319.00               | -                | 11187 |
|       | <b>Each</b>   |                      |                  |       |
| 11188 | Extra over either of Items 11173 to 11174 inclusive for depth marker and message tiles in any size, colour and thickness.....   | 213.60               | -                | 11188 |
| 11189 | Add to Item 11185 for overflow channel with drainage outlet of any size.....  | 582.00               | -                | 11189 |
|       | <b>Per pair</b>   |                      |                  |       |
| 11190 | Overflow channel internal angle .....   | 265.00               | -                | 11190 |
| 11191 | Pool edging tile internal angle with safety marking.....  | 293.00               | -                | 11191 |
|       | <b>Per square metre</b>   |                      |                  |       |
| 11192 | Rake out joints between tiles and point in approved grouting material on existing tiled surfaces.....   |                      | A<br>\$<br>48.60 | 11192 |

Item

Item

**MOVEMENT JOINTS TO TILING ON SWIMMING POOL AND POOL DECK**

Prepare and apply proprietary one part medium modulus non-acidic and anti-mould sealant based on hybrid silyl modified polyether technology to form a tough, highly durable and water resistant elastomer suitable for intermittent and permanent immersion in potable water complying with the following including priming surfaces with proprietary primer before applying sealant; all in strict compliance with the manufacturer's recommendations :-

|                               |  |
|-------------------------------|--|
| Form                          | Smooth, non-slumping paste   |
| Colour                        | White / Grey / Black / Portland / Buff / Rustic Red / Brown  |
| Movement accommodation factor | 25% butt joints<br>50% lap joints  |
| Skimming time at 20°C/50% RH  | 30 minutes   |
| Cure rate at 20°C/50% RH      | 24 hours<br>48 hours<br>72 hours   |
| Application temperature       | 50°C to 50°C   |
| Service temperature           | Dry<br>Wet   |
| Hardness shore 'A' 20°C       | 32   |
| Standard compliance           | ISO 11600 Type F 25HM<br>DWI Water Quality Regulations 25(1)(b) - Products having a small surface area in contact with water for public supply<br>BS 6920 : Part 1:2000 - Water Regulations Advisory Service<br>ASTM C920 Class 25, Type NS, NT, G<br>Performance criteria of BS 4254(1991)  |
| Chemical resistance           | Resistant to occasional spillage of many chemicals subject to the following limitations :<br>(a) should not be applied at temperatures below 5°C<br>(b) not suitable for contact with bituminous materials<br>(c) must be fully cured prior to immersion in water<br>(d) should not be considered a substitute for a good standard of joint preparation<br>(e) chlorine concentrations should be less than 10 mg/litre |
| Biological resistance         | Resistant to aerobic and anaerobic conditions evaluated in microbiologically active situations   |
| UV resistance                 | Excellent  |

| Joint size (mm) |        |         |         |         |         |         |
|-----------------|--------|---------|---------|---------|---------|---------|
| 5 x 20          | 5 x 25 | 15 x 20 | 15 x 25 | 15 x 50 | 25 x 25 | 25 x 50 |
| A               | B      | C       | D       | E       | F       | G       |
| \$              | \$     | \$      | \$      | \$      | \$      | \$      |
| 17.00           | 19.80  | 37.10   | 42.10   | 86.10   | 72.80   | 139.10  |

*Per linear metre*

11193 Proprietary sealant to movement joints in tiling on swimming pool and pool deck including priming surfaces with proprietary primer before applying sealant .....

11193



| Item  |  |           |                          |                               | Item                     |                               |
|-------|--|-----------|--------------------------|-------------------------------|--------------------------|-------------------------------|
|       | <b>PRECAST CONCRETE PAVING SLAB OR BLOCK</b>   |           |                          |                               |                          |                               |
|       | Precast concrete paving slabs (1:2:4) in any size, colour and surface finish, rectangular or irregular shape : -   |           |                          | Supply and lay                | Lay only                 |                               |
|       | <i>Per square metre</i>  |           |                          | A \$                          | B \$                     |                               |
| 11194 | Slab 50 mm thick.....  |           |                          | 116.40                        | 25.10                    |                               |
|       | Precast concrete blocks laid in stretcher bond, basket weave, herring bone patterns or any mixed colour patterns including all necessary cutting and trimming edges with cement and pouring sand to joints : - |           |                          | Supply and lay                | Lay only                 |                               |
|       | <i>Per square metre</i>  |           |                          | Block thickness (mm)          |                          |                               |
|       |  |           |                          | 60                            | 80                       |                               |
|       |  |           |                          | A \$                          | B \$                     |                               |
|       |  |           |                          | C \$                          |                          |                               |
| 11195 | 200 x 100 mm Natural grey colour rectangular blocks.....   | 132.30    | 151.10                   | 47.70                         | 11195                    |                               |
| 11196 | 200 x 100 mm Red, brown, yellow or charcoal colour rectangular blocks.....   | 133.80    | 153.80                   | 47.70                         | 11196                    |                               |
| 11197 | 225 x 112.50 mm Natural grey colour interlocking blocks.....   | 86.40     | 105.10                   | 47.70                         | 11197                    |                               |
| 11198 | 225 x 112.50 mm Red, brown, yellow or charcoal colour interlocking blocks.....   | 91.50     | 103.20                   | 47.70                         | 11198                    |                               |
|       | <b>RE-CONSTITUTED ARTIFICIAL GRANITE WALL AND FLOOR TILING</b>   |           |                          |                               |                          |                               |
|       | Re-constituted artificial granite tiles in any colour and surface finish : -   |           |                          | Strip tile                    | Square/ rectangular tile |                               |
|       | <i>Per square metre</i>  |           |                          | 10 - 15 mm thick              | 12 - 18 mm thick         |                               |
|       |  | Tile size | n.e. 0.01 m <sup>2</sup> | Exceeding 0.01 m <sup>2</sup> | n.e. 0.01 m <sup>2</sup> | Exceeding 0.01 m <sup>2</sup> |
|       |  |           | A \$                     | B \$                          | C \$                     | D \$                          |
| 11199 | Tiling on floors.....  | 221.00    | 187.10                   | 216.50                        | 192.80                   | 11199                         |
| 11200 | Tiling on walls or columns.....  | 227.70    | 197.30                   | 223.20                        | 204.00                   | 11200                         |
| 11201 | Tiling to treads and risers, return ends, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surface of fitment, working benches and the like.....                                     | 232.30    | 195.00                   | 227.70                        | 200.70                   | 11201                         |
|       | <i>Per linear metre</i>  |           |                          |                               |                          |                               |
| 11202 | Extra over either of Items 11199 to 11201 inclusive for corner tiles.....  | 17.10     | 15.40                    | 69.80                         | 64.70                    | 11202                         |
|       |  |           |                          | Thickness (mm)                |                          |                               |
|       |  |           |                          | n.e. 10                       | 10-15                    | 15-20                         |
|       |  |           |                          | A \$                          | B \$                     | C \$                          |
| 11203 | Re-constituted artificial granite door threshold, n.e. 70 mm wide, with bevelled edges.....  | 96.50     | 115.80                   | 135.00                        |                          | 11203                         |
|       | Add to either of Items 11199 to 11201 inclusive and Item 11203 for re-constituted artificial granite tiles of specific quality.....  |           |                          |                               |                          | 65%                           |

Item

Item

**RE-CONSTITUTED ARTIFICIAL GRANITE WALL AND FLOOR TILING (CONT'D)**

Re-constituted artificial granite tiles in any colour and surface finish : - (Cont'd)

|  | Strip tile       |                             | Square/<br>rectangular tile           |                             |       |
|--|------------------|-----------------------------|---------------------------------------|-----------------------------|-------|
|  | 10 - 15 mm thick |                             | 12 - 18 mm thick                      |                             |       |
|  | Tile<br>Size     | n.e.<br>0.01 m <sup>2</sup> | Exceed-<br>ing<br>0.01 m <sup>2</sup> | n.e.<br>0.01 m <sup>2</sup> |       |
| <i>Per square metre</i>  | A<br>\$          | B<br>\$                     | C<br>\$                               | D<br>\$                     |       |
| 11204 Lay only tiling on floor.....  | 77.00            | 58.90                       | 77.00                                 | 58.90                       | 11204 |
| 11205 Lay only tiling on walls or columns.....   | 83.70            | 69.10                       | 83.70                                 | 69.10                       | 11205 |
| 11206 Lay only tiling to treads and risers, end of stairs, sides and top of upstand kerbs, sides and bottom of channels and sinkings, surfaces of fitment, working slabs and the like..... | 88.20            | 66.80                       | 88.20                                 | 66.80                       | 11206 |
| 11207 Rake out joints between tiles and point in natural or coloured cement and sand grout on existing tiled surface.....  | 25.90            | 19.20                       | 25.90                                 | 19.20                       | 11207 |
| 11208 Hack out and replace tiling in isolated patches and point to match existing.....   | 244.10           | 204.10                      | 239.10                                | 207.40                      | 11208 |

Add to Item 11208 for re-constituted artificial granite tiles of specific quality..... 65%

**PAVERS**

Pavers in any size and colour, laid in stretcher bond, basket weave or herringbone pattern: -

|   | Thickness (mm) |         |         |         |         |         |         |       |
|---|----------------|---------|---------|---------|---------|---------|---------|-------|
|   | 43             | 50      | 55      | 60      | 65      | 76      | 80      |       |
|   | A<br>\$        | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$ | F<br>\$ | G<br>\$ |       |
| 11209 Clay/brick pavers on floor.....   | 123.20         | 132.50  | 144.20  | 154.60  | 165.10  | 187.60  | -       | 11209 |
| 11210 Recycled glass pavers on floor.....   | -              | -       | -       | 348.60  | -       | -       | 389.90  | 11210 |
| 11211 Lay only pavers on floor.....   | 40.80          | 43.20   | 44.20   | 45.40   | 46.50   | 47.70   | 48.90   | 11211 |
| Add to either of Items 11209 and 11210 inclusive for one layer of geogrid reinforcement of 50 KN/m strength and grid size of 25.4 x 25.4 mm underneath sand/sand and cement bedding of paver as detailed on Drawing No. H5136 and 5137 (Payment will only be paid for this item, if ordered by the Maintenance Surveyor in writing.)..... | 12%            | 12%     | 11%     | 9%      | 9%      | 8%      | 8%      |       |

*Per linear metre*

|   |         |       |       |
|---|---------|-------|-------|
| 11212 232 x 115 x 76 mm Kerb brick on sand bed..... | A<br>\$ | 53.10 | 11212 |
| 11213 232 x 115 x 76 mm Kerb brick on mortar.....   |         | 56.20 | 11213 |

| Item  |  |                |        |        |        |        |        |        | Item     |       |
|---|--|----------------|--------|--------|--------|--------|--------|--------|----------|-------|
| <b>STONE SLABS/TILES</b>  |  |                |        |        |        |        |        |        |          |       |
| Natural marble or granite slabs/tiles in any size, shape, pattern and colour :-                       |  |                |        |        |        |        |        |        |          |       |
| <i>Per square metre</i>   |  |                |        |        |        |        |        |        |          |       |
|   | Tiles  | Slabs          |        |        |        |        |        |        |          |       |
|   | Thickness (mm)   | Thickness (mm) |        |        |        |        |        |        |          |       |
|   | 8-12   | 20             | 25     | 32     | 40     | 50     | 75     | 100    |          |       |
|   | A  | B              | C      | D      | E      | F      | G      | H      |          |       |
|   | \$   | \$             | \$     | \$     | \$     | \$     | \$     | \$     |          |       |
| 11214   | Marble slabs/tiles, polished/flamed surface laid on floors.....  | 251.50         | 411.70 | 498.20 | 579.90 | 645.70 | 690.00 | 818.80 | 991.80   | 11214 |
| 11215   | Marble slabs/tiles, polished/flamed surface fixed on walls, columns or vertical surfaces.....  | 364.40         | 505.80 | 571.30 | 656.40 | 786.90 | -      | -      | -        | 11215 |
| 11216   | Marble slabs/tiles, polished/flamed surface laid to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....  | 322.60         | 481.10 | 506.70 | 598.40 | 664.20 | -      | -      | -        | 11216 |
| 11217   | Granite slabs/tiles, polished/flamed surface laid on floors.....   | 247.30         | 392.50 | 473.50 | 579.90 | 645.70 | 690.00 | 779.60 | 991.80   | 11217 |
| 11218   | Granite slabs/tiles, fine hammered dressed surface laid on floors.....   | 290.00         | 468.30 | 484.50 | 582.80 | 649.30 | 705.00 | 802.40 | 1,014.30 | 11218 |
| 11219   | Granite slabs/tiles, polished/flamed surface fixed on walls, columns or vertical surfaces.....   | 465.10         | 617.90 | 634.40 | 721.00 | 786.90 | -      | -      | -        | 11219 |
| 11220   | Granite slabs/tiles, fine hammer dressed surface fixed on walls, columns or vertical surfaces.....   | 550.00         | 617.90 | 634.40 | 721.00 | 786.90 | -      | -      | -        | 11220 |
| 11221   | Granite slabs/tiles, polished/flamed surface laid to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes..... | 351.20         | 572.60 | 589.10 | 680.70 | 746.70 | -      | -      | -        | 11221 |
| 11222   | Granite slabs/tiles, fine hammered dressed surface laid to treads and risers, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....  | 402.90         | 572.60 | 589.10 | 680.70 | 746.70 | -      | -      | -        | 11222 |
| <i>Per linear metre</i>   |  |                |        |        |        |        |        |        |          |       |
|   |  | Thickness (mm) |        |        |        |        |        |        |          |       |
|   |  | 20-30          | 30-40  | 40-50  | 50-75  | 75-100 |        |        |          |       |
|   |  | A              | B      | C      | D      | E      |        |        |          |       |
|   |  | \$             | \$     | \$     | \$     | \$     |        |        |          |       |
| 11223   | Marble/granite mouldings, polished/flamed surface n.e. 100 mm wide.....  | 78.50          | 87.90  | 94.70  | 111.70 | 135.30 |        |        |          | 11223 |
| 11224   | Ditto but 100 - 200 mm wide.....   | 138.90         | 156.70 | 169.10 | 201.80 | 246.90 |        |        |          | 11224 |
| <i>Per linear metre</i>   |  |                |        |        |        |        |        |        |          |       |
|   |  | Thickness (mm) |        |        |        |        |        |        |          |       |
|   |  | n.e. 10        | 10-15  | 15-20  |        |        |        |        |          |       |
|   |  | A              | B      | C      |        |        |        |        |          |       |
|   |  | \$             | \$     | \$     |        |        |        |        |          |       |
| 11225   | Marble/granite door threshold, n.e. 70 mm wide, with bevelled edges.....   | 180.40         | 193.90 | 203.00 |        |        |        |        |          | 11225 |
| Add to either of Items 11214 to 11225 inclusive for natural marble or granite of European origin..... |  |                |        |        |        |        |        |        | 40%      |       |

| Item  |  |                        |        |                      |       |       |        |        |  |  |       | Item |
|-------|--|------------------------|--------|----------------------|-------|-------|--------|--------|--|--|-------|------|
|       | <b>STONE SLABS/TILES (CONT'D)</b>  |                        |        |                      |       |       |        |        |  |  |       |      |
|       | Natural marble or granite slabs/tiles in any size, shape, pattern and colour : - (Cont'd)  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  | Marble / Granite tiles |        | Marble/Granite slabs |       |       |        |        |  |  |       |      |
|       |  | Thickness (mm)         |        | Thickness (mm)       |       |       |        |        |  |  |       |      |
|       |  | 8-12                   | 20-30  | 30-40                | 40-50 | 50-75 | 75-100 |        |  |  |       |      |
|       | <i>Per square metre</i>  | A                      | B      | C                    | D     | E     | F      |        |  |  |       |      |
|       |  | \$                     | \$     | \$                   | \$    | \$    | \$     |        |  |  |       |      |
| 11226 | Lay only slabs/tiles on floors.....  | 62.30                  | 74.60  | 78.10                | 81.50 | 87.10 | 96.20  |        |  |  | 11226 |      |
| 11227 | Fix/lay only slabs/tiles to walls, columns or vertical surfaces.....   | 188.60                 | 228.10 | 232.60               | -     | -     | -      |        |  |  | 11227 |      |
| 11228 | Ditto but including metal support backing frame.....   | -                      | 730.80 | 788.30               | -     | -     | -      |        |  |  | 11228 |      |
| 11229 | Lay only slabs/tiles to treads and risers, steps, return ends, top and sides of counters, cills, door or window jambs and heads, bands, string courses, copings, arches and the like including all necessary cutting and forming holes.....  | 73.60                  | 88.20  | 98.40                | -     | -     | -      |        |  |  | 11229 |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       | <i>Per linear metre</i>  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
| 11230 | Lay only moulding n.e. 100 mm wide.....  |                        | 25.10  | 27.30                | 29.60 | 33.00 | 38.70  |        |  |  | 11230 |      |
| 11231 | Lay only moulding 100 - 200 mm wide.....   |                        | 29.60  | 33.00                | 36.30 | 42.00 | 51.00  |        |  |  | 11231 |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       | <b>SUNDRY PAVING, ETC.</b>   |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       | <i>Per square metre</i>  |                        |        |                      |       |       |        |        |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
| 11232 | Pebble finish 20 mm thick Mix "A" comprising cement, sand and pebble (2:2:3) laid on floor with washed finish.....   |                        |        |                      |       |       |        | A      |  |  |       |      |
|       |  |                        |        |                      |       |       |        | \$     |  |  |       |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
| 11232 | Pebble finish 20 mm thick Mix "A" comprising cement, sand and pebble (2:2:3) laid on floor with washed finish.....   |                        |        |                      |       |       |        | 141.40 |  |  | 11232 |      |
| 11233 | Pebble finish 20 mm thick Mix "B" comprising cement and pebble (2:3) rendering to vertical surfaces with washed finish.....  |                        |        |                      |       |       |        | 178.70 |  |  | 11233 |      |
| 11234 | Pebble paving formed with selected pebbles exceeding 25 mm but n.e. 75 mm gauge, pressed into top of concrete bed (measured separately) before setting to give roughly level surfaces, including neatly recess pointing between pebbles in cement and sand (1:3) grout.....  |                        |        |                      |       |       |        | 283.50 |  |  | 11234 |      |
| 11235 | Small stone paving formed with selected stones exceeding 25 mm but n.e. 100 mm gauge, pressed into top of concrete bed (measured separately) before setting to give roughly level surfaces, including dressing off top of stones after setting to give roughly level surfaces and neatly recess pointing between stones in cement and sand (1:3) grout ..... |                        |        |                      |       |       |        | 345.00 |  |  | 11235 |      |
| 11236 | Silicone carbide non-slip grains sprinkled on and lightly trowelled into surface of paving before setting, at a rate of 0.50 kg/m <sup>2</sup> paving.....   |                        |        |                      |       |       |        | 43.20  |  |  | 11236 |      |
| 11237 | Ditto but at rate of 1 kg/m <sup>2</sup> paving .....  |                        |        |                      |       |       |        | 86.10  |  |  | 11237 |      |
|       |  |                        |        |                      |       |       |        |        |  |  |       |      |
|       | <i>Per linear metre</i>  |                        |        |                      |       |       |        |        |  |  |       |      |
| 11238 | 15 x 25 mm Non-slip insert strips bedded in paving, stair treads or steps as G.S. Item 18.88.....  |                        |        |                      |       |       |        | 28.10  |  |  | 11238 |      |
| 11239 | 75 x 150 x 10 mm Plain vitreous clay or quarry non-slip nosing tiles with grooves or raisings on top surface, bedded, jointed and pointed in cement and sand (1:3) grout .....   |                        |        |                      |       |       |        | 27.10  |  |  | 11239 |      |
| 11240 | Non-ferrous metal nosing angle fixed to stair and step treads.....   |                        |        |                      |       |       |        | 61.10  |  |  | 11240 |      |

| Item  |  |                      |                                      |  | Item        |       |
|-------|--|----------------------|--------------------------------------|--|-------------|-------|
|       | <b>TACTILES</b>  | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|       | Rubber/PVC tactiles with adhesive in any pattern, colour, size and thickness, all in strict accordance with the manufacturer's instructions : -  | A                    | B                                    | C  | D           |       |
|       | <i>Per square metre</i>  | \$                   | \$                                   | \$   | \$          |       |
| 11241 | Rubber/plastic tactiles.....   | 257.60               | 9.60                                 | 12.60  | 40.50       | 11241 |
|       | Ceramic or quarry tile tactiles with cement and sand slurry in any pattern, colour, size and thickness, all in strict accordance with the manufacturer's instructions : -  |                      |                                      |  |             |       |
|       | <i>Per square metre</i>  |                      |                                      |  |             |       |
| 11242 | Ceramic or quarry tile tactiles.....   | 296.50               | 13.30                                | 17.00  | 43.90       | 11242 |
|       | Concrete tactile pavers with cement and sand slurry in any pattern, colour, size and thickness, all in strict accordance with the manufacturer's instructions : -  |                      |                                      |  |             |       |
|       | <i>Per square metre</i>  |                      |                                      |  |             |       |
| 11243 | Concrete block tactiles .....  | 505.80               | 15.60                                | 18.20  | 58.10       | 11243 |
|       | Artificial granite tactiles with cement and sand slurry in any pattern, colour, size and thickness, all in strict accordance with the manufacturer's instructions : -  |                      |                                      |  |             |       |
|       | <i>Per square metre</i>  |                      |                                      |  |             |       |
| 11244 | Artificial granite tactiles.....   | 508.30               | 15.60                                | 18.20  | 61.70       | 11244 |
|       | Supply and fix stainless steel tactile marker grade 316 with studs or strips with or without plastic cover fixed with adhesive, fixing bolts and nuts including drilling, cut holes, make good and all necessary fixing accessories, lay in any pattern and all in strict accordance with the manufacturer's instructions: - |                      |                                      |  |             |       |
|       | <i>Each</i>  |                      |                                      |  |             |       |
| 11245 | 23 mm dia. x 5 mm (positional).....  | 9.00                 | 0.30                                 | 0.70   | 1.40        | 11245 |
| 11246 | 35 mm dia. x 5 mm (hazard warning tile).....   | 9.60                 | 0.30                                 | 0.70   | 1.40        | 11246 |
| 11247 | 34 mm x 285 mm x 5 mm (directional).....   | 60.80                | 1.20                                 | 2.20   | 9.00        | 11247 |
|       | Supply and fix proprietary POM tactile guide path, with or without studs, fixed with adhesive and including drilling, cut holes, make good and all necessary fixing accessories, lay in any pattern and all in strict accordance with the manufacturer's instructions : -  |                      |                                      |  |             |       |
|       | <i>Each</i>  |                      |                                      |  |             |       |
| 11248 | 23 mm Diameter x 5 mm (positional).....  | 5.90                 | 0.30                                 | 0.70   | 1.40        | 11248 |
| 11249 | 35 mm Diameter x 5 mm (hazard warning tile).....   | 6.70                 | 0.30                                 | 0.70   | 1.40        | 11249 |
| 11250 | 34 mm Diameter x 285 mm x 5 mm (directional).....  | 46.30                | 1.20                                 | 2.20   | 9.00        | 11250 |

| Item  |   |                             |           |                               |                 |          |       |       |       |       | Item  |
|-------|---|-----------------------------|-----------|-------------------------------|-----------------|----------|-------|-------|-------|-------|-------|
|       | <b>DIVISION STRIPS</b>  |                             |           |                               |                 |          |       |       |       |       |       |
|       | 3 mm thick  |                             |           |                               |                 |          |       |       |       |       |       |
|       | Depth<br>(mm)   | Plastic                     |           |                               | Stainless steel |          |       | Brass |       |       |       |
|       |   | 20                          | 25        | 40                            | 20              | 25       | 40    | 20    | 25    | 40    |       |
|       |   | A                           | B         | C                             | D               | E        | F     | G     | H     | I     |       |
|       | <i>Per linear metre</i>   | \$                          | \$        | \$                            | \$              | \$       | \$    | \$    | \$    | \$    |       |
| 11251 | Division strips set between different floor or wall finishes.....   | 7.30                        | 8.00      | 9.10                          | 17.10           | 19.90    | 26.70 | 19.90 | 23.60 | 32.90 | 11251 |
|       | <b>SUSPENDED CEILING SYSTEM FOR ACOUSTIC CEILING TILES</b>  |                             |           |                               |                 |          |       |       |       |       |       |
|       | Supply and install suspension (grid) system as G.S. Items 13.23 and 13.45 : -                                   |                             |           |                               |                 |          |       |       |       |       |       |
|       |   | Tile size (m <sup>2</sup> ) |           | Fit for square or rectangular |                 | Fix only |       |       |       |       |       |
|       |   |                             |           | n.e. 0.36                     | exc. 0.36       |          |       |       |       |       |       |
|       | <i>Per square metre</i>   |                             |           | A                             | B               | C        |       |       |       |       |       |
|       |   |                             |           | \$                            | \$              | \$       |       |       |       |       |       |
| 11252 | Metal grid suspension system for acoustic ceiling tiles.....  |                             |           | 66.70                         | 62.30           | 28.20    |       | 11252 |       |       |       |
|       | Add to Item 11252 for suspension system suitable for foam tape or sealing mastic.....                           |                             |           | 15%                           | 15%             | -        |       |       |       |       |       |
|       | Supply and fix acoustic ceiling tiles in any thickness as G.S. Item 13.22 : -                                   |                             |           |                               |                 |          |       |       |       |       |       |
|       |   | Tile size (m <sup>2</sup> ) |           | Fix only                      |                 |          |       |       |       |       |       |
|       |   | n.e. 0.36                   | exc. 0.36 |                               |                 |          |       |       |       |       |       |
|       | <i>Per square metre</i>   | A                           | B         | C                             |                 |          |       |       |       |       |       |
|       |   | \$                          | \$        | \$                            |                 |          |       |       |       |       |       |
| 11253 | Wood or other organic fibre perforated acoustic ceiling tiles.....  | 78.10                       | 89.70     | 16.90                         |                 | 11253    |       |       |       |       |       |
| 11254 | Mineral fibre/rock wool acoustic tiles with fissured design tiles.....  | 78.10                       | 89.70     | 16.90                         |                 | 11254    |       |       |       |       |       |
| 11255 | Moisture resistant mineral fibre/rock wool acoustic tiles.....  | 133.00                      | 146.30    | 16.90                         |                 | 11255    |       |       |       |       |       |
| 11256 | Moisture resistant vinyl faced mineral fibre/rock wool acoustic tiles.....                                      | 153.80                      | 170.70    | 16.90                         |                 | 11256    |       |       |       |       |       |
| 11257 | Moisture resistant hygiene acoustic tiles.....  | 168.30                      | 180.10    | 16.90                         |                 | 11257    |       |       |       |       |       |
| 11258 | Moisture resistant metal foil faced mineral fibre/rock wool acoustic tiles.....                                 | 178.90                      | 190.30    | 16.90                         |                 | 11258    |       |       |       |       |       |
| 11259 | Moisture resistant metal foil faced bio-proof hygiene mineral fibre/rock wool acoustic tiles.....               | 198.40                      | 209.40    | 16.90                         |                 | 11259    |       |       |       |       |       |
| 11260 | Ditto but sealed into the suspension system with low compression foam tape and/or silicone sealing mastic ..... | 227.90                      | 238.20    | 16.90                         |                 | 11260    |       |       |       |       |       |

| Item                  |  |   |                    |                       |               |               |                    | Item   |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
|-----------------------|--|---|--------------------|-----------------------|---------------|---------------|--------------------|--------|---------|----------|---------------|---------------|---------------|--------|---------|---|---------------|---------------|---------------|---------------|---------------|---------------|--|---|---|---|---|---|---|---|----|----|----|----|----|----|----|--|--|--|--|--|--|
|                       | <p><b>SUSPENDED CEILING SYSTEM FOR METAL CEILING</b></p> <p>Supply and install suspension grid system recommended by the manufacturer for approved ceiling type : -</p> <p><i>Per square metre</i></p>   | <table border="1"> <thead> <tr> <th colspan="3">Strip/panel</th> <th rowspan="2">Fix only</th> </tr> <tr> <th>Lay-in</th> <th colspan="2">Clip-in</th> </tr> <tr> <th>Internal type</th> <th>Internal type</th> <th>External type</th> <th></th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>  |                    | Strip/panel           |               |               | Fix only           | Lay-in | Clip-in |          | Internal type | Internal type | External type |        | A       | B | C             | D             | \$            | \$            | \$            | \$            |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Strip/panel           |  |   | Fix only           |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Lay-in                | Clip-in  |   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Internal type         | Internal type  | External type   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| A                     | B  | C   | D                  |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| \$                    | \$   | \$  | \$                 |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11261                 | Metal suspension system for metal ceiling.....   | 66.80   | 69.20              | 76.70                 | 31.60         |               |                    | 11261  |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11262                 | Extra over Item 11261 for air-tight suspension system.....   | 51.00   | 104.00             | -                     | 29.90         |               |                    | 11262  |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
|                       | <p>Non-perforated ceiling panel/strip in any thickness and colour fixed to suspension system in accordance with the manufacturer's instructions (suspension system measured separately) : -</p> <p><i>Per square metre</i></p>   | <table border="1"> <thead> <tr> <th colspan="3">Aluminium panel/strip</th> <th colspan="3">G.M.S. panel/strip</th> <th rowspan="2">Fix only</th> </tr> <tr> <th>Lay-in</th> <th colspan="2">Clip-in</th> <th>Lay-in</th> <th colspan="2">Clip-in</th> </tr> <tr> <th>Internal type</th> <th>Internal type</th> <th>External type</th> <th>Internal type</th> <th>Internal type</th> <th>External type</th> <th></th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table> |                    | Aluminium panel/strip |               |               | G.M.S. panel/strip |        |         | Fix only | Lay-in        | Clip-in       |               | Lay-in | Clip-in |   | Internal type | Internal type | External type | Internal type | Internal type | External type |  | A | B | C | D | E | F | G | \$ | \$ | \$ | \$ | \$ | \$ | \$ |  |  |  |  |  |  |
| Aluminium panel/strip |  |   | G.M.S. panel/strip |                       |               | Fix only      |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Lay-in                | Clip-in  |   | Lay-in             | Clip-in               |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Internal type         | Internal type  | External type   | Internal type      | Internal type         | External type |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| A                     | B  | C   | D                  | E                     | F             | G             |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| \$                    | \$   | \$  | \$                 | \$                    | \$            | \$            |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11263                 | Ceiling panel/strip.....   | 153.90  | 153.90             | 172.20                | 143.60        | 143.60        | 161.10             | 16.90  | 11263   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11264                 | Extra over Item 11263 for additional sound absorbing mats on the rear side of the panel/strip.....   | 40.00   | 40.00              | 40.00                 | 40.00         | 40.00         | 40.20              | 5.70   | 11264   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11265                 | Extra over Item 11263 for air-tight panel/strip.....   | 256.40  | 307.30             | -                     | 247.10        | -             | -                  | 28.40  | 11265   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
|                       | <p><i>Each</i></p> <p>Add to Item 11263 for panel/strip of perforated ceiling type.....</p>  | 10%   | 10%                | 10%                   | 10%           | 10%           | 10%                | 10%    |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
|                       | <p><b>PROPRIETARY SUSPENDED CEILING SYSTEM</b></p> <p>Proprietary aluminium baffle suspended ceiling system comprising minimum 1 mm thick aluminium sheets with powder coated finishes being formed to 25-30 mm wide x 100-150 mm height skeleton panels at specified centres to centres, including forming openings for light fittings or air grilles, fixed to and including suspension system and submission of catalogue, technical literature, samples, shop drawings and manufacturer's guarantee, all in accordance with the manufacturer's instructions : -</p> <p><i>Per square metre</i></p> | <table border="1"> <thead> <tr> <th colspan="2">Ceiling panels at</th> </tr> <tr> <th>100 mm centre</th> <th>150 mm centre</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> </table>   |                    | Ceiling panels at     |               | 100 mm centre | 150 mm centre      | A      | B       | \$       | \$            |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| Ceiling panels at     |  |   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 100 mm centre         | 150 mm centre  |   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| A                     | B  |   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| \$                    | \$   |   |                    |                       |               |               |                    |        |         |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11266                 | Proprietary aluminium baffle suspended ceiling system.....   |   |                    |                       | 1,544.40      | 1,064.90      |                    |        | 11266   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11267                 | Take down and clear away proprietary aluminium baffle suspended ceiling system.....  |   |                    |                       | 44.30         | 30.30         |                    |        | 11267   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11268                 | Take down and set aside for re-use proprietary aluminium baffle suspended ceiling system.....  |   |                    |                       | 52.10         | 35.60         |                    |        | 11268   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |
| 11269                 | Fix only proprietary aluminium baffle suspended ceiling system.....  |   |                    |                       | 695.10        | 474.90        |                    |        | 11269   |          |               |               |               |        |         |   |               |               |               |               |               |               |  |   |   |   |   |   |   |   |    |    |    |    |    |    |    |  |  |  |  |  |  |

| Item  |  |                                |   |   | Item     |       |
|-------|--|--------------------------------|---|---|----------|-------|
|       | <b>SUNDRY LABOURS ON SUSPENDED CEILING SYSTEM</b>  |                                |   |   |          |       |
|       |  |                                | Take down and clear away                      | Take down and set aside for re-use                      |          |       |
|       | <i>Per square metre</i>  |                                | A \$  | B \$  |          |       |
| 11270 | Suspended ceiling system including suspension system and acoustic ceiling tiles (all types).....   |                                | 16.90   | 23.40   | 11270    |       |
| 11271 | Suspended ceiling system including suspension system and metal ceilings (all types).....   |                                | 26.10   | 32.60   | 11271    |       |
|       | Forming openings to existing suspended ceilings :-   | Opening size (m <sup>2</sup> ) | n.e. 0.05                                     | n.e. 0.50   |          |       |
|       |  |                                | Sprinkler heads, smoke detectors and the like | Light fittings, air grilles, access panels and the like |          |       |
|       | <i>Each</i>  |                                | A \$  | B \$  |          |       |
| 11272 | Forming openings through existing suspended ceiling system for acoustic ceiling tiles (all types) including plywood backing as required..... |                                | 7.30  | 33.30   | 11272    |       |
| 11273 | Forming openings through existing suspended ceiling system for metal ceiling (all types) including plywood backing as required.....          |                                | 18.20   | 45.40   | 11273    |       |
|       | <b>RAISED ACCESSED FLOORING</b>  |                                |   |   |          |       |
|       | Raised accessed flooring in any pedestal height as G.S. Items 18.164 to 18.183 :-  | Supply and fix                 | Take down and clear away                      | Take down and set aside for re-use                      | Fix only |       |
|       | <i>Per square metre</i>  | A \$                           | B \$  | C \$  | D \$     |       |
| 11274 | Flooring with bare panel.....  | 388.90                         | 29.50   | 36.20   | 78.90    | 11274 |
| 11275 | Flooring with high pressure laminated panel finish.....  | 535.30                         | 29.50   | 36.20   | 78.90    | 11275 |
| 11276 | Flooring with carpet tile finish.....  | 545.30                         | 29.50   | 36.20   | 78.90    | 11276 |
| 11277 | Flooring with vinyl tile finish.....   | 548.00                         | 29.50   | 36.20   | 78.90    | 11277 |
| 11278 | Access ramp.....   | 1,002.50                       | 30.30   | 41.30   | 180.40   | 11278 |
| 11279 | Steps.....   | 1,263.10                       | 27.30   | 41.30   | 135.30   | 11279 |
|       | <i>Per linear metre</i>  |                                |   |   |          |       |
| 11280 | Standard railing.....  | 1,570.60                       | 14.00   | 19.20   | 136.40   | 11280 |
|       | <i>Each</i>  |                                |   | A \$  |          |       |
| 11281 | Set of picker and tool (lifting device).....   |                                |   | 605.00  | 11281    |       |



| Item  |  |        | Item  |
|-------|--|--------|-------|
|       | <p><b>HEAVY CONTACT QUALITY CARPET</b></p> <p><b>CARPET; FULLY ADHERING METHOD</b></p> <p>Supply and lay carpet with all types of backing and in any series and colour finish required : -</p> |        |       |
|       | <p><i>Per square metre</i></p>   |        |       |
| 11282 | Carpet laid with adhesive.....   | 144.20 | 11282 |
| 11283 | Carpet laid with adhesive and release bond agent.....  | 152.30 | 11283 |
|       | <p>Supply and lay carpet including backing as "Environmentally Friendly Carpet" in any series and colour finish required : -</p>   |        |       |
|       | <p><i>Per square metre</i></p>   |        |       |
| 11284 | Carpet laid with adhesive.....   | 206.00 | 11284 |
| 11285 | Carpet laid with adhesive and release bond agent.....  | 212.50 | 11285 |
|       |  |        |       |
|       | <p><i>Per square metre</i></p>   |        |       |
| 11286 | Carpet laid with adhesive.....   | 259.60 | 11286 |
| 11287 | Carpet laid with adhesive and release bond agent.....  | 274.50 | 11287 |
|       | Alterations and repairs : -  |        |       |
|       | <p><i>Per square metre</i></p>   |        |       |
| 11288 | Take up and clear away existing carpet of any type.....  | 6.60   | 11288 |
| 11289 | Take up existing carpet of any type and set aside for re-use.....  | 16.20  | 11289 |
| 11290 | Lay or fix only carpet of any type with adhesive.....  | 22.60  | 11290 |
| 11291 | Lay or fix only carpet of any type with adhesive and release bond agent.....   | 33.80  | 11291 |

| Carpet                           |           |         |           |           |         |
|----------------------------------|-----------|---------|-----------|-----------|---------|
| Pile weight (kg/m <sup>2</sup> ) |           |         |           |           |         |
| n.e. 1.50                        |           |         | exc. 1.50 |           |         |
| to floor                         | to stairs | to wall | to floor  | to stairs | to wall |
| A                                | B         | C       | D         | E         | F       |
| \$                               | \$        | \$      | \$        | \$        | \$      |
| 144.20                           | 164.20    | 192.70  | 202.60    | 217.20    | 242.70  |
| 152.30                           | 173.80    | 202.50  | 202.50    | 221.50    | 248.80  |

| Carpet                           |           |         |           |           |         |
|----------------------------------|-----------|---------|-----------|-----------|---------|
| Pile weight (kg/m <sup>2</sup> ) |           |         |           |           |         |
| n.e. 1.00                        |           |         | exc. 1.00 |           |         |
| to floor                         | to stairs | to wall | to floor  | to stairs | to wall |
| A                                | B         | C       | D         | E         | F       |
| \$                               | \$        | \$      | \$        | \$        | \$      |
| 206.00                           | 223.30    | 252.20  | 234.20    | 256.60    | 287.00  |
| 212.50                           | 229.40    | 261.10  | 251.80    | 270.90    | 298.30  |

| Carpet                               |           |         |
|--------------------------------------|-----------|---------|
| Pile density (fibre/m <sup>2</sup> ) |           |         |
| exc. 75 million                      |           |         |
| to floor                             | to stairs | to wall |
| A                                    | B         | C       |
| \$                                   | \$        | \$      |
| 259.60                               | 278.30    | 301.70  |
| 274.50                               | 289.30    | 322.00  |

| Carpet   |           |         |
|----------|-----------|---------|
| to floor | to stairs | to wall |
| A        | B         | C       |
| \$       | \$        | \$      |
| 6.60     | 8.00      | 8.70    |
| 16.20    | 19.40     | 21.10   |
| 22.60    | 33.80     | 37.30   |
| 33.80    | 39.50     | 45.10   |

Item

Item

**HEAVY CONTACT QUALITY CARPET (CONT'D)**

**CARPET; GRIPPER METHOD**

Supply and lay carpet with all type of backing and in any series and colour finish required :-

*Per square metre*

| Carpet                           |           |           |           |
|----------------------------------|-----------|-----------|-----------|
| Pile weight (kg/m <sup>2</sup> ) |           |           |           |
| n.e. 1.50                        |           | exc. 1.50 |           |
| to floor                         | to stairs | to floor  | to stairs |
| A                                | B         | C         | D         |
| \$                               | \$        | \$        | \$        |
| 148.90                           | 190.20    | 222.80    | 260.60    |
| 178.60                           | 218.80    | 251.20    | 291.40    |

11292 Carpet laid with grippers..... 11292

11293 Ditto with underlays..... 11293

Supply and lay carpet including backing as "Environmentally Friendly Carpet" in any series and colour finish required :-

*Per square metre*

| Carpet                           |           |           |           |
|----------------------------------|-----------|-----------|-----------|
| Pile weight (kg/m <sup>2</sup> ) |           |           |           |
| n.e. 1.00                        |           | exc. 1.00 |           |
| to floor                         | to stairs | to floor  | to stairs |
| A                                | B         | C         | D         |
| \$                               | \$        | \$        | \$        |
| 214.20                           | 255.20    | 264.20    | 315.30    |
| 243.40                           | 284.20    | 297.40    | 334.20    |

11294 Carpet laid with grippers..... 11294

11295 Ditto with underlays..... 11295

Alterations and repairs :-

*Per square metre*

| Carpet   |           |
|----------|-----------|
| to floor | to stairs |
| A        | B         |
| \$       | \$        |
| 6.60     | 8.00      |
| 16.20    | 19.40     |
| 19.40    | 23.40     |
| 22.60    | 62.00     |
| 28.20    | 67.70     |
| 56.80    | 96.30     |

11296 Take up and clear away existing carpet of any type with or without underlay..... 11296

11297 Take up existing carpet of any type and set aside for re-use..... 11297

11298 Ditto but including underlays..... 11298

11299 Lay only carpet of any type with and including grippers..... 11299

11300 Ditto with underlays..... 11300

11301 Lay only carpet of any type including provision of new underlays and clear away old underlays..... 11301

**100% PURE WOOL CARPET; GRIPPER METHOD**

*Per square metre*

| Carpet                           |           |           |           |
|----------------------------------|-----------|-----------|-----------|
| Pile weight (kg/m <sup>2</sup> ) |           |           |           |
| n.e. 2.05                        |           | exc. 2.05 |           |
| to floor                         | to stairs | to floor  | to stairs |
| A                                | B         | C         | D         |
| \$                               | \$        | \$        | \$        |
| 378.50                           | 413.70    | 426.20    | 472.00    |
| 398.30                           | 434.10    | 467.20    | 505.20    |
| 642.40                           | 679.60    | 694.00    | 731.20    |
| 675.50                           | 716.90    | 727.10    | 768.50    |

11302 Carpet 'machine tufted' laid with grippers..... 11302

11303 Ditto with underlays..... 11303

11304 Carpet 'hand made' laid with grippers..... 11304

11305 Ditto with underlays..... 11305

Item

Item

**HEAVY CONTACT QUALITY CARPET (CONT'D)**

**100% PURE WOOL CARPET; GRIPPER METHOD (CONT'D)**

Alterations and repairs : -

| Carpet   |           |
|----------|-----------|
| to floor | to stairs |
| A        | B         |
| \$       | \$        |
| 5.90     | 8.00      |
| 15.50    | 18.60     |
| 18.60    | 22.30     |
| 22.60    | 68.30     |
| 28.20    | 73.80     |
| 62.50    | 102.50    |

*Per square metre*

|       |  |       |        |       |
|-------|--|-------|--------|-------|
| 11306 | Take up and clear away existing carpet of any type.....  | 5.90  | 8.00   | 11306 |
| 11307 | Take up existing carpet of any type and set aside for re-use.....                                  | 15.50 | 18.60  | 11307 |
| 11308 | Ditto but including underlays.....   | 18.60 | 22.30  | 11308 |
| 11309 | Lay only carpet of any type with and including grippers.....                                       | 22.60 | 68.30  | 11309 |
| 11310 | Ditto with underlays.....  | 28.20 | 73.80  | 11310 |
| 11311 | Lay only carpet of any type including provision of new underlays and clear away old underlays..... | 62.50 | 102.50 | 11311 |

**HEAVY CONTACT QUALITY CARPET TILES**

**CARPET TILES; FULLY ADHERING METHOD**

Supply and lay carpet tiles module size n.e. 0.40 m<sup>2</sup> in all types of backing and in all series and colour finish required : -

| Carpet tiles                     |           |         |           |           |         |
|----------------------------------|-----------|---------|-----------|-----------|---------|
| Pile weight (kg/m <sup>2</sup> ) |           |         |           |           |         |
| n.e. 1.00                        |           |         | exc. 1.00 |           |         |
| to floor                         | to stairs | to wall | to floor  | to stairs | to wall |
| A                                | B         | C       | D         | E         | F       |
| \$                               | \$        | \$      | \$        | \$        | \$      |
| 142.80                           | 164.80    | 179.50  | 171.60    | 188.60    | 218.00  |
| 150.00                           | 173.80    | 208.10  | 183.30    | 200.30    | 229.70  |
| 175.40                           | 192.50    | 223.70  | 206.50    | 223.50    | 235.50  |
| 187.20                           | 204.30    | 235.50  | 218.20    | 235.20    | 264.60  |

*Per square metre*

|       |  |        |        |        |        |        |        |       |
|-------|--|--------|--------|--------|--------|--------|--------|-------|
| 11312 | Carpet tiles laid with adhesive.....                 | 142.80 | 164.80 | 179.50 | 171.60 | 188.60 | 218.00 | 11312 |
| 11313 | Ditto laid with adhesive and release bond agent..... | 150.00 | 173.80 | 208.10 | 183.30 | 200.30 | 229.70 | 11313 |
| 11314 | Carpet tiles laid with adhesive.....                 | 175.40 | 192.50 | 223.70 | 206.50 | 223.50 | 235.50 | 11314 |
| 11315 | Ditto laid with adhesive and release bond agent..... | 187.20 | 204.30 | 235.50 | 218.20 | 235.20 | 264.60 | 11315 |

Supply and lay carpet tiles module size n.e. 1.00 m<sup>2</sup> including backing as "Environmentally Friendly Carpet" in any series and colour finish required : -

*Per square metre*

|       |  |        |        |        |        |        |        |       |
|-------|--|--------|--------|--------|--------|--------|--------|-------|
| 11314 | Carpet tiles laid with adhesive.....                 | 175.40 | 192.50 | 223.70 | 206.50 | 223.50 | 235.50 | 11314 |
| 11315 | Ditto laid with adhesive and release bond agent..... | 187.20 | 204.30 | 235.50 | 218.20 | 235.20 | 264.60 | 11315 |

Supply and lay carpet tiles module size n.e. 0.40 m<sup>2</sup> including backing as "Environmentally Friendly Carpet" in any series and colour finish required : -

| Carpet tile                          |           |         |
|--------------------------------------|-----------|---------|
| Pile density (fibre/m <sup>2</sup> ) |           |         |
| exc. 75 million                      |           |         |
| to floor                             | to stairs | to wall |
| A                                    | B         | C       |
| \$                                   | \$        | \$      |
| 314.10                               | 337.30    | 362.80  |
| 326.60                               | 350.30    | 379.80  |

*Per square metre*

|       |  |        |        |        |       |
|-------|--|--------|--------|--------|-------|
| 11316 | Carpet tiles laid with adhesive.....                 | 314.10 | 337.30 | 362.80 | 11316 |
| 11317 | Ditto laid with adhesive and release bond agent..... | 326.60 | 350.30 | 379.80 | 11317 |

| Item  |  | Carpet         |                          |                                    | Item     |       |
|---|--|----------------|--------------------------|------------------------------------|----------|-------|
|   |  | to floor       | to stairs                | to wall                            |          |       |
|   |  | A<br>\$        | B<br>\$                  | C<br>\$                            |          |       |
| <b>HEAVY CONTACT QUALITY CARPET TILES (CONT'D)</b>  |  |                |                          |                                    |          |       |
| <b>CARPET TILES ; FULLY ADHERING METHOD (CONT'D)</b>  |  |                |                          |                                    |          |       |
| Alterations and repairs : -   |  |                |                          |                                    |          |       |
|   |  |                |                          |                                    |          |       |
| <i>Per square metre</i>   |  |                |                          |                                    |          |       |
| 11318   | Take up and clear away existing carpet tiles of any type.....  | 6.60           | 7.30                     | 7.30                               | 11318    |       |
| 11319   | Take up existing carpet tiles of any type and set aside for re-use.....  | 16.20          | 19.40                    | 17.80                              | 11319    |       |
| 11320   | Lay only carpet tiles of any type with adhesive.....   | 27.30          | 31.00                    | 28.00                              | 11320    |       |
| 11321   | Lay only carpet tiles of any type with adhesive and release bond agent.....  | 29.50          | 35.40                    | 32.50                              | 11321    |       |
| <b>ENTRANCE MATTING</b>   |  |                |                          |                                    |          |       |
| Supply and install entrance matting comprises aluminium rolling mat strips and frames and aluminium/rubber/carpet scraper strip in any colour, profile spacing and finish : - |  |                |                          |                                    |          |       |
|   |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|   |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 11322   | Heavy duty entrance matting, ribbed carpet/grooved rubber/brush/aluminium scraper finished strip, n.e. 17 mm high.....   | 3,508.60       | 41.30                    | 62.70                              | 112.70   | 11322 |
| 11323   | Ditto, 17 - 22 mm high.....  | 3,732.70       | 41.30                    | 62.70                              | 112.70   | 11323 |
| 11324   | Ditto, 22 - 27 mm high.....  | 4,333.50       | 41.30                    | 62.70                              | 112.70   | 11324 |
| <b>TAKING DOWN EXISTING PLASTER, PAVINGS, TILING, SUSPENDED CEILING, ETC.</b>   |  |                |                          |                                    |          |       |
| (Note : - The items under column A hereafter shall not be measured if the wall or slab, etc. to which the finish being affixed is to be taken down.)                          |  |                |                          |                                    |          |       |
| Take down and clear away, or set aside for re-use as required, the following from any position : -  |  |                |                          |                                    |          |       |
|   |  |                | Take down and clear away | Take down and set aside for re-use |          |       |
|   |  |                | A<br>\$                  | B<br>\$                            |          |       |
| 11325   | Expanded metal lathing .....   |                | 3.40                     | -                                  | 11325    |       |
| 11326   | Lightweight screeds to floors and roofs of any thickness .....   |                | 12.20                    | -                                  | 11326    |       |
| 11327   | Cement and sand paving, floor screeds or floor rendering of any mix or thickness, including covering to stair treads, risers, kerbs, channels and the like ..... |                | 10.10                    | -                                  | 11327    |       |
| 11328   | Cement and sand wall or ceiling rendering, screeds, skirting and the like .....  |                | 12.80                    | -                                  | 11328    |       |
| 11329   | Internal plaster, external plaster, acoustic plaster, Shanghai plaster or gypsum plaster of any mix, thickness, or number of coats.....                          |                | 12.20                    | -                                  | 11329    |       |
| 11330   | Flexible sheets and skirting of any type to floor or wall (screed measured separately).....  |                | 8.80                     | 11.50                              | 11330    |       |
| 11331   | "Sandtex-trowel" finish including backing screed if any .....  |                | 18.20                    | -                                  | 11331    |       |

| Item  |   |                                      | Item   |       |
|-------|---|--------------------------------------|--|-------|
|       | <b>TAKING DOWN EXISTING PLASTER, PAVINGS, TILING, SUSPENDED CEILING, ETC.<br/>(CONT'D)</b>  |                                      |  |       |
|       | (Note : - The items under column A hereafter shall not be measured if the wall or slab, etc. to which the finish being affixed is to be taken down.) (Cont'd)   |                                      |  |       |
|       | Take down and clear away, or set aside for re-use as required, the following from any position : - (Cont'd)   |                                      |  |       |
|       |   | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use |       |
|       |   | A<br>\$                              | B<br>\$  |       |
|       | <b>Per square metre</b>   |                                      |  |       |
| 11332 | Granolithic or terrazzo paving of any mix or thickness, including covering to stair treads, risers, kerbs, channels and the like, and backing screed if any .....   | 17.50                                | -  | 11332 |
| 11333 | Granolithic or terrazzo wall dadoes and skirting of any mix or thickness including backing screed if any.....   | 14.20                                | -  | 11333 |
| 11334 | Ceramic or quarry floor tiling, skirting, etc., of any type (screed measured separately) .....  | 12.20                                | -  | 11334 |
| 11335 | Precast concrete floor tiling or skirting of any thickness (ditto) .....  | 11.50                                | 15.50  | 11335 |
| 11336 | Terrazzo floor tiling, skirting, etc. of any type (ditto).....  | 13.50                                | 18.90  | 11336 |
| 11337 | Cork tiling of any thickness to floor, wall or ceiling (ditto) .....  | 4.80                                 | 6.00   | 11337 |
| 11338 | Flexible tiles and skirting of any type to floor or wall (ditto).....   | 8.80                                 | 11.50  | 11338 |
| 11339 | Rubber tiles and sheets to floors, and treads and risers of any type (ditto) .....  | 8.80                                 | 11.50  | 11339 |
| 11340 | Mosaic floor or wall tiling of any type (ditto) .....   | 12.20                                | -  | 11340 |
| 11341 | Glazed or ceramic wall tiling of any type (ditto) .....   | 12.20                                | -  | 11341 |
| 11342 | Precast concrete paving slabs of any thickness (screed measured separately) .....   | 11.50                                | 15.50  | 11342 |
| 11343 | Rectangular or interlocking precast concrete paving blocks of any thickness (ditto) .....   | 13.50                                | 18.20  | 11343 |
| 11344 | Artificial granite floor or wall tiling of any thickness (ditto).....   | 14.20                                | 19.60  | 11344 |
| 11345 | Clay brick paver of any size (ditto).....   | 12.80                                | 16.90  | 11345 |
| 11346 | Natural marble or granite slabs in any thickness on floors, walls, columns, vertical surfaces in dadoes and wall lining, treads and risers, end of stairs, top and sides of counters, window cills and the like (screed measured separately)..... | 14.20                                | 19.60  | 11346 |
| 11347 | Marble/granite tiles of any size (ditto).....   | 12.20                                | 16.20  | 11347 |
| 11348 | Pebble or small stone paving of any mix or thickness.....   | 8.80                                 | -  | 11348 |
|       | <b>Per linear metre</b>   |                                      |  |       |
| 11349 | Plaster of paris mouldings and moulded cornices n.e. 150 mm girth, complete with bracketing and the like.....   | 3.40                                 | -  | 11349 |
| 11350 | Ditto 150 - 300 mm girth, ditto.....  | 4.00                                 | -  | 11350 |
| 11351 | Brick curb of any size.....   | 5.40                                 | 7.40   | 11351 |
| 11352 | Natural marble or granite moulding n.e. 100 mm wide.....  | 5.40                                 | 7.40   | 11352 |
| 11353 | Ditto 100 - 200 mm wide.....  | 6.00                                 | 9.40   | 11353 |

| Item  | A<br>\$            | Item  |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
|---|--------------------|-------|----------------|--|--|-------------|--------------------|--|---------|---------|--|--|-------|-------|---|-------|-------|---|--------|-------|--|-------|-------|-------------------------|--|--|--|-------|-------|--|-------|-------|--|-------|-------|---|-----|--|-------------------------|--|--|---|--------|-------|--|--------|-------|--|--------|-------|---|--------|-------|--|-----|--|
| <b>SUPPLY ONLY OF MATERIALS</b>   |                    |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| <i>Per square metre</i>   |                    |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11354 6 mm Thick cork tiles.....  | 74.10              | 11354 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11355 9 mm Ditto.....   | 101.00             | 11355 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11356 12 mm Ditto.....  | 124.30             | 11356 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Thickness (mm)</th> <th></th> </tr> <tr> <th style="text-align: center;">n.e.<br/>9.5</th> <th style="text-align: center;">exceed-<br/>ing 9.5</th> <th></th> </tr> <tr> <th style="text-align: center;">A<br/>\$</th> <th style="text-align: center;">B<br/>\$</th> <th></th> </tr> </thead> <tbody> <tr> <td>11357 Ceramic and quarry floor tiles each tile size n.e. 0.36 m<sup>2</sup>.....</td> <td style="text-align: right;">96.60</td> <td>11357</td> </tr> <tr> <td>11358 Ceramic and quarry floor tiles each tile size exceeding 0.36 m<sup>2</sup>.....</td> <td style="text-align: right;">89.30</td> <td>11358</td> </tr> <tr> <td>11359 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size n.e. 0.36 m<sup>2</sup>.....</td> <td style="text-align: right;">103.40</td> <td>11359</td> </tr> <tr> <td>11360 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size exceeding 0.36 m<sup>2</sup>.....</td> <td style="text-align: right;">96.20</td> <td>11360</td> </tr> <tr> <td colspan="3"><i>Per linear metre</i></td> </tr> <tr> <td>11361 Ceramic and quarry skirting tiles 100 mm high.....</td> <td style="text-align: right;">16.10</td> <td>11361</td> </tr> <tr> <td>11362 Ceramic and quarry skirting tiles 150 mm high.....</td> <td style="text-align: right;">19.20</td> <td>11362</td> </tr> <tr> <td>11363 Ceramic and quarry skirting tiles 200 mm high.....</td> <td style="text-align: right;">24.70</td> <td>11363</td> </tr> <tr> <td>Add to either of Items 11357 to 11363 inclusive for ceramic and quarry floor tiles of specific quality.....</td> <td style="text-align: right;">65%</td> <td></td> </tr> <tr> <td colspan="3"><i>Per square metre</i></td> </tr> <tr> <td>11364 Re-constituted artificial granite strip tile n.e. 0.01 m<sup>2</sup>, 10 - 15 mm thick.....</td> <td style="text-align: right;">136.80</td> <td>11364</td> </tr> <tr> <td>11365 Re-constituted artificial granite strip tile exceeding 0.01 m<sup>2</sup>, 10 - 15 mm thick.....</td> <td style="text-align: right;">122.10</td> <td>11365</td> </tr> <tr> <td>11366 Re-constituted artificial granite square/rectangular tile n.e. 0.01 m<sup>2</sup>, 12 - 18 mm thick.....</td> <td style="text-align: right;">132.60</td> <td>11366</td> </tr> <tr> <td>11367 Re-constituted artificial granite square/rectangular tile exceeding 0.01 m<sup>2</sup>, 12 - 18 mm thick.....</td> <td style="text-align: right;">122.10</td> <td>11367</td> </tr> <tr> <td>Add to either of Items 11364 to 11367 inclusive for re-constituted artificial granite tiles of specific quality.....</td> <td style="text-align: right;">65%</td> <td></td> </tr> </tbody> </table> |                    |       | Thickness (mm) |  |  | n.e.<br>9.5 | exceed-<br>ing 9.5 |  | A<br>\$ | B<br>\$ |  | 11357 Ceramic and quarry floor tiles each tile size n.e. 0.36 m <sup>2</sup> ..... | 96.60 | 11357 | 11358 Ceramic and quarry floor tiles each tile size exceeding 0.36 m <sup>2</sup> ..... | 89.30 | 11358 | 11359 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size n.e. 0.36 m <sup>2</sup> ..... | 103.40 | 11359 | 11360 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size exceeding 0.36 m <sup>2</sup> ..... | 96.20 | 11360 | <i>Per linear metre</i> |  |  | 11361 Ceramic and quarry skirting tiles 100 mm high..... | 16.10 | 11361 | 11362 Ceramic and quarry skirting tiles 150 mm high..... | 19.20 | 11362 | 11363 Ceramic and quarry skirting tiles 200 mm high..... | 24.70 | 11363 | Add to either of Items 11357 to 11363 inclusive for ceramic and quarry floor tiles of specific quality..... | 65% |  | <i>Per square metre</i> |  |  | 11364 Re-constituted artificial granite strip tile n.e. 0.01 m <sup>2</sup> , 10 - 15 mm thick..... | 136.80 | 11364 | 11365 Re-constituted artificial granite strip tile exceeding 0.01 m <sup>2</sup> , 10 - 15 mm thick..... | 122.10 | 11365 | 11366 Re-constituted artificial granite square/rectangular tile n.e. 0.01 m <sup>2</sup> , 12 - 18 mm thick..... | 132.60 | 11366 | 11367 Re-constituted artificial granite square/rectangular tile exceeding 0.01 m <sup>2</sup> , 12 - 18 mm thick..... | 122.10 | 11367 | Add to either of Items 11364 to 11367 inclusive for re-constituted artificial granite tiles of specific quality..... | 65% |  |
| Thickness (mm)  |                    |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| n.e.<br>9.5   | exceed-<br>ing 9.5 |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| A<br>\$   | B<br>\$            |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11357 Ceramic and quarry floor tiles each tile size n.e. 0.36 m <sup>2</sup> .....  | 96.60              | 11357 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11358 Ceramic and quarry floor tiles each tile size exceeding 0.36 m <sup>2</sup> .....   | 89.30              | 11358 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11359 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size n.e. 0.36 m <sup>2</sup> .....   | 103.40             | 11359 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11360 Ditto but to treads and risers of stairs, sides and top of upstand kerbs, sides and bottom of channels and the like each tile size exceeding 0.36 m <sup>2</sup> .....  | 96.20              | 11360 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| <i>Per linear metre</i>   |                    |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11361 Ceramic and quarry skirting tiles 100 mm high.....  | 16.10              | 11361 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11362 Ceramic and quarry skirting tiles 150 mm high.....  | 19.20              | 11362 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11363 Ceramic and quarry skirting tiles 200 mm high.....  | 24.70              | 11363 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| Add to either of Items 11357 to 11363 inclusive for ceramic and quarry floor tiles of specific quality.....   | 65%                |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| <i>Per square metre</i>   |                    |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11364 Re-constituted artificial granite strip tile n.e. 0.01 m <sup>2</sup> , 10 - 15 mm thick.....   | 136.80             | 11364 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11365 Re-constituted artificial granite strip tile exceeding 0.01 m <sup>2</sup> , 10 - 15 mm thick.....  | 122.10             | 11365 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11366 Re-constituted artificial granite square/rectangular tile n.e. 0.01 m <sup>2</sup> , 12 - 18 mm thick.....  | 132.60             | 11366 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| 11367 Re-constituted artificial granite square/rectangular tile exceeding 0.01 m <sup>2</sup> , 12 - 18 mm thick.....   | 122.10             | 11367 |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |
| Add to either of Items 11364 to 11367 inclusive for re-constituted artificial granite tiles of specific quality.....  | 65%                |       |                |  |  |             |                    |  |         |         |  |  |       |       |   |       |       |   |        |       |  |       |       |                         |  |  |  |       |       |  |       |       |  |       |       |   |     |  |                         |  |  |   |        |       |  |        |       |  |        |       |   |        |       |  |     |  |

| Item  |   | Item         |
|---|---|--------------|
| <b>SUPPLY ONLY OF MATERIALS (CONT'D)</b>  |   |              |
| <i>Per square metre</i>   |   | A<br>\$      |
| 11368   | Terrazzo floor tiles to BS EN 13748 in any colour and surface finish, 20 mm thick.....              | 107.30 11368 |
| 11369   | Vinyl tiles in any colour and surface finish 2 mm thick.....  | 76.20 11369  |
| 11370   | Semi-flexible p.v.c. tiles in any colour and surface finish, 2.5 mm thick.....                      | 99.40 11370  |
| 11371   | Linoleum tiles in any colour and surface finish 3.2 mm thick.....                                   | 154.60 11371 |
| 11372   | Unbacked flexible sheet in any colour and surface finish, 1.2 mm thick.....                         | 58.60 11372  |
| 11373   | Unbacked flexible sheet in any colour and surface finish, 2 mm thick.....                           | 77.10 11373  |
| 11374   | Foam backed (1.5 mm thick) flexible sheet in any colour and surface finish, overall 3 mm thick..... | 91.70 11374  |
| 11375   | Linoleum flexible sheet in any colour and surface finish, 3.2 mm thick.....                         | 167.20 11375 |
| 11376   | Linoleum flexible sheet in any colour and surface finish, 4.5 mm thick.....                         | 226.50 11376 |
| 11377   | Homogeneous vinyl tiles, 2 mm thick.....  | 225.00 11377 |
| 11378   | Homogeneous vinyl sheet, 2 mm thick.....  | 249.00 11378 |
| 11379   | Rubber tiles in any colour and surface finish, 4 mm thick.....                                      | 356.20 11379 |
| 11380   | Rubber sheet in any colour and surface finish, 4 mm thick.....                                      | 398.50 11380 |
| <i>Per linear metre</i>   |   |              |
| 11381   | Preformed flexible PVC skirting 100 mm high coved bottom.....                                       | 33.40 11381  |
| 11382   | 'L' shape PVC skirting, 100 x 45 x 2 mm thick.....  | 37.50 11382  |
| <i>Per square metre</i>   |   | A<br>\$      |
| 11383   | Glazed ceramic mosaic tiles in any colour and size.....   | 83.70 11383  |
| 11384   | Unglazed vitreous mosaic tiles in any colour and size.....  | 100.80 11384 |
| 11385   | Ceramic wall tiles each tile size n.e. 0.05 m <sup>2</sup> and n.e. 9.5 mm thick.....               | 92.30 11385  |
| 11386   | Ceramic wall tiles each tile size exceeding 0.05 m <sup>2</sup> and n.e. 9.5 mm thick.....          | 103.10 11386 |
| 11387   | Ceramic wall tiles each tile size n.e. 0.05 m <sup>2</sup> and exceeding 9.5 mm thick .....         | 110.30 11387 |
| 11388   | Ceramic wall tiles each tile size exceeding 0.05 m <sup>2</sup> and exceeding 9.5 mm thick .....    | 110.30 11388 |
| Add to either of Items 11385 to 11388 inclusive for ceramic wall tiles of specific quality..... |   | 65%          |

| Item                                     | A<br>\$ | Item  |
|--|---------|-------|
| <b>SUPPLY ONLY OF MATERIALS (CONT'D)</b> |         |       |
| <i>Per square metre</i>                  |         |       |
| 11389                                    | 197.80  | 11389 |
| 11390                                    | 103.60  | 11390 |
| 11391                                    | 120.50  | 11391 |
| 11392                                    | 161.20  | 11392 |
| 11393                                    | 222.20  | 11393 |
| 11394                                    | 137.40  | 11394 |
| 11395                                    | 163.40  | 11395 |
| 11396                                    | 167.60  | 11396 |
| 11397                                    | 207.30  | 11397 |
| 11398                                    | 301.90  | 11398 |
| 11399                                    | 333.70  | 11399 |
| 11400                                    | 422.60  | 11400 |
| 11401                                    | 649.10  | 11401 |
| 11402                                    | 693.50  | 11402 |
| 11403                                    | 36.00   | 11403 |



## **Section 12**

### **ROADWORK AND CABLE DUCT**

## SECTION 12

### ROADWORK AND CABLE DUCT

#### SPECIAL CONDITIONS

**Drawings**                      **SC12.01**                      The drawings referred to in this Section and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule can be viewed on the internet website via the pathway referred therein. The latest version of drawings posted shall be referred to when reading this Section.

**Specification**                      **SC12.02**                      This Section shall be read and used in conjunction with G.S. Section 24 - External Works.

**Measurement of excavation, concrete work, etc.**                      **SC12.03**                      All excavation, concrete work, steel and metal work, plaster work and drainage work will be measured separately and paid for at appropriate rates under applicable Work Sections of this Schedule unless specifically described in this Section.

**Measurement of granular beds, base or sub-base**                      **SC12.04**                      The measurement of granular beds, base or sub-base shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deductions shall be made for manholes, gullies, catch pits, inspection covers, columns or piers, etc. not exceeding 1.00 m<sup>2</sup>.

In the case of quadrants, the outer circular girth shall be measured.

#### ROADWORK

**Rates generally**                      **SC12.05**                      Rates for all items shall include for any or all of the following as applicable : -

- (a) Finishing surfaces level or to falls, gradients, crowns and cambers to exact profile required, with each successive surface finished parallel to the final finished surface.
- (b) Additional bulk of material required to allow for compaction and consolidation.
- (c) All wheeling and multi-handing of material to place of final incorporation in the work.
- (d) Maintenance and cleaning of surfaces.
- (e) Protection of curbs, masking and unmasking of drainage channels, manhole covers, gully gratings, expansion joints, road studs and road marking.
- (f) Provision, maintenance and removal of measures to maintain traffic flow including all temporary traffic diversion lighting and signs including labours and all charges incurred.
- (g) Provision, maintenance and removal of temporary road, walkway covers to trenches and the like.
- (h) Obtaining permits from Government departments before execution of the works.

**SPECIAL CONDITIONS**

**ROADWORK**

**Rates generally (Cont'd)**

**SC12.05 (Cont'd)**

- (i) Mobilization, maintenance and demobilization of paving machine, rollers, compaction plant, milling machine and the like.
- (j) Coring, testing and reinstatement with bituminous material shall include for : -
  - (i) Marking the edges of the surfaces to be cored.
  - (ii) Making good any overbreak, cracking or other damages.
  - (iii) Cleaning up and removing surplus material and waste.
  - (iv) Taking core samples, sealing and transferring in the proper sequence to core box and delivering them to place of testing.
  - (v) Recording and submitting records and reports.
  - (vi) Filling up core holes with appropriate materials.

**Rates for granular sub-base and/or lean concrete**

**SC12.06**

Rates for granular sub-base and/or lean concrete sub-base shall further include for : -

- (a) Trial areas.
- (b) Reclaimed asphalt pavement as specified in G.S. Item 24.06.
- (c) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting.
- (d) Making of all joints.
- (e) In the case of lean concrete sub-base, all testing and formwork.
- (f) Spillage and slopes at edges.
- (g) Edge support.

**Rates for bituminous road base**

**SC12.07**

Rate for bituminous road base shall further include for : -

- (a) Trial areas.
- (b) Reclaimed asphalt pavement as specified in G.S. Item 24.06.
- (c) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting.
- (d) Making of all joints.
- (e) Spillage and slopes at edges.

## SPECIAL CONDITIONS

## ROADWORK

**Rates for bituminous road base (Cont'd)**

**SC12.07 (Cont'd)**

- (f) Edge support.
- (g) Sealing surfaces, priming and tack coats.

**Rates for bituminous flexible surfacing**

**SC12.08**

The rates for bituminous flexible surfacing shall further include for : -

- (a) Preparation and cleaning of surface to receive bituminous materials.
- (b) Reclaimed asphalt pavement as specified in G.S. Item 24.06.
- (c) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting.
- (d) Cutting back and making of joints including applying bituminous priming coats.
- (e) Maintenance of surface and cleaning or removal and replacement of contaminated layers.
- (f) Spillage and slopes at edges.
- (g) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints.
- (h) Making good up to existing flexible surfacing.
- (i) Sealing surfaces, priming and tack coats.

**Rates for stone mastic asphalt surface**

**SC12.09**

The rates for stone mastic asphalt surface shall further include for : -

- (a) Preparation and cleaning of surface to receive stone mastic asphalt materials.
- (b) Grading, measuring, mixing, transporting, depositing, spreading, levelling and compacting.
- (c) Cutting back and making of joints including applying bituminous priming coats.
- (d) Maintenance of surface and cleaning or removal and replacement of contaminated layers.
- (e) Spillage and slopes at edges.
- (f) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints.
- (g) Making good up to existing flexible surfacing.
- (h) Sealing surfaces, priming and tack coats.

### SPECIAL CONDITIONS

#### ROADWORK

**Rates for cold milling of wearing course**

**SC12.10**

The rates for cold milling of wearing course shall further include for : -

- (a) Removal of all material arising.
- (b) Preparation and brushing of surface.
- (c) Multiple milling to the depth, profile shape, fall and the texture surface required.
- (d) Making good up to curbs and around manholes and gully covers and frames and up to existing services and around expansion joints.
- (e) Making good up to existing flexible surfacing.
- (f) Loosing, breaking of milled particles.
- (g) Cleaning milled surface by mechanical vacuum road sweeper.

**Rates for patching up potholes with bituminous material**

**SC12.11**

The rates for patching up potholes with bituminous material shall further include for : -

- (a) Potholes of any thickness.
- (b) Removal of debris and loose material from potholes.
- (c) Drying out water in potholes.
- (d) Preparation of surface and applying bituminous priming coat.
- (e) Placing and compacting bituminous material marrying in with existing surfaces.

**Rates for patching up potholes with instant filling material**

**SC12.12**

The rates for patching up potholes with instant filling material shall further include for : -

- (a) Potholes of any thickness.
- (b) Removal of debris and loose material from potholes.
- (c) Drying out water in potholes.
- (d) Placing and compacting instant hole filling material marrying in with existing surfaces.

**Rates for concrete carriageway**

**SC12.13**

The rates of concrete carriageway shall further include for : -

- (a) Trial mixes.
- (b) Waterproofing membrane underlays.
- (c) Formwork and trimming bars.
- (d) Spreading, compacting and finishing the concrete.

**SPECIAL CONDITIONS**

**ROADWORK**

**Rates for  
concrete  
carriageway  
(Cont'd)**

**SC12.13  
(Cont'd)**

- (e) In the case of rapid hardening concrete, providing and mixing approved concrete admixture for early strength or rapid hardening cement.
- (f) Surface texturing, curing and protection.
- (g) Forming channels as an integral part of the slab.
- (h) Forming recesses, openings and bays for manholes, gullies and road studs.
- (i) Forming surfaces within vertical and horizontal tolerances and surface regularity.
- (j) Restrictions on the use of pavement courses by construction traffic.
- (k) Making good up to existing.

**Rates for  
steel fabric  
reinforcement**

**SC12.14**

The rates for steel fabric reinforcement shall include for : -

- (a) Extra fabric reinforcement at laps.
- (b) All requirements of sampling and testing.
- (c) Cleaning, cutting to size, bending, fixing and securely supporting in the required position.
- (d) Plastic cover spacers, spacer blocks, steel spacer rods, steel chairs and annealed iron tying wire or tack welding.

**Rates for  
longitudinal,  
expansion and  
contraction  
joints**

**SC12.15**

The rates for longitudinal, expansion and contraction joints shall include for : -

- (a) Forming joints through full thickness of concrete slab carriageway and surfacing including formwork.
- (b) Removal of dust and debris.
- (c) Provision of bond breaker or backing strips.
- (d) Masking tape to sides of groove.
- (e) Application of primer to sides of sealing grooves.
- (f) Joint assemblies complete including, as appropriate, groove forming strip, tie bars with PVC sleeves, crack inducers, dowel bars, dowel sheaths, dowel bar cradles, joint filler and joint sealant.
- (g) Removal of groove forming strip at movement joints after concrete has set.

### SPECIAL CONDITIONS

#### ROADWORK

**Rates for  
run-in**

**SC12.16**

The rates for run-in shall further include for : -

- (a) Cutting pavement by saw cut, excavating and clearing away or filling and compacting excavated materials.
- (b) Taking up and clearing away from Site or setting aside for re-laying existing curbs.
- (c) Breaking up and clearing away from Site existing concrete bedding for curbs.
- (d) Preparation of formation and compacting base.
- (e) Laying and compacting of 150 mm granular sub-base.
- (f) Concrete pavement up to 200 mm thick and finishing surface.
- (g) Supplying and laying steel fabric reinforcement.
- (h) Supplying and laying additional/replacement drop curbs including concrete bedding as required.

**Rates for  
curbs, precast  
concrete  
footway  
edgings, etc.**

**SC12.17**

The rates for granite or precast concrete curbs, precast concrete footway edgings, etc. shall further include for : -

- (a) Excavating in any materials, ramming bottom, backfilling and removing surplus materials from Site.
- (b) Concrete bedding, backing and foundation for curbs or edgings.
- (c) Formwork.
- (d) Reinforcement.
- (e) Keying of surface and tack coat.
- (f) Finishing, protecting and curing.
- (g) Making and sealing joints.
- (h) Dressing of curbs as required.

**Rates for  
concrete  
footways**

**SC12.18**

The rates for concrete footways shall further include for : -

- (a) Trial mixes.
- (b) Waterproofing membrane underlays.
- (c) Formwork and trimming bars.
- (d) Spreading, compacting and finishing the concrete.

**SPECIAL CONDITIONS**

**ROADWORK**

**Rates for  
concrete  
footways  
(Cont'd)**

**SC12.18  
(Cont'd)**

- (e) In the case of rapid hardening concrete, providing and mixing approved concrete admixture for early strength or rapid hardening cement.
- (f) Surface texturing, curing and protection.
- (g) Spillage and slopes at sides.
- (h) Forming channels as an integral part of the slab.
- (i) Forming recesses, openings and bays for manholes, gullies and road studs.
- (j) Forming surfaces within vertical and horizontal tolerances and surface regularity.
- (k) Forming and including expansion, longitudinal and contraction joints including all necessary formwork.
- (l) Restrictions on the use of pavement courses by construction traffic.
- (m) Making good up to existing.

**CABLE DUCT**

**Measurement of  
cable duct pipes**

**SC12.19**

All cable duct pipes shall be measured net as laid or fixed over all fittings.

**Rates for  
concrete beds,  
haunchings  
and surrounds  
to pipes**

**SC12.20**

The rates for concrete beds, haunchings and surrounds to pipes shall include for : -

- (a) Providing and laying a layer of polythene sheeting or concrete blinding on the bottom of trenches before concreting.
- (b) All necessary formwork and falsework.
- (c) Forming flexible joints including joint filler.
- (d) All necessary precast concrete wedges, blocks or cradles or other approved pipe supports including compressible sheeting.
- (e) Keeping concrete and pipes damp until backfilling placed.

**Rates for  
granular beds**

**SC12.21**

The rates for granular beds shall include for : -

- (a) Recycled or non-recycled granular bedding material to be clean, hard, durable, crushed rock or crushed concrete, broken stone, hard brick, concrete or other comparable hard insert approved by the Maintenance Surveyor.
- (b) Compacting and trimming granular beds to correct gradient and shape under barrel and pipe sockets.



**SPECIAL CONDITIONS****CABLE DUCT**

**Rates for granular beds (Cont'd)**

**SC12.21 (Cont'd)**

- (c) Handling from temporary spoil heaps.
- (d) Additional bulk of material required to allow for compaction and consolidation.
- (e) Re-compacting and laying granular around pipes after testing.

**Rates for cable duct pipes**

**SC12.22**

The rates for cable duct pipes shall include for : -

- (a) All short lengths and all cutting and waste.
- (b) All jointing and jointing materials as required.
- (c) Provision of nylon draw cord in each length of duct.
- (d) Provision of all information required by the Maintenance Surveyor for preparation of record drawings.

| Item   |  |                             | Item  |
|--|--|-----------------------------|-------|
| <b>ROAD, CARPARKS AND PAVED AREAS</b>  |  |                             |       |
| <b>SUB-BASE</b>  |  |                             |       |
|  |  | A<br>\$                     |       |
| 12001  | Granular sub-base.....   | 165.40                      | 12001 |
| 12002  | Lean concrete sub-base.....  | 1,090.70                    | 12002 |
| <b>ROAD BASE</b>   |  |                             |       |
|  |  | A<br>\$                     |       |
| 12003  | Bituminous road base.....  | 711.20                      | 12003 |
| <b>FLEXIBLE SURFACING</b>  |  |                             |       |
| Supply, lay and roll with roller for the following bituminous surfacing (consolidated thickness stated) :- |  |                             |       |
|  |  | Nominal aggregate size (mm) |       |
|  |  | 37.5                        | 28    |
|  |  | 20                          | 10    |
|  |  | A                           | B     |
|  |  | \$                          | \$    |
| 12004  | 55 mm Thick bituminous base course.....  | 75.00                       | -     |
| 12005  | Add to Item 12004 for each additional 5 mm thickness or part thereof in excess of 55 mm..... | 6.90                        | -     |
| 12006  | 55 mm Thick bituminous base course.....  | -                           | 80.50 |
| 12007  | Add to Item 12006 for each additional 5 mm thickness or part thereof in excess of 55 mm..... | -                           | 7.60  |
| 12008  | 40 mm Thick bituminous wearing course.....   | -                           | -     |
| 12009  | Add to Item 12008 for each additional 5 mm thickness or part thereof in excess of 40 mm..... | -                           | 79.40 |
| 12010  | 30 mm Thick bituminous wearing course.....   | -                           | -     |
| 12011  | Add to Item 12010 for each additional 5 mm thickness or part thereof in excess of 30 mm..... | -                           | 8.20  |
| 12012  | Stone mastic asphalt surfaces.....   | -                           | 54.90 |
| 12013  | Add to Item 12012 for each additional 5 mm thickness or part thereof in excess of 40 mm..... | -                           | 9.30  |
|  |  | Thickness (mm)              |       |
|  |  | 10                          | 20    |
|  |  | 40                          |       |
|  |  | A                           | B     |
|  |  | \$                          | \$    |
| 12012  | Stone mastic asphalt surfaces.....   | 20.90                       | 40.00 |
| 12013  | Add to Item 12012 for each additional 5 mm thickness or part thereof in excess of 40 mm..... | -                           | 72.80 |
|  |  | A<br>\$                     |       |
| 12013  | Add to Item 12012 for each additional 5 mm thickness or part thereof in excess of 40 mm..... | 7.90                        | 12013 |

Item

Item

**ROAD, CARPARKS AND PAVED AREAS (CONT'D)**

**COLD MILLING WORK**

*Per square metre*

A  
\$

|       |   |       |       |
|-------|---|-------|-------|
| 12014 | Cold mill 25 mm thick wearing course with shaving machine and remove from Site all materials arising..... | 17.40 | 12014 |
| 12015 | Add to Item 12014 for each additional 25 mm thickness or part thereof in excess of 25 mm.....             | 14.00 | 12015 |

**PATCHING UP POTHOLES**

(Note : - Items 12016 to 12017 inclusive shall only be measured when individual potholes n.e. 2.0 m<sup>2</sup> each are repaired.)

| Pothole size (m <sup>2</sup> ) |           |           |           |
|--------------------------------|-----------|-----------|-----------|
| n.e. 0.2                       | 0.2 - 0.5 | 0.5 - 1.0 | 1.0 - 2.0 |
| A                              | B         | C         | D         |
| \$                             | \$        | \$        | \$        |
| 25.10                          | 36.70     | 56.70     | 113.00    |
| 96.90                          | 253.00    | 508.00    | 1,015.00  |

*Each*

|       |  |  |       |
|-------|--|--|-------|
| 12016 | Patch up pothole with bituminous material.....           |  | 12016 |
| 12017 | Patch up pothole with instant hole filling material..... |  | 12017 |

**REINFORCED CONCRETE CARRIAGEWAY**

*Per cubic metre*

A  
\$

|       |  |          |       |
|-------|--|----------|-------|
| 12018 | Reinforced concrete Grade 40S, Grade 40D or 40MPa carriageway..... | 1,342.70 | 12018 |
| 12019 | Extra over Item 12018 for rapid hardened concrete.....             | 243.50   | 12019 |

**STEEL FABRIC REINFORCEMENT**

*Per square metre*

| BS 4483 or SS-32 Reference number |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|
| C785                              | C636  | C503  | C385  | C283  |
| A                                 | B     | C     | D     | E     |
| \$                                | \$    | \$    | \$    | \$    |
| 53.30                             | 48.10 | 40.30 | 33.90 | 28.40 |

|       |  |  |       |
|-------|--|--|-------|
| 12020 | Supply and lay steel fabric reinforcement..... |  | 12020 |
|-------|--|--|-------|

**RUN-IN**

*Each*

A  
\$

|       |   |          |       |
|-------|---|----------|-------|
| 12021 | Concrete run-in size n.e. 10 m <sup>2</sup> ..... | 2,648.00 | 12021 |
|-------|---|----------|-------|

*Per square metre*

A  
\$

|       |  |        |       |
|-------|--|--------|-------|
| 12022 | Concrete run-in size exceeding 10 m <sup>2</sup> ..... | 253.10 | 12022 |
|-------|--|--------|-------|



| Item  |   |                    | Item   |        |          |          |        |       |
|-------|---|--------------------|--------|--------|----------|----------|--------|-------|
|       | <b>FOOTWAYS, CYCLE TRACKS, PAVING AND CURBING (CONT'D)</b>  |                    |        |        |          |          |        |       |
|       |   | Concrete curb type |        |        |          |          |        |       |
|       |   | K1                 | K2     | K3     | K5 or K9 | K6 or K8 | K7     |       |
|       |   | A                  | B      | C      | D        | E        | F      |       |
|       | <i>Per linear metre</i>   | \$                 | \$     | \$     | \$       | \$       | \$     |       |
| 12036 | Precast concrete curb including backing and foundations.....  | 140.80             | 152.30 | 146.00 | 165.00   | 161.70   | 142.10 | 12036 |
| 12037 | Extra over Item 12036 for curb n.e. 15.00 m radius.....   | 50.00              | 50.00  | 46.10  | 52.20    | 52.20    | 42.00  | 12037 |
| 12038 | Lay only precast concrete curb including backing and foundations.....   | 119.00             | 119.00 | 110.20 | 121.40   | 121.40   | 106.20 | 12038 |
| 12039 | Ditto but n.e. 15.00 m radius.....  | 138.90             | 138.90 | 128.60 | 141.60   | 141.60   | 124.10 | 12039 |
|       |   | Edging type        |        |        |          |          |        |       |
|       |   | E1                 | E2     | E3     |          |          |        |       |
|       | <i>Per linear metre</i>   | A                  | B      | C      |          |          |        |       |
|       |   | \$                 | \$     | \$     |          |          |        |       |
| 12040 | Precast concrete footpath edging including backing and foundations.....   | 140.90             | 142.80 | 139.30 |          |          |        | 12040 |
|       |   | A                  |        |        |          |          |        |       |
|       | <i>Per linear metre</i>   | \$                 |        |        |          |          |        |       |
| 12041 | Precast concrete quadrant to suit curbs and edgings of any size and radius including backing and foundations..... | 187.50             |        |        |          |          |        | 12041 |
|       |   | A                  |        |        |          |          |        |       |
|       | <i>Per cubic metre</i>  | \$                 |        |        |          |          |        |       |
| 12042 | Plain concrete Grade 30S, Grade 30D or 30MPa footway.....   | 1,139.90           |        |        |          |          |        | 12042 |
| 12043 | Plain concrete Grade 30S, Grade 30D or 30MPa margin or edging.....  | 1,165.30           |        |        |          |          |        | 12043 |
| 12044 | Ditto flat or dish channel.....   | 1,165.30           |        |        |          |          |        | 12044 |
| 12045 | Extra over either of Items 12042 to 12044 inclusive for concrete footpath with rapid hardening concrete.....      | 311.30             |        |        |          |          |        | 12045 |
| 12046 | Reinforced concrete Grade 30S, Grade 30D or 30MPa footway.....  | 1,256.10           |        |        |          |          |        | 12046 |
| 12047 | Ditto margin or edging.....   | 1,288.20           |        |        |          |          |        | 12047 |

| Item  |  |  | Item                                |  |  |  |  |         |         |       |
|-------|--|--|-------------------------------------|--|--|--|--|---------|---------|-------|
|       | <b>FOOTWAYS, CYCLE TRACKS, PAVING AND CURBING (CONT'D)</b>   |  |                                     |  |  |  |  |         |         |       |
|       | <b>SUNDRIES</b>  |  |                                     |  |  |  |  |         |         |       |
|       | <i>Per square metre</i>  | A<br>\$                                  |                                     |  |  |  |  |         |         |       |
| 12048 | Take up and clear away from Site existing paving slabs/blocks and sand bedding.....  | 41.90                                    | 12048                               |  |  |  |  |         |         |       |
| 12049 | Take up, set aside for re-use and re-lay existing paving slabs/blocks and sand bedding including additional sand filling and bedding.....                                  | 77.00                                    | 12049                               |  |  |  |  |         |         |       |
|       | <i>Per linear metre</i>  |  |                                     |  |  |  |  |         |         |       |
| 12050 | Take up and clear away from Site existing granite curbs or precast concrete curb, in any size and any radius, and associated concrete bedding, backing and foundation..... | 41.40                                    | 12050                               |  |  |  |  |         |         |       |
| 12051 | Take up, set aside for re-use and re-lay existing granite curbs or precast concrete curbs, ditto.....  | 196.80                                   | 12051                               |  |  |  |  |         |         |       |
|       | <b>CABLE DUCT</b>  |  |                                     |  |  |  |  |         |         |       |
|       | <b>CABLE DUCT PIPES</b>  |  |                                     |  |  |  |  |         |         |       |
|       |  | Type and bore of pipe (mm)               |                                     |  |  |  |  |         |         |       |
|       |  | U.P.V.C.                                 |                                     |  |  | Galvanized mild steel                      |  |         |         |       |
|       |  | 50                                       | 75                                  | 100                                      | 150                                      | 50   | 80   | 100     | 150     |       |
|       | <i>Per linear metre</i>  | A<br>\$                                  | B<br>\$                             | C<br>\$                                  | D<br>\$                                  | E<br>\$                                    | F<br>\$                                    | G<br>\$ | H<br>\$ |       |
| 12052 | Pipe laid in trench as cable duct.....   | 28.70                                    | 50.70                               | 74.30                                    | 143.30                                   | 67.10                                      | 90.30                                      | 127.20  | 188.90  | 12052 |
| 12053 | Take up and clear away ditto.....  | 3.00                                     | 4.40                                | 5.20                                     | 7.40                                     | 5.20                                       | 7.40                                       | 8.90    | 11.10   | 12053 |
| 12054 | Take up and set aside for re-use ditto.....  | 4.40                                     | 5.20                                | 5.90                                     | 8.10                                     | 8.90                                       | 9.60                                       | 11.10   | 13.30   | 12054 |
| 12055 | Extra over either of Items 12053 to 12054 inclusive for breaking out and clearing away concrete bed and surround if any.....   | 8.40                                     | 9.70                                | 14.50                                    | 20.60                                    | 8.40                                       | 9.70                                       | 14.50   | 20.60   | 12055 |
| 12056 | Lay only pipe in trench as cable duct.....   | 10.90                                    | 21.80                               | 31.50                                    | 48.40                                    | 12.20                                      | 24.20                                      | 36.30   | 54.50   | 12056 |
|       | <b>CONCRETE BEDS FOR CABLE DUCT PIPES</b>  |  |                                     |  |  |  |  |         |         |       |
|       | Concrete Grade 10S, Grade 10D or 10MPa in : -  |  |                                     |  |  |  |  |         |         |       |
|       |  | Width of concrete bed and pipe bore (mm) |                                     |  |  |  |  |         |         |       |
|       |  | 400<br>Wide<br>under<br>100<br>pipe      | 450<br>Wide<br>under<br>150<br>pipe | 600<br>Wide<br>under<br>two 100<br>pipes | 700<br>Wide<br>under<br>two 150<br>pipes | 800<br>Wide<br>under<br>three 100<br>pipes | 950<br>Wide<br>under<br>three 150<br>pipes |         |         |       |
|       | <i>Per linear metre</i>  | A<br>\$                                  | B<br>\$                             | C<br>\$                                  | D<br>\$                                  | E<br>\$                                    | F<br>\$                                    |         |         |       |
| 12057 | Bed 100 mm thick under pipe or pipes laid side-by-side including haunching up from outside edge of bed to meet pipe barrel tangentially after pipes are laid.....          |  |                                     | 46.10                                    | 49.50                                    | 70.20                                      | 85.40                                      | 101.00  | 120.30  | 12057 |
| 12058 | Add to Item 12057 if pipe or pipes completely surrounded with similar concrete not less than 100 mm thick all round.....   |  |                                     | 53.20                                    | 65.50                                    | 77.50                                      | 88.30                                      | 104.70  | 137.80  | 12058 |



**Section 13**

**PLUMBING AND DRAINAGE**



## SECTION 13

### PLUMBING AND DRAINAGE

#### SPECIAL CONDITIONS

|                                |                |  |
|--------------------------------|----------------|--|
| <b>Specification</b>           | <b>SC13.01</b> | <p>This Section shall generally be read and used in conjunction with the Specification in particular the Particular Specification for Plumbing and Drainage Installation, Particular Specification for Quality Water Supply Schemes for Buildings - Fresh Water, and any other relevant Particular Specifications adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages and any percentage addition adjustment to any of the rate contained in this Section or other Sections in the Schedule for any difference in cost and expenses incurred for complying with all requirements as stipulated in the Specification and Employer's Requirements adopted in the Contract for the Plumbing and Drainage Installation (the Installation).</p> |
| <b>Definitions generally</b>   | <b>SC13.02</b> | <p>Further to General Regulations Clause GR.02, the following definition is added in this Schedule : -</p> <p>“fresh water” shall mean “potable water” as referred to in this Schedule and the Contract.</p> <p style="text-align: center;"><b>PLUMBING AND DRAINAGE INSTALLATION</b></p>  |
| <b>Measurement generally</b>   | <b>SC13.03</b> | <p>Pipe sizes are referred to nominal sizes.</p> <p>Pipes shall generally be measured the length along centre line of the pipework over all in-line fittings including bends, branches, junctions and the like unless otherwise provided.</p> <p>All underground drain pipes shall be measured net as laid or fixed over all fittings.</p> <p>Gutters shall be measured the net length as fixed. No allowance for laps shall be measured.</p> <p>Insulation to pipe shall be measured the diameter of the pipes to be insulated.</p> <p>The materials stated for the valve are the materials of the body and bonnet of the valves.</p>   |
| <b>Measurement of fittings</b> | <b>SC13.04</b> | <p>Only fittings over 50 mm diameter, or 54 mm diameter in the case of copper fittings, shall be measured separately. All fittings shall be identified by the largest diameter.</p> <p>Unless otherwise stated, fittings shall be measured as “Extra over“ the gutter, tubing or pipe run.</p> <p>Taper pipes, taper bends, tees and junctions with diminishing branches shall be measured as the size of the largest end.</p>   |

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

|  |                         |  |
|--|-------------------------|--|
| <b>Measurement of fittings (Cont'd)</b>                | <b>SC13.04 (Cont'd)</b> | <p>Connector shall include valve connector, press fitting, flat seal etc. and the like, female or male construction. Connector shall only be measured in the connections of pipework to water tanks, cisterns and the like, and connections between new and existing pipework. Connectors in new pipework is deemed to be included in the measurement of pipes.</p> <p>Elbow shall include all degree elbow, reducing elbow, pre-formed pipe bridge, adapter, with or without sort, plain end, wall plate, outlet, etc. and the like, female or male construction.</p> <p>Tee shall include equal tee, branch tee, reducing tee, with or without outlet, etc. and the like, female or male construction.</p> <p>Unless otherwise provided, all copper pipes and fittings shall include for press end joints and fittings in accordance with BS 8537 and any other construction recommended by the manufacturer. All stainless steel pipes and fittings shall include for press end joints and fittings and any other construction recommended by the manufacturer.</p> |
| <b>Measurement of sheet lead work</b>                  | <b>SC13.05</b>          | <p>Sheet lead shall be measured the net weight as laid or fixed. The weight of tacks, wedges and the like shall be added in.</p>   |
| <b>Measurement under separate Sections</b>             | <b>SC13.06</b>          | <p>Unless specifically included in the items under this Section, the following works shall be measured separately and paid for at the appropriate rates under the respective Sections as stated below or other applicable Work Sections in this Schedule : -</p> <ul style="list-style-type: none"> <li>(a) All trench excavation under Section 03 - Excavation.</li> <li>(b) All chases in and holes through existing walls, ceilings, etc. for tubing and pipes, other than mortices or holes for brackets, and all concrete filling under Section 04 - Concrete Work and Section 05 - Brickwork and Blockwork.</li> <li>(c) All steel reinforcement under Section 04 - Concrete Work.</li> <li>(d) All plasterwork under Section 11 - Plastering and Finishes.</li> <li>(e) All painting to pipework under Section 15 - Painting.</li> </ul>  |
| <b>Measurement of granular bedding for drain pipes</b> | <b>SC13.07</b>          | <p>The measurement shall be the compacted thickness as specified by the Maintenance Surveyor, whether laid in one or more layers. No deduction shall be made for voids not exceeding 1.00 m<sup>3</sup>.</p>   |
| <b>Measurement of formwork</b>                         | <b>SC13.08</b>          | <p>Formwork shall be measured as the actual surface in contact with concrete. No deduction shall be made for openings not exceeding 1.00 m<sup>2</sup>. Boxing for opening exceeding 1.00 m<sup>2</sup> shall be measured as edges. Wrot formwork shall be measured only when a fair finished face to the concrete is specifically ordered by the Maintenance Surveyor in writing.</p>   |

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

|   |                |  |
|---|----------------|--|
| <b>Measurement of precast concrete</b>  | <b>SC13.09</b> | Precast concrete shall be measured the actual size of the item casted.   |
| <b>Measurement of manholes, cesspits, etc.</b>                                  | <b>SC13.10</b> | <p>Manholes, cesspits, etc. shall be measured net as cast.</p> <p>No deduction shall be made for : -</p> <p>(a) Voids not exceeding 0.05 m<sup>3</sup>.</p> <p>(b) The volume of reinforcement, steel joist and the like.</p> <p>(c) Openings in walls, cover slabs and the like not exceeding 0.10 m<sup>2</sup>.</p>   |
| <b>Measurement of internal lining to leaking buried water-carrying services</b> | <b>SC13.11</b> | Preparation and applying internal lining to leaking buried water-carrying services shall be measured the number of the net length of pipes over all fittings and joints not exceeding 2500 mm long. Length exceeding 2500 mm shall be measured the net length of pipes over all fittings and joints. The material and length of internal lining shall be submitted for the Maintenance Surveyor's approval before formal application.  |
| <b>Rates for Plumbing and Drainage Installation</b>                             | <b>SC13.12</b> | <p>The rates for Plumbing and Drainage Installation shall generally include for : -</p> <p>(a) Carrying out all necessary preparation and investigation to the Site and the areas or services that may be affected by the works prior to commencement of the Installation.</p> <p>(b) Working internally or externally, and at any height and position.</p> <p>(c) Submission of technical literatures, catalogues, sample boards, samples, test certificates and other documents as specified in the Contract for the approval of the Maintenance Surveyor.</p> <p>(d) Provision of proper and safe protection to equipment, materials delivered to Site and any installation works executed.</p> <p>(e) Provision of cleaning and disinfection of the Installation upon completion using methods as specified in the Contract.</p> <p>(f) Works executed by Specialist Sub-contractor approved by the Maintenance Surveyor.</p> <p>(g) Provision of design and record drawings except for installation drawing and as-built drawing preparation which are part of the services provided for the Enhanced Execution Works for the Plumbing and Drainage Installation under Special Conditions Clause SC13.37(a) herein, in which case, the drawing preparation shall be measured and paid for separately in accordance with Special Conditions Clauses SC13.41 to SC13.42 herein.</p> |

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for Plumbing and Drainage Installation (Cont'd)**

**SC13.12 (Cont'd)**

- (h) Programming, planning, co-ordination, control, supervision, monitoring and phasing of installation works in existing and/or occupied buildings and premises including providing all necessary superintendents as required and specified in the Contract.
- (i) Provision of temporary works and protective measures for execution of works in existing and/or occupied buildings or premises to suit users and/or building management requirements, including the erection, alteration and dismantling of such temporary works and protective measures on a daily basis.
- (j) Temporary suspension of the water supplies and arranging for temporary plumbing system and diversion, if required.
- (k) Providing labels for marking all valves, pipework, filtration tanks, fuses, terminals, lamps, switches, handles, keys instruments, gauges, control and other equipment, etc.
- (l) Conducting sampling and analysis of potable fresh water upon substantial completion of the plumbing installation.
- (m) Carrying out cleaning of the plumbing installation pipework and water storage tanks and disinfection of plumbing installation in potable use.
- (n) Carrying out all testing and commissioning for the Installation as required under the Contract including provisions of all incidental sundry components for operation of the Installation to the satisfaction of the Maintenance Surveyor.

**Rates for lead work**

**SC13.13**

Rates for lead work shall include for all dressing, bossing up, forming angles and inter-sections, bossing ends and the like to rolls and welts.

**Rates for pipeworks**

**SC13.14**

The rates for pipeworks shall further include for :-

- (a) All short lengths, cutting and waste.
- (b) All joints in the running lengths including flanges, couplings, unions, or other connection devices, cutting and jointing pipe to fittings like bends, elbows, branches, tees, caps, heads, outlets, gullies, etc., joints between pipes of differing materials, including using all necessary jointing materials and fixing accessories.
- (c) Unless otherwise provided, all methods of jointings to pipes and fittings.
- (d) All connections of pipework to water tanks, cisterns and the like including drilling of tank, cistern, etc. as required, and connections between new and existing pipework including all necessary jointing materials and fixing accessories, cutting into existing pipework and removing short length of pipe in position, and preparing and making good pipe ends to receive new fittings.
- (e) Fittings for pipes not exceeding 50 mm diameter (or 54 mm diameter in the case of copper pipes) including connections.

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for  
pipeworks  
(Cont'd)**

**SC13.14  
(Cont'd)**

- (f) Provision and fixing of all pipe sleeves of any kind of materials including loose cover plates, pointing with approved non-acidic and anti-mould sealants, sealing up voids between pipes and fire rated walls or floors with sealing system as specified.
- (g) Provision and fixing of pipe supports including stainless steel clamps, brackets, clips, etc. as specified.
- (h) Fixing in any position to floors, walls and soffits including fixing in chases, ducts, false ceilings and similar positions, and laying in trench.
- (i) Protection of underground and concealed metal pipes with "Denso" tape or other materials as specified.
- (j) Provision of connection point for the purposes of connection of equipotential bonding connection as required by the I.E.E. Regulations.
- (k) Carrying out quality control of soldering / brazing joints for copper pipes.
- (l) Making good to any length of pipe damaged in addition to the net length which has actually been removed, including providing new pipes and forming and including new joints.
- (m) Making good all surfaces disturbed.

**Rates for  
drain pipes for  
underground  
drainage**

**SC13.15**

- The rates for all types of drain pipes for underground drainage shall further include for : -
- (a) All jointing including provision of loose collars, loose sockets, connectors, flanged socket ends, flanged spigot ends and the like and jointing materials.
  - (b) Provision and fixing of all holderbats required for pipes fixed to manhole sides and the like and making good.
  - (c) Building in ends of pipes to manhole sides and the like, jointing to channels and making good.
  - (d) Cutting into and removing short length of pipe in position, preparing and making good pipe ends to receive new fittings (measured separately) including cutting into and making good concrete bed or surround afterwards as necessary.
  - (e) Temporary sealing of pipes during the progress of the work.
  - (f) Making good to any length of drain pipe damaged in addition to the net length which has actually been removed, including providing new drain pipes and forming and including new joints.
  - (g) Maintaining the soil or waste flow by means of temporary channels or drain pipes whilst the work is in progress, including additional excavation or other related works.
  - (h) Making good of surfaces disturbed.

## SPECIAL CONDITIONS

## PLUMBING AND DRAINAGE INSTALLATION

|  |                |  |
|--|----------------|--|
| <b>Rates for sub-soil drain pipes</b>                                | <b>SC13.16</b> | The rates for sub-soil drain pipes shall further include for : -<br><br>(a) Forming holes in pipeline for junction if required.  |
| <b>Rates for vitrified clay pipes</b>                                | <b>SC13.17</b> | The rates for vitrified clay pipes shall further include for : -<br><br>(a) Providing extra strength "o" ring flexible spigot and socket joints.   |
| <b>Rates for tubing and pipes include for made bends</b>             | <b>SC13.18</b> | The rates for UPVC pipes, polyethylene (PE) pipes, galvanized mild steel pipes, uPVC lined galvanized mild steel pipes, stainless steel pipes and copper pipes shall further include for : -<br><br>(a) Made bends.  |
| <b>Rates for fittings</b>  | <b>SC13.19</b> | The rates for fittings on gutters, tubing and pipes of all types shall include for : -<br><br>(a) Additional cutting and waste on gutter, tubing or pipe and all extra joints.<br><br>(b) In the case of pipe bends and gutter angles, bends and gutter angles of any angle.<br><br>(c) In the case of tees, crosses and single or double junctions, square or oblique connections with straight or curved offsets and all ends either equal or reducing.  |
| <b>Rates for take up or take down, etc. gutters, tubing or pipes</b> | <b>SC13.20</b> | The rates for take up or take down and clear away or take up or take down and set aside for re-use gutters, tubing or pipes shall further include for : -<br><br>(a) All fittings including brackets or hangers.<br><br>(b) Cutting into existing gutter, tubing or pipe in position.<br><br>(c) Preparing remaining ends to receive joint with new pipe if required.<br><br>(d) Plugging ends with plugs or caps as required.<br><br>(e) Making good surfaces disturbed.<br><br>(f) Arranging for temporary plumbing system and diversion, if required. |
| <b>Rates for fix only or lay only gutters, tubing or pipes</b>       | <b>SC13.21</b> | The rates for fix only or lay only gutters, tubing or pipes shall further include for : -<br><br>(a) All fittings including brackets, gaskets, bolts, nuts and washers and other accessories.<br><br>(b) Cutting mortices and grouting in cement mortar.   |

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for  
fix only  
or lay only  
gutters, tubing  
or pipes  
(Cont'd)**

**SC13.21  
(Cont'd)**

- (c) Preparing ends to receive joints with pipes.
- (d) Making good surfaces disturbed.

**Rates for  
insulation**

**SC13.22**

The rates for insulation to pipeworks shall include for : -

- (a) All cutting, waste and fitting.
- (b) Fixing bands.

**Rates for  
valves**

**SC13.23**

Rates for valves shall further include for : -

- (a) Providing valves of the type approved by the WSD.
- (b) Submitting test certificates issued by the PWL/AL.
- (c) Providing certificates from WRAS or equivalent organization for potable water application.

**Rates for  
cisterns and  
tanks**

**SC13.24**

The rates for cisterns and tanks shall include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions.
- (b) Provision of design for glass-fibre reinforced plastic water tanks.
- (c) Suitable for storage of fresh water, portable water and/or flushing water.
- (d) Any colour and shape.
- (e) Supply and fix nozzles, air vent, electrode seat and cover, internal ladder, external ladder, galvanized mild steel base supporting frames, etc. and all necessary accessories, fittings and the like recommended by the manufacturer.
- (f) Providing and fixing with anchor bolts.
- (g) Cutting mortice, sinking or drilling in concrete, brick, stone or other surfaces as required.
- (h) Grouting into new or existing mortice or holes.
- (i) Making good disturbed surfaces.
- (j) Masking, protecting and cleaning.

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for cisterns and tanks (Cont'd)</b>                      | <b>SC13.24 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(k) Submission of catalogues, technical literature, operation manuals and manufacturer's guarantee for the approval of the Maintenance Surveyor.</li> <li>(l) Testing and commissioning.</li> <li>(m) Providing test certificate.</li> </ul>  |
| <b>Rates for concrete beds, haunchings and surrounds to pipes</b> | <b>SC13.25</b>          | <p>The rates for concrete beds, haunchings and surrounds to pipes shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Providing and laying a layer of polythene sheeting or concrete blinding on the bottom of trenches before concreting.</li> <li>(b) All necessary formwork and falsework.</li> <li>(c) Forming and including movement joints.</li> <li>(d) All necessary precast concrete wedges, blocks or cradles or other approved pipe supports including compressible sheeting.</li> <li>(e) Keeping concrete and pipes damp until backfilling placed.</li> </ul>  |
| <b>Rates for granular beds</b>                                    | <b>SC13.26</b>          | <p>The rates for granular beds shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Recycled or non-recycled granular bedding material to be clean, hard, durable, crushed rock or crushed concrete, broken stone, hard brick, concrete or other comparable hard insert approved by the Maintenance Surveyor.</li> <li>(b) Compacting and trimming granular beds to correct gradient and shape under barrel and pipe sockets.</li> <li>(c) Handling from temporary spoil heaps.</li> <li>(d) Additional bulk of material required to allow for compaction and consolidation.</li> <li>(e) Re-compacting and laying granular around pipes after testing.</li> </ul> |
| <b>Rates for traps and gullies of any type</b>                    | <b>SC13.27</b>          | <p>The rates for traps and gullies of any type shall include for : -</p> <ul style="list-style-type: none"> <li>(a) All necessary concrete bedding, cover and surrounds including formwork.</li> <li>(b) Excavation, backfilling with suitable materials, compaction and removal of surplus excavated materials from Site.</li> <li>(c) Building in ends of pipes to gully sides and the like.</li> <li>(d) Connecting and jointing to drainage system.</li> </ul>   |



**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for surface water channels or step channels**

**SC13.28**

The rates for surface water channels or step channels shall include for : -

- (a) Excavation, backfilling with suitable filling materials, compaction and removal of surplus excavated materials from Site.
- (b) All necessary formwork.
- (c) Forming and including movement joints, angles, ends, intersections, junctions, outlets, rebates to receive channel covers and the like.
- (d) Rendering all exposed surfaces with minimum 13 mm thick cement and sand (1:3) mortar.
- (e) Providing and forming PVC weepholes, if required.
- (f) Connecting and jointing to drainage system.

**Rates for cast iron channel covers**

**SC13.29**

The rates for cast iron channel covers shall include for : -

- (a) Multi-handling and placing in position.
- (b) All necessary cutting and waste.
- (c) Adjusting to suit channel alignment.

**Rates for precast concrete channel covers**

**SC13.30**

The rates for precast concrete channel covers shall include for : -

- (a) Forming slots to channel covers.
- (b) Multi-handling and placing in position.
- (c) All necessary formwork.
- (d) All necessary cutting and waste.
- (e) Adjusting to suit channel alignment.

**Rates for manholes, cesspits, etc.**

**SC13.31**

The rates for manholes, cesspits, etc. shall include for : -

- (a) Tamping around reinforcement.
- (b) Rendering all internal surfaces with minimum 13 mm thick cement and sand (1:3) mortar.
- (c) Forming benching for main and branch channels as required including finishing to falls.
- (d) Benching finishing smooth and marrying into structural sides with cement mortar (1:3).

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for manholes, cesspits, etc. (Cont'd)**

**SC13.31 (Cont'd)**

- (e) Fair-faced finish internally.
- (f) Testing of water tightness.

**Rates for formwork**

**SC13.32**

The rates for formwork shall include for : -

- (a) Submission of design on formwork and falsework, if any, including supports and foundations by a Registered Structural Engineer.
- (b) Erecting, maintaining and striking formwork and falsework.
- (c) Preventing loss of grout between joints.
- (d) Fixing inserts and chases.
- (e) Box out to form holes not exceeding 1.00 m<sup>2</sup>.
- (f) Preparing and applying surface retarders and release agents as required.
- (g) Multi-handling of removing formwork and falsework when striking without overloading the finished concrete work.
- (h) Preparing and applying wood preservatives to all surfaces of left-in timber formwork.
- (i) Forming cambers and falls.
- (j) Individual fillets, chambers, splays, drips, rebates, recesses, grooves and the like, not exceeding 100 mm total girth measured on the faces in contact with the concrete.
- (k) Strutting to soffits at any height.
- (l) Soffits of solid slabs in any thickness.
- (m) Sides and soffits of beams in any depth.
- (n) In case of formwork materials proposed by the contractor, all necessary preparation work other than spatterdash.

**Rates for manhole or gully sump cover and frame**

**SC13.33**

The rates for manhole or gully sump cover and frame shall include for : -

- (a) Bedding frame in cement and sand (1:3) mortar.
- (b) Sealing cover in heavy grease.
- (c) Providing two keys for each pattern of cover.

**SPECIAL CONDITIONS**

**PLUMBING AND DRAINAGE INSTALLATION**

**Rates for alterations to existing manholes**

**SC13.34**

The rates for alterations to existing manholes shall include for : -

- (a) All preparation work that are required for the alteration.
- (b) Forming main and branch channels as required in re-formed benching including finishing to falls.
- (c) Provision of temporary channels or drain pipes and/or other temporary measures necessary to maintain the existing soil or waste flow whilst the work is in progress.
- (d) All other related works that are required for the alteration.
- (e) Clearing away debris arising from alteration work.
- (f) Making good areas disturbed to match existing.

**Rates for internal lining to leaking buried water-carrying services**

**SC13.35**

The rates for internal lining to leaking buried water-carrying services shall include for : -

- (a) Removing covers of manholes and other drainage chambers and re-fixing including heavy grease after cleaning.
- (b) Cleaning of all pipelines and drainage structures with high pressure water jets before application of internal lining including removing all water arising and drying up the pipelines and drainage structures before execution of works.
- (c) Application to all types of pipe materials including fittings.
- (d) Temporary diversion of drainage flow.
- (e) Establishment, maintaining and removal of all necessary plant, tools and equipment.
- (f) Testing as specified, remedying any defects and re-testing as necessary until the Maintenance Surveyor satisfies the test results.
- (g) Providing two sets of CD-ROM recording of the repaired pipelines certified by the Contractor's Leakage Test Team Leader and Contract Manager.
- (h) Submission of catalogues, technical literature, etc. for the approval of the Maintenance Surveyor.

**G.S. clauses for formwork**

**SC13.36**

G.S. clauses for formwork can be found in the Concrete Work Section of the General Specification for Building.

**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

**Services generally**

**SC13.37**

Services for Plumbing and Drainage Installation in this Section shall refer to the following services to be provided by the Contractor in connection with the Plumbing and Drainage Installation, all in accordance with the requirements of the Contract : -

- (a) Services provided for the Enhanced Execution Works ("EEW") for the Plumbing and Drainage Installation.
- (b) Services provided to fresh water plumbing system and successful application of new or renewal certificates under the Quality Water Supply Schemes for Buildings - Fresh Water (the Scheme).
- (c) Services for inspection, testing and cleaning of existing drainage system.

Any services or works required for the satisfactory completion and operation of the Plumbing and Drainage Installation in accordance with the requirements of the Contract but are not separately itemized under the Services for Plumbing and Drainage Installation in this Section, the Contractor is deemed to have allowed for such item(s) in his Contract Percentages and any percentage addition to the rates contained in this and other Sections in the Schedule of Rates under the Contract.

**Services for Enhanced Execution Works**

**SC13.38**

Services provided for the Enhanced Execution Works shall include for any of the following services : -

- (a) Submission of installation drawings prior to commencement of the Installation for the approval of the Maintenance Surveyor.
- (b) Submission of as-built drawings upon completion of the Installation for the approval of the Maintenance Surveyor.
- (c) Submission of operation and maintenance (O&M) manual upon completion of the Installation for the approval of the Maintenance Surveyor.
- (d) Providing specific operation and maintenance services for the completed Plumbing and Drainage Installation.

**Measurement of Services for Plumbing and Drainage Installation**

**SC13.39**

The items included under Services for Plumbing and Drainage Installation shall only be measured and paid for where specifically ordered by the Maintenance Surveyor in writing.

**Measurement of Services for Enhanced Execution Works**

**SC13.40**

Measurement of the Services for the Enhanced Execution Works will be based on the final value of the Installation included in the Works Order (but excluding the value of the services ordered for the EEW of such Installation) that has been certified by the Maintenance Surveyor (the "Installation Value").

**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

|   |                |  |
|---|----------------|--|
| <b>Measurement of installation drawings</b>                                     | <b>SC13.41</b> | The provision for installation drawings shall be measured and paid for when the complete set of drawings and/or documents for the Installation has been submitted and accepted by the Maintenance Surveyor.  |
| <b>Measurement of as-built drawings</b>   | <b>SC13.42</b> | The provision for as-built drawings shall be measured and paid for when the drawings have been submitted and accepted by the Maintenance Surveyor.   |
| <b>Measurement of O&amp;M manual</b>  | <b>SC13.43</b> | The provision for operation and maintenance (O&M) manuals shall be measured and paid for when the O&M manual have been submitted and accepted by the Maintenance Surveyor.   |
| <b>Measurement of Inspection to Fresh Water Plumbing System</b>                 | <b>SC13.44</b> | <p>Measurement of provision of inspection to fresh water plumbing system is based on the following : -</p> <p>(a) Inspection to fresh water plumbing system shall be measured as number of inspection instructed by the Maintenance Surveyor to the fresh water plumbing system including all the upfeed to and downfeed from the fresh water tanks for each building.</p> <p>Unless otherwise stated, if the building contains an annex block, then only the main building will be considered in the measurement.</p> <p>If the annex block has an independent fresh water plumbing system, in which case, inspection of the annex block shall be measured separately as if it is a stand-alone building.</p> |
| <b>Measurement of utilities survey</b>  | <b>SC13.45</b> | Measurement of utilities survey of the buried/exposed existing underground utilities / services shall be the plan area within boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the date of completion or both as agreed by the Maintenance Surveyor.   |
| <b>Measurement of acoustic test for detection of leaking buried water pipes</b> | <b>SC13.46</b> | Measurement of acoustic test for detection of leaking buried water pipes shall be the plan length within boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the date of completion or both as agreed by the Maintenance Surveyor.  |

### SPECIAL CONDITIONS

#### SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION

**Rates for Services for Enhanced Execution Works**

**SC13.47**

The rates for Services for Enhanced Execution Works shall further include for : -

- (a) Submission of a detailed programme of the Installation showing the intended method, stages and order of work execution for the approval of the Maintenance Surveyor.
- (b) Submission of full details of builder's work requirements for the approval of the Maintenance Surveyor.

For any works or services that are required in the Specification for Enhanced Execution Works but are not separately itemized in this Section, the Contractor is deemed to have allowed such works or services in the Contract Percentages and any percentage addition for complying with the Specification requirements.

**Rates for provision of installation drawings**

**SC13.48**

The rates for provision of installation drawings shall further include for : -

- (a) Developing, preparing and completion of drawings showing the complete installation requirements incorporating the following details and other details as specified : -
  - Installation drawings
  - Pipework installation drawings
  - Special plant rooms co-ordination work
  - Builder's work drawings
  - Manufacturer's shop drawings
  - Checking drawings of other trades
- (b) Reviewing, updating and revising the drawings taking into account comments from the Maintenance Surveyor and/or changes of the works during the Contract.
- (c) Provision of drawings in electronic format conforming to the latest version of CAD Standard of Works Projects as specified.
- (d) Submission of the number of copies of drawings as required by the Contract.

**Rates for provision of as-built drawings**

**SC13.49**

The rates for provision of as-built drawings shall further include for : -

- (a) Developing, preparing and completion of drawings showing the as-built condition of the Installation incorporating the details as required by the Contract.
- (b) Reviewing, updating and revising the drawings taking into account comments from the Maintenance Surveyor and/or changes of the works during the Contract.
- (c) Submission of the number of copies of drawings as required by the Contract.
- (d) Provision and installation of a glass frame for the valve chart and plant room record drawings at major plant rooms.

**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

**Rates for provision of O&M manual**

**SC13.50**

The rates for provision of O&M manual shall further include for : -

- (a) Developing, preparing and completion of the O&M manual showing the detailed technical information covering both operation and maintenance aspects of the Installation as required by the Contract.
- (b) Reviewing, updating and revising the O&M manual taking into account comments of the Maintenance Surveyor and/or changes of the works during the Contract.
- (c) Submission of the number of copies of the O&M manual as required by the Contract.

**Rates for provision of annual operation and maintenance services**

**SC13.51**

The rates for provision for annual operation and maintenance services shall further include for :-

- (a) Submission of a maintenance schedule identifying the programme for monthly routine services, quarterly, half-yearly and annual operation and maintenance services, all to the approval of the Maintenance Surveyor.
- (b) Carrying out monthly routine maintenance services, quarterly, half-yearly and annual operation and maintenance services, as detailed in the Contract and to the satisfaction of the Maintenance Surveyor.
- (c) Provision of emergency call-out services for any installation and equipment failure.
- (d) Carry out replacement or repair of all components of equipment and pipework as necessary in order to maintain the whole Installation in a good working order including supply of equipment, fittings and consumable items.
- (e) Maintaining an attendance log book and details of operation and maintenance services carried out.
- (f) Carrying out checking and, if necessary, re-adjustment of the Installation one month before the expiry date of the Maintenance Period.

**Rates for inspection to fresh water plumbing system**

**SC13.52**

The rates for carrying out inspection to fresh water plumbing system shall further include for : -

- (a) Any function / type of building to be inspected irrespective of the number of floors in a building.
- (b) Any locations to be inspected including any basement floor(s), ground floor, sky garden floor and/or refuge floor(s).
- (c) Any return visits due to attending follow-up actions from matters arising from the inspection, shall be deemed to be included in the same inspection, and such return visits shall not be measured separately.
- (d) Provision of a licensed plumber, building surveyor or building services engineer with qualification and experience that meets the requirements as laid down in the Fresh Water Plumbing Maintenance Guide issued by Water Supplies Department.

**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

**Rates for inspection to fresh water plumbing system (Cont'd)**

**SC13.52 (Cont'd)**

- (e) All expenses and reimbursement in connection with employment of the licensed plumber, building surveyor or building services engineer including but not limited to basic salary, contribution to the Mandatory Provident Fund, gratuity and all necessary levies, e.g. levy for Construction Industry Council, insurances, etc.
- (f) Carrying out inspection of the fresh water plumbing system in accordance with the recommended practices as laid down in the Fresh Water Plumbing Maintenance Guide issued by Water Supplies Department.
- (g) Programming, planning, co-ordination and phasing of installation works in existing and/or occupied buildings and premises.
- (h) Provision of temporary works and protective measures for execution of works in existing and/or occupied buildings or premises to suit users and/or building management requirements.
- (i) Submission of documentary support and inspection results, provision of estimates for proposed repair works, water tank cleansing reports and other documents necessary for the new or renewal application under the Scheme as required by the Maintenance Surveyor.

**Rates for cleaning of fresh and flush water tanks**

**SC13.53**

The rates for cleaning of fresh and flush water tanks shall include for : -

- (a) Cleaning of water tanks all in accordance with the Specification requirements.
- (b) Designating a competent Unit Foreman to supervise throughout the course of cleaning.
- (c) Co-ordination with the user or management office in carrying out cleaning works in existing and/or occupied buildings and premises.
- (d) Submitting method statements, plant / equipment lists and risk assessment on the delivery of cleaning.
- (e) Conducting sampling and analysis for water quality examination as SC13.54 for cleaning of fresh water tanks.
- (f) Submitting attendance records.
- (g) Taking photographic records.
- (h) Submitting completion reports including : -
  - (i) attendance records of all skilled labourers;
  - (ii) photographic records on the locations and distribution of defects found on the internal wall finishes and/or structure before and after the repairs;



**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

**Rates for cleaning of fresh and flush water tanks (Cont'd)**

**SC13.53 (Cont'd)**

- (iii) photographic records after completion of the cleaning services; and
- (iv) photographic records to show the proper functioning condition of the stop valves and stop cocks after completion of the cleaning services.

**Rates for sampling and analysis for water quality examination**

**SC13.54**

The rates for sampling and analysis for water quality examination shall include for : -

- (a) Conducting sampling and analysis for the quality of fresh water on completion of the plumbing installation. At least one sampling shall be taken from each water supply tank.
- (b) All water tests and analysis shall be conducted by the PWL/AL as stated in the Contract and in accordance with Fresh Water Plumbing Maintenance Guide issued by the Water Supplies Department.
- (c) Submission of test reports.

**Rates for utilities survey**

**SC13.55**

The rates for utilities survey of the buried/exposed existing underground utilities/services shall include for : -

- (a) Carrying out the utilities survey of the buried/exposed existing underground utilities/services by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.
- (b) Preparation and submission of survey report in 2 copies with record drawings, photo records, text reports and layout plans and 2 sets of CD-ROM containing all such information.
- (c) Compliance with the requirements of the current Code of Practice on Monitoring and Maintenance of Water Carrying Services Affecting Slopes issued by Civil Engineering and Development Department.

**Rates for acoustic test detection of leaking buried water pipes**

**SC13.56**

The rates for acoustic test for detection of leaking buried water pipes shall include for : -

- (a) Carrying out the acoustic test by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.
- (b) Preparation and submission of survey report in 2 copies with record drawings, photo records, text reports and layout plans and 2 sets of CD-ROM containing all such information.
- (c) Compliance with the requirements of the current Code of Practice on Monitoring and Maintenance of Water Carrying Services Affecting Slopes issued by Civil Engineering and Development Department.

**SPECIAL CONDITIONS**

**SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION**

**Rates for  
cleaning of  
existing drainage  
system**

**SC13.57**

The rates for cleaning of existing drainage system shall include for : -

- (a) Cleaning of existing manholes including branches and drains between manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers.
- (b) Removing covers and re-fixing including re-sealing with heavy grease after cleaning out works.
- (c) Removing all sludge, silts, solid matters, etc. and the like by labour or pumping out from drainage chamber.
- (d) Clearing away and disposal of sludge, deposits, solid matters, etc. to the dumping site approved by Environmental Protection Department.
- (e) Cleaning of drainage chamber with high pressure jets including removing all water arising.
- (f) Obtaining a disposal permit from Environmental Protection Department and submitting a copy to the Maintenance Surveyor.
- (g) Keeping surrounding and affected areas clean and tidy including sanitizing, cleaning, removing all matters arising.

**Rates for  
CCTV  
inspection  
survey to  
existing  
underground  
drainage system**

**SC13.58**

The rates for CCTV inspection survey to existing underground drainage system shall include for : -

- (a) Cleaning all pipelines and drainage structures with high pressure water jets before testing.
- (b) Providing two copies of CCTV inspection survey reports and two sets of 3R-size digital colour photographs of all identified defects.
- (c) Providing two sets of CD-ROM recordings of all drains, manholes, cesspits, septic tanks, catch pits, grease pits and other drainage chambers inspected.

**Rates for  
testing  
existing  
drains**

**SC13.59**

The rates for testing existing drains shall include for : -

- (a) Cleaning all pipelines and drainage structures with high pressure water jets before testing.
- (b) Temporary sealing ends of drains and connections.
- (c) Provision of all water, material and equipment.
- (d) Provision of test record.

| Item  |  |                    |        |        |          |          |       |
|-------|--|--------------------|--------|--------|----------|----------|-------|
|       | <b>LEAD WORK</b>   |                    |        |        |          |          |       |
|       | Milled lead and all labours including provision of all nails, screws, holdfasts, wedges, tacks and solder in :-  |                    |        |        |          |          |       |
|       | <i>Per kg</i>  |                    |        |        |          |          |       |
| 13001 | Flats (including rolls), gutters (including cesspools), cornices, dormers, flashings, hips, ridges, linings to sinks, cisterns, safes, drawers and the like .....                          | 82.70              | 7.40   | 8.90   | 15.30    | 13001    |       |
|       |  |                    |        |        |          |          |       |
|       | <b>DUCTILE IRON PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM</b>   |                    |        |        |          |          |       |
|       | Ductile iron pipes and fittings to BS EN 545 Class 100 with minimum thickness as specified and internal cement lining and external bitumen coating, for fresh and flushing water system :- |                    |        |        |          |          |       |
|       | <i>Per linear metre</i>  |                    |        |        |          |          |       |
|       |  | Pipe diameter (mm) |        |        |          |          |       |
|       |  | 80                 | 100    | 150    | 200      | 250      |       |
|       |  | A                  | B      | C      | D        | E        |       |
|       |  | \$                 | \$     | \$     | \$       | \$       |       |
| 13002 | Pipe laid in trench.....   | 515.50             | 522.10 | 735.40 | 998.80   | 1,287.70 | 13002 |
| 13003 | Pipe fixed to floor, wall or soffits.....  | 527.60             | 534.10 | 752.50 | 1,019.10 | 1,309.90 | 13003 |
|       | <i>Each</i>  |                    |        |        |          |          |       |
| 13004 | Extra over either of Items 13002 to 13003 inclusive for cover plate to flanged end .....   | 81.40              | 98.80  | 130.00 | 172.00   | 215.00   | 13004 |
| 13005 | Ditto for flanged socket end .....   | 197.00             | 297.00 | 390.00 | 516.00   | 647.00   | 13005 |
| 13006 | Ditto for flanged spigot end .....   | 274.00             | 375.00 | 493.00 | 651.00   | 817.00   | 13006 |
| 13007 | Ditto for flanged connector to existing pipework or water tank, etc.....   | 346.00             | 418.00 | 550.00 | 726.00   | 910.00   | 13007 |
| 13008 | Ditto for bend .....   | 266.00             | 365.00 | 480.00 | 634.00   | 795.00   | 13008 |
| 13009 | Ditto for tee .....  | 288.00             | 381.00 | 501.00 | 662.00   | 830.00   | 13009 |
| 13010 | Ditto for cross .....  | 318.00             | 399.00 | 525.00 | 693.00   | 869.00   | 13010 |
|       | <i>Per linear metre</i>  |                    |        |        |          |          |       |
| 13011 | Take up and clear away pipe laid in trench excavation (trench excavation measured separately) .....  | 18.20              | 22.10  | 26.00  | 29.90    | 33.80    | 13011 |
| 13012 | Take up and set aside for re-use pipe laid in trench (ditto) .....   | 23.40              | 27.30  | 31.20  | 35.10    | 39.00    | 13012 |
| 13013 | Take down and clear away pipe fixed to floor, wall or soffits .....  | 19.50              | 23.40  | 27.30  | 31.20    | 35.10    | 13013 |
| 13014 | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....  | 23.40              | 27.30  | 31.20  | 35.10    | 39.00    | 13014 |
| 13015 | Lay only pipe in trench .....  | 70.70              | 74.30  | 77.80  | 83.10    | 88.40    | 13015 |
| 13016 | Fix only pipe to floor, wall or soffits .....  | 97.20              | 102.50 | 107.80 | 113.20   | 118.50   | 13016 |

Item

Item

**DUCTILE IRON PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)**

Ductile iron pipes and fittings to BS EN 545 Class 100 with minimum thickness as specified and internal cement lining and external bitumen coating, for fresh and flushing water system : - (Cont'd)

| Pipe diameter (mm) |       |       |        |        |
|--------------------|-------|-------|--------|--------|
| 80                 | 100   | 150   | 200    | 250    |
| A                  | B     | C     | D      | E      |
| \$                 | \$    | \$    | \$     | \$     |
| 56.20              | 63.40 | 79.40 | 105.00 | 132.00 |
| 53.10              | 59.20 | 74.10 | 97.90  | 123.00 |

*Each*

13017 Unbolt existing joint, remove gasket and clear away, clean flange faces, provide new gasket and re-bolt joint .....

13017

13018 Remove flange cover plate and clear away, clean flange face, provide new gasket and prepare end of existing pipe for jointing to new pipework (measured separately).....

13018

**UPVC LINED GALVANIZED MILD STEEL PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM**

UPVC lined galvanized steel pipes and fittings to BS 1387 with internal lining of an approved type for fresh water supply system : -

| Pipe diameter (mm) |       |        |        |        |        |        |        |        |        |        |  |
|--------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| 15                 | 20    | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |  |
| A                  | B     | C      | D      | E      | F      | G      | H      | I      | J      | K      |  |
| \$                 | \$    | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     |  |
| 80.00              | 92.90 | 120.20 | 147.60 | 163.30 | 210.20 | 230.20 | 272.90 | 354.10 | 414.10 | 494.60 |  |
| 85.10              | 97.90 | 127.20 | 155.90 | 178.50 | 220.40 | 240.40 | 284.90 | 366.10 | 428.20 | 511.70 |  |
| -                  | -     | -      | -      | -      | -      | 80.70  | 123.00 | 190.00 | 279.00 | 367.00 |  |
| -                  | -     | -      | -      | -      | -      | 105.00 | 135.00 | 191.00 | 300.00 | 346.00 |  |
| -                  | -     | -      | -      | -      | -      | 145.00 | 185.00 | 275.00 | 384.00 | 497.00 |  |
| -                  | -     | -      | -      | -      | -      | 187.00 | 229.00 | 317.00 | 504.00 | 641.00 |  |
| -                  | -     | -      | -      | -      | -      | 85.40  | 152.00 | 275.00 | 302.00 | 334.00 |  |
| -                  | -     | -      | -      | -      | -      | 66.00  | 84.00  | 125.00 | 175.00 | 226.00 |  |

*Per linear metre*

13019 Pipe laid in trench.....

13019

13020 Pipe fixed to floor, wall or soffits.....

13020

*Each*

13021 Extra over either of Items 13019 to 13020 inclusive for cap end or plug.....

13021

13022 Ditto for bend or elbow.....

13022

13023 Ditto for three-way elbow or tee.....

13023

13024 Ditto for cross.....

13024

13025 Ditto for reducer.....

13025

13026 Ditto for connector to existing pipework or water tank, etc.....

13026

Item

Item

**UPVC LINED GALVANIZED MILD STEEL PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)**

UPVC lined galvanized steel pipes and fittings to BS 1387 with internal lining of an approved type for fresh water supply system : - (Cont'd)

*Per linear metre*

|       |   | Pipe diameter (mm) |       |       |       |       |       |       |       |       |       |       |       |
|-------|---|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|       |   | 15                 | 20    | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 125   | 150   |       |
|       |   | A                  | B     | C     | D     | E     | F     | G     | H     | I     | J     | K     |       |
|       |   | \$                 | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    |       |
| 13027 | Take up and clear away pipe laid in trench (trench excavation measured separately)..... | 3.90               | 5.20  | 6.50  | 7.80  | 9.10  | 10.40 | 11.70 | 13.00 | 14.30 | 18.20 | 22.10 | 13027 |
| 13028 | Take up and set aside for re-use pipe laid in trench (ditto).....                       | 6.50               | 7.80  | 9.10  | 10.40 | 11.70 | 13.00 | 14.30 | 15.60 | 16.90 | 20.80 | 24.70 | 13028 |
| 13029 | Take down and clear away pipe fixed to floor, wall or soffits.....                      | 5.20               | 6.50  | 7.80  | 9.10  | 10.40 | 11.70 | 13.00 | 14.30 | 15.60 | 19.50 | 26.00 | 13029 |
| 13030 | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....            | 6.50               | 7.80  | 9.10  | 10.40 | 11.70 | 14.30 | 15.60 | 16.90 | 20.80 | 23.40 | 27.30 | 13030 |
| 13031 | Lay only pipe in trench.....  | 8.80               | 10.60 | 12.40 | 14.20 | 15.90 | 19.50 | 21.20 | 23.00 | 24.80 | 26.50 | 30.10 | 13031 |
| 13032 | Fix only pipe to floor, wall or soffits.....  | 12.40              | 15.90 | 17.70 | 21.20 | 24.80 | 28.30 | 30.10 | 31.80 | 38.90 | 42.40 | 47.70 | 13032 |

**COPPER PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM**

Copper pipes and fittings to BS EN 1057 encapsulated with moisture resistant polyethylene sheath including factory applied thermal insulation polyethylene sheath with internal profile to entrap air for fresh water supply system as required : -

*Per linear metre*

|       |  | Pipe diameter (mm) |        |        |        |        |        |        |        |        |       |
|-------|--|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|       |  | 15                 | 22     | 28     | 35     | 42     | 54     | 67     | 76     | 108    |       |
|       |  | A                  | B      | C      | D      | E      | F      | G      | H      | I      |       |
|       |  | \$                 | \$     | \$     | \$     | \$     | \$     | \$     | \$     | \$     |       |
| 13033 | Pipe laid in trench.....                   | 93.40              | 139.40 | 180.20 | 264.60 | 314.90 | 391.20 | 463.30 | 601.80 | 884.70 | 13033 |
| 13034 | Pipe fixed to floor, wall or soffits ..... | 98.70              | 150.10 | 187.50 | 273.30 | 325.60 | 401.80 | 474.00 | 614.30 | 897.30 | 13034 |

| Item   |  | Pipe diameter (mm) |        |        | Item  |
|--|--|--------------------|--------|--------|-------|
|  |  | 67                 | 76     | 108    |       |
|  |  | A                  | B      | C      |       |
|  |  | \$                 | \$     | \$     |       |
| <b>COPPER PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)</b>  |  |                    |        |        |       |
| Copper pipes and fittings to BS EN 1057 encapsulated with moisture resistant polyethylene sheath including factory applied thermal insulation polyethylene sheath with internal profile to entrap air for fresh water supply system as required : - (Cont'd) |  |                    |        |        |       |
| Brass "Compression type" fittings : -  |  |                    |        |        |       |
|  | <b>Each</b>  |                    |        |        |       |
| 13035  | Extra over either of Items 13033 to 13034 inclusive for stop end .....   | 145.00             | 204.00 | 246.00 | 13035 |
| 13036  | Ditto for bend or elbow (copper to copper) .....   | 150.00             | 211.00 | 277.00 | 13036 |
| 13037  | Ditto for bend or elbow (copper to steel) .....  | 288.00             | 319.00 | 428.00 | 13037 |
| 13038  | Ditto for tee (all ends for copper) .....  | 366.00             | 449.00 | 706.00 | 13038 |
| 13039  | Ditto for tee (copper to copper to steel) .....  | 422.00             | 536.00 | 794.00 | 13039 |
| 13040  | Ditto for cross (all ends for copper) .....  | 568.00             | 646.00 | 824.00 | 13040 |
| 13041  | Ditto for connector to existing pipework.....  | 281.00             | 335.00 | 496.00 | 13041 |
| 13042  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like..... | 347.00             | 432.00 | 545.00 | 13042 |
| Brass or copper "Capillary type" fittings : -  |  |                    |        |        |       |
|  | <b>Each</b>  |                    |        |        |       |
| 13043  | Extra over either of Items 13033 to 13034 inclusive for stop end .....   | 121.00             | 170.00 | 205.00 | 13043 |
| 13044  | Ditto for bend or elbow (copper to copper) .....   | 125.00             | 176.00 | 231.00 | 13044 |
| 13045  | Ditto for bend or elbow (copper to steel) .....  | 240.00             | 266.00 | 357.00 | 13045 |
| 13046  | Ditto for tee (all ends for copper) .....  | 305.00             | 374.00 | 588.00 | 13046 |
| 13047  | Ditto for tee (copper to copper to steel) .....  | 352.00             | 447.00 | 662.00 | 13047 |
| 13048  | Ditto for cross (all ends for copper) .....  | 473.00             | 538.00 | 687.00 | 13048 |
| 13049  | Ditto for connector to existing pipework.....  | 234.00             | 279.00 | 413.00 | 13049 |
| 13050  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like..... | 289.00             | 360.00 | 454.00 | 13050 |

| Item   |  |                    |        |        |       |       |       |       |       |       | Item  |       |
|--|--|--------------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>COPPER PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)</b>  |  |                    |        |        |       |       |       |       |       |       |       |       |
| Copper pipes and fittings to BS EN 1057 encapsulated with moisture resistant polyethylene sheath including factory applied thermal insulation polyethylene sheath with internal profile to entrap air for fresh water supply system as required : - (Cont'd) |  |                    |        |        |       |       |       |       |       |       |       |       |
| Brass or copper "Press end type" fittings to BS 8537 :-  |  |                    |        |        |       |       |       |       |       |       |       |       |
| <i>Each</i>  |  |                    |        |        |       |       |       |       |       |       |       |       |
|  |  | Pipe diameter (mm) |        |        |       |       |       |       |       |       |       |       |
|  |  | 67                 | 76     | 108    |       |       |       |       |       |       |       |       |
|  |  | A                  | B      | C      |       |       |       |       |       |       |       |       |
|  |  | \$                 | \$     | \$     |       |       |       |       |       |       |       |       |
| 13051  | Extra over either of Items 13033 to 13034 inclusive for stop end .....   | 131.00             | 184.00 | 221.00 |       |       |       |       |       |       |       | 13051 |
| 13052  | Ditto for bend or elbow (copper to copper) .....   | 135.00             | 190.00 | 249.00 |       |       |       |       |       |       |       | 13052 |
| 13053  | Ditto for bend or elbow (copper to steel) .....  | 259.00             | 287.00 | 386.00 |       |       |       |       |       |       |       | 13053 |
| 13054  | Ditto for tee (all ends for copper) .....  | 329.00             | 404.00 | 635.00 |       |       |       |       |       |       |       | 13054 |
| 13055  | Ditto for tee (copper to copper to steel) .....  | 380.00             | 483.00 | 715.00 |       |       |       |       |       |       |       | 13055 |
| 13056  | Ditto for cross (all ends for copper) .....  | 511.00             | 581.00 | 742.00 |       |       |       |       |       |       |       | 13056 |
| 13057  | Ditto for connector to existing pipework.....  | 253.00             | 301.00 | 446.00 |       |       |       |       |       |       |       | 13057 |
| 13058  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like..... | 312.00             | 389.00 | 490.00 |       |       |       |       |       |       |       | 13058 |
| <i>Per linear metre</i>  |  |                    |        |        |       |       |       |       |       |       |       |       |
|  |  | Pipe diameter (mm) |        |        |       |       |       |       |       |       |       |       |
|  |  | 15                 | 22     | 28     | 35    | 42    | 54    | 67    | 76    | 108   |       |       |
|  |  | A                  | B      | C      | D     | E     | F     | G     | H     | I     |       |       |
|  |  | \$                 | \$     | \$     | \$    | \$    | \$    | \$    | \$    | \$    |       |       |
| 13059  | Take up and clear away pipe laid in trench (trench excavation measured separately).....                        | 3.90               | 5.90   | 7.20   | 8.50  | 9.10  | 10.70 | 11.70 | 13.00 | 14.30 | 13059 |       |
| 13060  | Take up and set aside for re-use pipe laid in trench (ditto).....  | 6.50               | 8.50   | 9.80   | 11.10 | 11.70 | 13.30 | 14.30 | 15.60 | 16.90 | 13060 |       |
| 13061  | Take down and clear away pipe fixed to floor, wall or soffits .....  | 5.20               | 7.20   | 8.50   | 9.80  | 10.40 | 12.00 | 13.00 | 14.30 | 15.60 | 13061 |       |
| 13062  | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                                  | 6.50               | 8.50   | 9.80   | 11.10 | 11.70 | 14.60 | 15.60 | 16.90 | 20.80 | 13062 |       |
| 13063  | Lay only pipe in trench.....   | 8.80               | 11.50  | 13.30  | 15.10 | 15.90 | 20.00 | 21.20 | 23.00 | 24.80 | 13063 |       |
| 13064  | Fix only pipe to floor, wall or soffits .....  | 12.40              | 16.80  | 19.50  | 23.00 | 24.80 | 28.80 | 30.10 | 31.80 | 38.90 | 13064 |       |

Item

Item

**COPPER PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)**

Copper pipes and fittings to BS EN 1057 encapsulated with moisture resistant polyethylene sheath including factory applied thermal insulation polyethylene sheath with internal profile to entrap air for fresh water supply system as required : - (Cont'd)

|             |   | Pipe diameter (mm) |       |       |       |       |        |        |        |        |
|-------------|---|--------------------|-------|-------|-------|-------|--------|--------|--------|--------|
|             |   | 15                 | 22    | 28    | 35    | 42    | 54     | 67     | 76     | 108    |
|             |   | A                  | B     | C     | D     | E     | F      | G      | H      | I      |
|             |   | \$                 | \$    | \$    | \$    | \$    | \$     | \$     | \$     | \$     |
| <b>Each</b> |   |                    |       |       |       |       |        |        |        |        |
| 13065       | Repair and make good one existing joint for "compression type" joint fittings including loosening nut and compression ring, cleaning tube end and re-tightening .....                                 | 8.70               | 9.70  | 10.80 | 11.70 | 12.70 | 14.80  | 17.50  | 19.60  | 30.20  |
| 13066       | Repair and make good one existing joint for "capillary type" joint fittings including heating, re-tinning tub end and re-soldering as necessary .....   | 29.70              | 32.90 | 38.00 | 42.00 | 47.10 | 55.30  | 63.50  | 72.70  | 93.20  |
| 13067       | Repair and make good one existing joint for "press end type" joint fittings to BS 8537 including loosening fittings, cleaning tube end, re-deburring, re-assembling and re-pressing as necessary..... | 32.10              | 35.50 | 41.00 | 45.40 | 50.90 | 59.70  | 68.60  | 78.50  | 101.00 |
| 13068       | Seal off existing pipe fixed in position including providing and jointing on "compression type" stop end .....  | 42.50              | 48.60 | 57.20 | 70.30 | 91.00 | 101.00 | 121.00 | 140.00 | 168.00 |
| 13069       | Ditto but "capillary type" stop end .....   | 35.40              | 40.50 | 47.70 | 58.60 | 75.80 | 83.90  | 101.00 | 117.00 | 140.00 |
| 13070       | Ditto but "press end type" stop end to BS 8537.....   | 38.20              | 43.70 | 51.50 | 63.30 | 81.90 | 90.60  | 109.00 | 126.00 | 151.00 |

**Per linear metre**

13071 Approved polyethylene sheath to existing copper pipe including all cutting and fittings at joints, tees, bends and other fittings or alternatively covering such fittings with insulation quilt or insulation rope to the thickness required .....

| Pipe diameter (mm) |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|
| 15                 | 22    | 28    | 35    | 42    | 54    |
| A                  | B     | C     | D     | E     | F     |
| \$                 | \$    | \$    | \$    | \$    | \$    |
| 17.40              | 20.50 | 22.40 | 34.70 | 35.80 | 44.00 |

13065

13066

13067

13068

13069

13070

13071



| Item   |  |        |        |        |        |                    | Item   |                    |    |    |    |       |  |
|--|--|--------|--------|--------|--------|--------------------|--------|--------------------|----|----|----|-------|--|
| <b>STAINLESS STEEL PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM</b>                    |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
| Stainless steel pipes and fittings to BS EN 10312 for fresh water supply system :-   |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
|  |  |        |        |        |        | Pipe diameter (mm) |        |                    |    |    |    |       |  |
|  |  |        |        |        |        | 15                 | 18     | 22                 | 28 | 35 | 42 |       |  |
|  |  |        |        |        |        | A                  | B      | C                  | D  | E  | F  |       |  |
|  |  |        |        |        |        | \$                 | \$     | \$                 | \$ | \$ | \$ |       |  |
| <i>Per linear metre</i>  |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
| 13072  | Pipe laid in trench.....   | 105.60 | 122.70 | 156.80 | 193.40 | 278.80             | 340.80 |                    |    |    |    | 13072 |  |
| 13073  | Pipe fixed to floor, wall or soffits .....   | 110.60 | 127.80 | 161.80 | 200.30 | 287.10             | 350.90 |                    |    |    |    | 13073 |  |
| <i>Each</i>  |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
| 13074  | Repair and make good existing joint including cleaning ends.....   | 25.10  | 28.20  | 30.20  | 33.30  | 35.40              | 39.50  |                    |    |    |    | 13074 |  |
| 13075  | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug ..... | 29.20  | 37.50  | 44.30  | 49.80  | 60.90              | 78.70  |                    |    |    |    | 13075 |  |
| Stainless steel pipes and fittings to BS EN 10217-7 for fresh water supply system :- |  |        |        |        |        |                    |        | Pipe diameter (mm) |    |    |    |       |  |
|  |  |        |        |        |        |                    |        | 54                 | 76 |    |    |       |  |
|  |  |        |        |        |        |                    |        | A                  | B  |    |    |       |  |
|  |  |        |        |        |        |                    |        | \$                 | \$ |    |    |       |  |
| <i>Per linear metre</i>  |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
| 13076  | Pipe laid in trench.....   |        |        |        |        | 416.30             | 626.30 |                    |    |    |    | 13076 |  |
| 13077  | Pipe fixed to floor, wall or soffits .....   |        |        |        |        | 426.50             | 638.40 |                    |    |    |    | 13077 |  |
| <i>Each</i>  |  |        |        |        |        |                    |        |                    |    |    |    |       |  |
| 13078  | Extra over either of Items 13076 to 13077 inclusive for cap end or plug.....                                     |        |        |        |        | 83.80              | 87.20  |                    |    |    |    | 13078 |  |
| 13079  | Ditto for bend or elbow .....  |        |        |        |        | 269.00             | 371.00 |                    |    |    |    | 13079 |  |
| 13080  | Ditto for three-way elbow or tee .....   |        |        |        |        | 302.00             | 426.00 |                    |    |    |    | 13080 |  |
| 13081  | Ditto for cross .....  |        |        |        |        | 385.00             | 545.00 |                    |    |    |    | 13081 |  |
| 13082  | Ditto for reducer .....  |        |        |        |        | 246.00             | 363.00 |                    |    |    |    | 13082 |  |
| 13083  | Ditto for connector to existing pipework.....  |        |        |        |        | 137.00             | 193.00 |                    |    |    |    | 13083 |  |
| 13084  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like.....   |        |        |        |        | 265.00             | 383.00 |                    |    |    |    | 13084 |  |

| Item  |  |                    | Item   |        |        |        |        |       |       |
|-------|--|--------------------|--------|--------|--------|--------|--------|-------|-------|
|       | <b>STAINLESS STEEL PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)</b>                                       |                    |        |        |        |        |        |       |       |
|       | Stainless steel pipes and fittings to BS EN 10217-7 or BS EN 10312 for fresh water supply system : -             |                    |        |        |        |        |        |       |       |
|       |  | Pipe diameter (mm) |        |        |        |        |        |       |       |
|       |  | 54                 | 76     |        |        |        |        |       |       |
|       |  | A                  | B      |        |        |        |        |       |       |
|       |  | \$                 | \$     |        |        |        |        |       |       |
| 13085 | Repair and make good existing joint including cleaning ends.....   | 42.50              | 45.60  |        |        |        |        |       |       |
| 13086 | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug ..... | 87.10              | 105.00 |        |        |        |        |       |       |
|       |  |                    |        |        |        |        |        |       |       |
|       |  | Pipe diameter (mm) |        |        |        |        |        |       |       |
|       |  | 15                 | 18     | 22     | 28     | 35     | 42     | 54    | 76    |
|       |  | A                  | B      | C      | D      | E      | F      | G     | H     |
|       |  | \$                 | \$     | \$     | \$     | \$     | \$     | \$    | \$    |
| 13087 | Take up and clear away pipe laid in trench (trench excavation measured separately).....                          | 3.90               | 5.20   | 5.90   | 7.20   | 8.50   | 9.10   | 10.70 | 13.00 |
| 13088 | Take up and set aside for re-use pipe laid in trench (ditto) .....   | 6.50               | 7.80   | 8.50   | 9.80   | 11.10  | 11.75  | 13.30 | 15.60 |
| 13089 | Take down and clear away pipe fixed to floor wall or soffits .....   | 5.20               | 6.50   | 7.20   | 8.50   | 9.80   | 10.40  | 12.00 | 14.30 |
| 13090 | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....                                     | 6.50               | 7.80   | 8.50   | 9.80   | 11.10  | 11.70  | 14.60 | 16.90 |
| 13091 | Lay only pipe in trench.....   | 8.80               | 10.60  | 11.50  | 13.30  | 15.10  | 15.90  | 20.00 | 23.00 |
| 13092 | Fix only pipe to floor, wall or soffits .....  | 12.40              | 15.90  | 16.80  | 19.50  | 23.00  | 24.80  | 28.80 | 31.80 |
|       |  |                    |        |        |        |        |        |       |       |
|       |  | Pipe diameter (mm) |        |        |        |        |        |       |       |
|       |  | 15                 | 18     | 22     | 28     | 35     | 42     |       |       |
|       |  | A                  | B      | C      | D      | E      | F      |       |       |
|       |  | \$                 | \$     | \$     | \$     | \$     | \$     |       |       |
| 13093 | Flexible pipe for connecting water boiler, heater, etc. ....   | 165.90             | 191.70 | 242.70 | 300.50 | 430.70 | 526.40 |       |       |
|       |  |                    |        |        |        |        |        |       |       |
|       |  | Pipe diameter (mm) |        |        |        |        |        |       |       |
|       |  | 150                |        |        |        |        |        |       |       |
|       |  | A                  |        |        |        |        |        |       |       |
|       |  | \$                 |        |        |        |        |        |       |       |
| 13094 | Anti-shock connector.....  | 4,402.00           |        |        |        |        |        |       |       |

| Item   |   |                    |       |       |        |        | Item   |        |       |
|--|---|--------------------|-------|-------|--------|--------|--------|--------|-------|
| <b>UPVC PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM</b>   |   |                    |       |       |        |        |        |        |       |
| UPVC Pressure pipes and fittings to BS 3505 Class E or to BS EN ISO 1452-2 series S8 or high for fresh and flushing water supply system with joints and fittings complying with BS EN ISO 1452-3 for fresh and flushing water supply system :- |   | Pipe diameter (mm) |       |       |        |        |        |        |       |
|  |   | 15                 | 20    | 25    | 32     | 40     | 50     | 65     |       |
|  |   | A                  | B     | C     | D      | E      | F      | G      |       |
|  |   | \$                 | \$    | \$    | \$     | \$     | \$     | \$     |       |
| <b>Per linear metre</b>  |   |                    |       |       |        |        |        |        |       |
| 13095  | Pipe laid in trench.....  | 47.20              | 57.70 | 82.90 | 98.70  | 105.90 | 123.80 | 151.20 | 13095 |
| 13096  | Pipe fixed to floor, wall or soffits.....   | 48.90              | 61.90 | 87.10 | 105.50 | 114.30 | 136.40 | 168.00 | 13096 |
| <b>Each</b>  |   |                    |       |       |        |        |        |        |       |
| 13097  | Extra over either of Items 13095 to 13096 inclusive for cap end.....  | -                  | -     | -     | -      | -      | -      | 55.70  | 13097 |
| 13098  | Ditto for bend or elbow.....  | -                  | -     | -     | -      | -      | -      | 74.60  | 13098 |
| 13099  | Ditto for tee.....  | -                  | -     | -     | -      | -      | -      | 102.00 | 13099 |
| 13100  | Ditto for connector to existing pipework.....   | -                  | -     | -     | -      | -      | -      | 46.00  | 13100 |
| 13101  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like.....  | -                  | -     | -     | -      | -      | -      | 220.00 | 13101 |
| <b>Per linear metre</b>  |   |                    |       |       |        |        |        |        |       |
| 13102  | Take up and clear away pipe laid in trench (trench excavation separately).....                                  | 2.60               | 3.90  | 5.20  | 6.50   | 7.80   | 9.10   | 10.40  | 13102 |
| 13103  | Take up and set aside for re-use pipe laid in trench (ditto).....   | 5.20               | 6.50  | 7.80  | 9.10   | 10.40  | 11.70  | 13.00  | 13103 |
| 13104  | Take down and clear away pipe fixed to floor, wall or soffits.....  | 3.90               | 5.20  | 6.50  | 7.80   | 9.10   | 10.40  | 11.70  | 13104 |
| 13105  | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....                                    | 5.20               | 7.80  | 9.10  | 10.40  | 11.70  | 13.00  | 14.30  | 13105 |
| 13106  | Lay only pipe in trench.....  | 8.80               | 10.60 | 12.40 | 14.20  | 15.90  | 17.70  | 19.50  | 13106 |
| 13107  | Fix only pipe to floor, wall or soffits.....  | 21.20              | 21.20 | 24.80 | 26.50  | 28.30  | 37.10  | 44.20  | 13107 |
| <b>Each</b>  |   |                    |       |       |        |        |        |        |       |
| 13108  | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug..... | 21.60              | 27.80 | 36.90 | 45.10  | 58.30  | 64.50  | 77.90  | 13108 |

| Item   |   |                    |        |        |        |        | Item   |       |
|--|---|--------------------|--------|--------|--------|--------|--------|-------|
| <b>UPVC PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)</b>  |   |                    |        |        |        |        |        |       |
| UPVC Pressure pipes and fittings to BS 3505 Class E or to BS EN ISO 1452-2 series S8 or high for fresh and flushing water supply system with joints and fittings complying with BS EN ISO 1452-3 for fresh and flushing water supply system : - (Cont'd) |   |                    |        |        |        |        |        |       |
| <i>Per linear metre</i>  |   |                    |        |        |        |        |        |       |
|  |   | Pipe diameter (mm) |        |        |        |        |        |       |
|  |   | 80                 | 100    | 150    | 200    | 250    | 300    |       |
|  |   | A                  | B      | C      | D      | E      | F      |       |
|  |   | \$                 | \$     | \$     | \$     | \$     | \$     |       |
| 13109  | Pipe laid in trench.....  | 178.20             | 214.00 | 260.40 | 479.30 | 549.00 | 691.80 | 13109 |
| 13110  | Pipe fixed to floor, wall or soffits.....   | 199.30             | 239.20 | 294.00 | 517.20 | 591.10 | 738.10 | 13110 |
| <i>Each</i>  |   |                    |        |        |        |        |        |       |
| 13111  | Extra over either of Items 13109 to 13110 inclusive for cap end.....  | 66.10              | 79.30  | 97.50  | 171.00 | 196.00 | 245.00 | 13111 |
| 13112  | Ditto for bend or elbow.....  | 88.50              | 106.00 | 131.00 | 230.00 | 262.00 | 328.00 | 13112 |
| 13113  | Ditto for tee.....  | 121.00             | 145.00 | 179.00 | 314.00 | 359.00 | 448.00 | 13113 |
| 13114  | Ditto for connector to existing pipework.....   | 54.60              | 65.50  | 80.50  | 142.00 | 162.00 | 202.00 | 13114 |
| 13115  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like.....  | 261.00             | 313.00 | 385.00 | 501.00 | 651.00 | 846.00 | 13115 |
| <i>Per linear metre</i>  |   |                    |        |        |        |        |        |       |
| 13116  | Take up and clear away pipe laid in trench (trench excavation measured separately).....                         | 11.70              | 13.00  | 15.60  | 18.20  | 20.80  | 23.40  | 13116 |
| 13117  | Take up and set aside for re-use pipe laid in trench (ditto).....   | 14.30              | 15.60  | 20.80  | 23.40  | 26.00  | 29.90  | 13117 |
| 13118  | Take down and clear away pipe fixed to floor, wall or soffits.....  | 13.00              | 14.30  | 16.90  | 19.50  | 22.10  | 24.70  | 13118 |
| 13119  | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....                                    | 15.60              | 16.90  | 22.10  | 24.70  | 27.30  | 31.20  | 13119 |
| 13120  | Lay only pipe in trench.....  | 21.20              | 23.00  | 26.50  | 30.10  | 31.80  | 33.60  | 13120 |
| 13121  | Fix only pipe to floor, wall or soffits .....   | 47.70              | 54.80  | 61.90  | 69.00  | 76.00  | 83.10  | 13121 |
| <i>Each</i>  |   |                    |        |        |        |        |        |       |
| 13122  | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug..... | 92.40              | 111.00 | 136.00 | 240.00 | 274.00 | 342.00 | 13122 |

| Item   |  |       |       |       |       |        |        |        |        | Item     |       |
|--|--|-------|-------|-------|-------|--------|--------|--------|--------|----------|-------|
| <b>POLYETHYLENE (PE) PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM</b>  |  |       |       |       |       |        |        |        |        |          |       |
| PE 100 Pressure pipes and fittings to BS-EN-12201 with nominal pressure rating PN16 under pipe series SDR 11, for fresh water supply system :- |  |       |       |       |       |        |        |        |        |          |       |
| <b>Pipe diameter (mm)</b>  |  |       |       |       |       |        |        |        |        |          |       |
| 25      32      50      63      90      125      180      250      315   |  |       |       |       |       |        |        |        |        |          |       |
| <i>Per linear metre</i>  |  |       |       |       |       |        |        |        |        |          |       |
| A      B      C      D      E      F      G      H      I  |  |       |       |       |       |        |        |        |        |          |       |
| \$      \$      \$      \$      \$      \$      \$      \$      \$   |  |       |       |       |       |        |        |        |        |          |       |
| 13123  | Pipe laid in trench.....   | 12.60 | 17.80 | 34.30 | 50.70 | 78.10  | 139.10 | 275.00 | 516.50 | 810.30   | 13123 |
| <i>Each</i>  |  |       |       |       |       |        |        |        |        |          |       |
| 13124  | Extra over Item 13123 for cap end.....   | -     | -     | -     | 18.80 | 28.90  | 52.10  | 98.10  | 184.00 | 287.00   | 13124 |
| 13125  | Ditto for bend or elbow.....   | -     | -     | -     | 25.20 | 38.70  | 70.00  | 132.00 | 246.00 | 384.00   | 13125 |
| 13126  | Ditto for tee.....   | -     | -     | -     | 34.40 | 52.90  | 95.60  | 180.00 | 338.00 | 525.00   | 13126 |
| 13127  | Ditto for connector to existing pipework.....  | -     | -     | -     | 15.50 | 23.90  | 43.00  | 81.50  | 152.00 | 237.00   | 13127 |
| 13128  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like..... | -     | -     | -     | 74.30 | 114.00 | 206.00 | 309.00 | 525.00 | 840.00   | 13128 |
| <i>Per linear metre</i>  |  |       |       |       |       |        |        |        |        |          |       |
| 13129  | Take up and clear away pipe laid in trench (trench excavation measured separately).....                        | 5.20  | 6.50  | 9.10  | 10.40 | 12.35  | 14.30  | 16.90  | 20.80  | 24.80    | 13129 |
| 13130  | Take up and set aside for re-use pipe laid in trench (ditto).....  | 7.80  | 9.10  | 11.70 | 13.00 | 15.00  | 18.20  | 22.10  | 26.00  | 31.10    | 13130 |
| 13131  | Lay only pipe in trench.....   | 12.40 | 14.20 | 17.70 | 19.50 | 22.10  | 24.80  | 28.30  | 31.80  | 48.60    | 13131 |
| PE 100 Pressure pipes and fittings to BS-EN-12201 with nominal pressure rating PN20 under pipe series SDR 9, for fresh water supply system :-  |  |       |       |       |       |        |        |        |        |          |       |
| <i>Per linear metre</i>  |  |       |       |       |       |        |        |        |        |          |       |
| 13132  | Pipe fixed to floor, wall or soffits.....  | 13.10 | 18.50 | 36.70 | 56.30 | 89.00  | 162.80 | 330.00 | 635.30 | 1,004.80 | 13132 |
| <i>Each</i>  |  |       |       |       |       |        |        |        |        |          |       |
| 13133  | Extra over Item 13132 for cap end.....   | -     | -     | -     | 20.90 | 33.00  | 61.00  | 118.00 | 226.00 | 356.00   | 13133 |
| 13134  | Ditto for bend or elbow.....   | -     | -     | -     | 28.00 | 44.10  | 81.90  | 158.00 | 303.00 | 476.00   | 13134 |
| 13135  | Ditto for tee.....   | -     | -     | -     | 38.20 | 60.30  | 112.00 | 216.00 | 416.00 | 651.00   | 13135 |
| 13136  | Ditto for connector to existing pipework.....  | -     | -     | -     | 17.20 | 27.30  | 50.30  | 97.80  | 187.00 | 294.00   | 13136 |
| 13137  | Ditto for flanged tank connector or double nut tank connector to existing water tank cistern and the like..... | -     | -     | -     | 82.50 | 130.00 | 241.00 | 466.00 | 895.00 | 1,405.00 | 13137 |

Item

Item

**POLYETHYLENE (PE) PIPES AND FITTINGS FOR WATER SUPPLY SYSTEM (CONT'D)**

PE 100 Pressure pipes and fittings to BS-EN-12201 with nominal pressure rating PN20 under pipe series SDR 9, for fresh water supply system :- (Cont'd)

| Pipe diameter (mm)      |   |       |       |       |       |        |        |        |        |        |       |
|-------------------------|---|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|
| 25                      | 32  | 50    | 63    | 90    | 125   | 180    | 250    | 315    |        |        |       |
| A                       | B   | C     | D     | E     | F     | G      | H      | I      |        |        |       |
| \$                      | \$  | \$    | \$    | \$    | \$    | \$     | \$     | \$     |        |        |       |
| <i>Per linear metre</i> |   |       |       |       |       |        |        |        |        |        |       |
| 13138                   | Take down and clear away pipe fixed to floor, wall or soffits.....  | 6.50  | 7.80  | 10.40 | 11.70 | 13.70  | 15.60  | 18.20  | 22.10  | 25.50  | 13138 |
| 13139                   | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....                                    | 9.10  | 10.40 | 13.00 | 14.30 | 16.30  | 19.50  | 23.40  | 27.30  | 32.40  | 13139 |
| 13140                   | Fix only pipe to floor, wall or soffits.....  | 24.80 | 26.50 | 37.10 | 44.20 | 51.30  | 58.40  | 65.50  | 76.00  | 85.20  | 13140 |
| <i>Each</i>             |   |       |       |       |       |        |        |        |        |        |       |
| 13141                   | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug..... | 36.90 | 45.10 | 64.50 | 77.90 | 106.00 | 124.00 | 198.00 | 274.00 | 350.00 | 13141 |

**THERMAL INSULATION TO PIPES**

(Note :- The following Items 13142 to 13149 inclusive do not apply to factory applied thermal insulation to pre-insulated pipework.)

*Per linear metre*

|       | Supply and fix  | Take down and clear away | Take down and set aside for re-use | Fix only |        |       |
|-------|---|--------------------------|------------------------------------|----------|--------|-------|
|       | A   | B                        | C                                  | D        |        |       |
|       | \$  | \$                       | \$                                 | \$       |        |       |
| 13142 | Thermal insulation to pipework n.e. 15 mm diameter..... | 82.90                    | 16.20                              | 17.70    | 37.80  | 13142 |
| 13143 | Ditto but 15 - 30 mm diameter .....                     | 89.90                    | 18.50                              | 20.70    | 45.90  | 13143 |
| 13144 | Ditto but 30 - 40 mm diameter .....                     | 108.00                   | 20.70                              | 21.40    | 53.10  | 13144 |
| 13145 | Ditto but 40 - 55 mm diameter .....                     | 139.70                   | 24.40                              | 25.80    | 61.30  | 13145 |
| 13146 | Ditto but 55 - 80 mm diameter .....                     | 178.50                   | 28.80                              | 30.40    | 72.30  | 13146 |
| 13147 | Ditto but 80 - 125 mm diameter .....                    | 232.00                   | 34.60                              | 36.50    | 86.80  | 13147 |
| 13148 | Ditto but 125 - 200 mm diameter .....                   | 301.60                   | 41.50                              | 43.80    | 104.20 | 13148 |
| 13149 | Ditto but 200 - 300 mm diameter .....                   | 392.00                   | 49.80                              | 52.60    | 125.00 | 13149 |

| Item   |   | Half round section     |        |        | Ogee section           | Item  |
|--|---|------------------------|--------|--------|------------------------|-------|
|  |   | Internal diameter (mm) |        |        | Internal diameter (mm) |       |
|  |   | 75                     | 100    | 150    | 100                    |       |
|  |   | A                      | B      | C      | D                      |       |
|  |   | \$                     | \$     | \$     | \$                     |       |
| <b>CAST IRON RAINWATER PIPES, GUTTERS AND FITTINGS FOR SURFACE WATER DRAINAGE</b>        |   |                        |        |        |                        |       |
| Cast iron rainwater gutter and fittings to BS 416-1, internally and externally coated :- |   |                        |        |        |                        |       |
|  |   |                        |        |        |                        |       |
|  | <i>Per linear metre</i>   |                        |        |        |                        |       |
| 13150  | Rainwater gutters fixed on brackets at 1.00 m (maximum) centres.....                    | 135.30                 | 181.00 | 279.00 | 191.20                 | 13150 |
|  | <i>Each</i>   |                        |        |        |                        |       |
| 13151  | Extra over Item 13150 for stop end .....  | 49.10                  | 62.50  | 76.00  | 62.50                  | 13151 |
| 13152  | Ditto for internal or external angle .....  | 62.50                  | 73.00  | 123.00 | 89.60                  | 13152 |
| 13153  | Ditto for nozzle outlet .....   | 89.60                  | 112.00 | 186.00 | 144.00                 | 13153 |
| 13154  | Ditto for combined stop end nozzle outlet .....   | 106.00                 | 142.00 | 230.00 | 177.00                 | 13154 |
|  | <i>Per linear metre</i>   |                        |        |        |                        |       |
| 13155  | Take down and clear away gutter complete with all fittings and brackets .....           | 9.60                   | 13.30  | 16.20  | 14.00                  | 13155 |
| 13156  | Take down and set aside for re-use ditto .....  | 10.30                  | 14.00  | 17.00  | 14.80                  | 13156 |
| 13157  | Fix only gutter complete including providing brackets at 1.00 m (maximum) centres ..... | 59.50                  | 71.50  | 102.20 | 81.70                  | 13157 |
|  | <i>Each</i>   |                        |        |        |                        |       |
| 13158  | Repair and make good existing joint including cleaning ends .....                       | 26.80                  | 30.90  | 47.20  | 39.10                  | 13158 |

| Item  |   | Pipe diameter (mm) |        | Item  |
|---|---|--------------------|--------|-------|
|   |   | 100                | 150    |       |
| <b>CAST IRON RAINWATER PIPES, GUTTERS AND FITTINGS FOR SURFACE WATER DRAINAGE (CONT'D)</b>                |   |                    |        |       |
| Cast iron pipes and fittings to BS 416-1, internally and externally coated, for surface water drainage :- |   |                    |        |       |
|   |   | A                  | B      |       |
|   |   | \$                 | \$     |       |
|   | <i>Per linear metre</i>   |                    |        |       |
| 13159   | Pipe fixed to floor, wall or soffits.....   | 262.30             | 491.60 | 13159 |
|   | <i>Each</i>   |                    |        |       |
| 13160   | Extra over Item 13159 for shoe .....  | 246.00             | 390.00 | 13160 |
| 13161   | Ditto for bend .....  | 224.00             | 398.00 | 13161 |
| 13162   | Ditto for single junction .....   | 284.00             | 511.00 | 13162 |
| 13163   | Ditto for double junction .....   | 458.00             | 824.00 | 13163 |
| 13164   | Ditto for swan-neck of any projection .....   | 411.00             | 740.00 | 13164 |
| 13165   | Ditto for connector to existing pipework.....   | 78.60              | 214.00 | 13165 |
| 13166   | Add to either of Items 13161 to 13163 inclusive if fitted with bolted access door ..... | 84.10              | 93.40  | 13166 |
| 13167   | Roof outlet with square or circular, flat or domed grating .....                        | 540.00             | 697.00 | 13167 |
| 13168   | Rainwater head, flat or angular .....   | 152.00             | 172.00 | 13168 |
|   | <i>Per linear metre</i>   |                    |        |       |
| 13169   | Take down and clear away pipe fixed to floor, wall or soffits .....                     | 15.60              | 26.00  | 13169 |
| 13170   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....           | 20.80              | 27.30  | 13170 |
| 13171   | Fix only pipe to floor, wall or soffits .....   | 46.00              | 70.70  | 13171 |
|   | <i>Each</i>   |                    |        |       |
| 13172   | Repair and make good existing joint including cleaning ends .....                       | 59.50              | 80.00  | 13172 |



| Item   |   |                        | Item    |       |
|--|---|------------------------|---------|-------|
| <b>UPVC RAINWATER PIPES, GUTTERS AND FITTINGS FOR SURFACE WATER DRAINAGE</b> |   |                        |         |       |
|  | UPVC rainwater gutters and fittings to BS EN 1329-1: -                          | Internal diameter (mm) |         |       |
|  |   | 80                     |         |       |
|  | <i>Per linear metre</i>   | A<br>\$                |         |       |
| 13173  | Half round rainwater gutter fixed on brackets at 1.00 m (maximum) centres ..... | 106.30                 | 13173   |       |
|  | <i>Each</i>   |                        |         |       |
| 13174  | Extra over Item 13173 for stop end .....  | 47.40                  | 13174   |       |
| 13175  | Ditto for internal or external angle .....                                      | 60.30                  | 13175   |       |
| 13176  | Ditto for nozzle outlet .....   | 70.50                  | 13176   |       |
| 13177  | Ditto for combined stop end and nozzle outlet .....                             | 85.70                  | 13177   |       |
|  | <i>Per linear metre</i>   |                        |         |       |
| 13178  | Take down and clear away gutter .....   | 14.30                  | 13178   |       |
| 13179  | Take down and set aside for re-use gutter .....                                 | 15.60                  | 13179   |       |
| 13180  | Fix only gutter including providing brackets at 1.00 m (maximum) centres .....  | 45.90                  | 13180   |       |
|  | UPVC rainwater gutters and fittings to BS 4514 : -                              | Internal diameter (mm) |         |       |
|  |   | 100                    | 150     |       |
|  |   | A<br>\$                | B<br>\$ |       |
|  | <i>Per linear metre</i>   |                        |         |       |
| 13181  | Half round rainwater gutter fixed on brackets at 1.00 m (maximum) centres ..... | 131.60                 | 202.90  | 13181 |
|  | <i>Each</i>   |                        |         |       |
| 13182  | Extra over Item 13181 for stop end .....  | 58.70                  | 97.80   | 13182 |
| 13183  | Ditto for internal or external angle .....                                      | 68.60                  | 114.00  | 13183 |
| 13184  | Ditto for nozzle outlet .....   | 88.10                  | 137.00  | 13184 |
| 13185  | Ditto for combined stop end and nozzle outlet .....                             | 107.00                 | 156.00  | 13185 |
|  | <i>Per linear metre</i>   |                        |         |       |
| 13186  | Take down and clear away gutter .....   | 16.90                  | 22.10   | 13186 |
| 13187  | Take down and set aside for re-use gutter .....                                 | 19.50                  | 24.70   | 13187 |
| 13188  | Fix only gutter including providing brackets at 1.00 m (maximum) centres .....  | 33.80                  | 42.80   | 13188 |

| Item  |  |        |        |        | Item   |       |
|---|--|--------|--------|--------|--------|-------|
| <b>UPVC RAINWATER PIPES, GUTTERS AND FITTINGS FOR SURFACE WATER DRAINAGE (CONT'D)</b> |  |        |        |        |        |       |
| UPVC Non-pressure pipes and fittings to BS 4514 :-                                    |  |        |        |        |        |       |
| <b>Pipe diameter (mm)</b>   |  |        |        |        |        |       |
| 65      80      100      150  |  |        |        |        |        |       |
| A      B      C      D  |  |        |        |        |        |       |
| \$      \$      \$      \$  |  |        |        |        |        |       |
| 13189   | Pipe fixed to floor, wall or soffits .....   | 91.50  | 99.80  | 108.90 | 193.90 | 13189 |
| <i>Per linear metre</i>   |  |        |        |        |        |       |
| 13190   | Extra over Item 13189 for cap end .....  | 30.40  | 33.10  | 36.10  | 64.30  | 13190 |
| 13191   | Ditto for bend or elbow .....  | 53.50  | 63.80  | 82.30  | 123.00 | 13191 |
| 13192   | Ditto for branch .....   | 65.70  | 80.40  | 94.80  | 158.00 | 13192 |
| 13193   | Ditto for double branch .....  | 106.00 | 130.00 | 153.00 | 255.00 | 13193 |
| 13194   | Ditto for connector to existing pipework.....  | 29.90  | 36.60  | 43.00  | 72.00  | 13194 |
| 13195   | Add to either of Items 13191 o 13193 inclusive for screwed access.....   | 19.70  | 24.10  | 28.40  | 47.50  | 13195 |
| 13196   | Tapered socket with cap nut and joint to steel tubing or brass fittings .....                                    | 105.00 | 129.00 | 161.00 | 242.00 | 13196 |
| 13197   | Flat roof outlet with raised grating .....   | 134.00 | 164.00 | 225.00 | 387.00 | 13197 |
| <i>Per linear metre</i>   |  |        |        |        |        |       |
| 13198   | Take down and clear away pipe fixed to floor, wall or soffits .....  | 11.70  | 13.00  | 14.30  | 16.90  | 13198 |
| 13199   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                                    | 14.30  | 15.60  | 16.90  | 22.10  | 13199 |
| 13200   | Fix only pipe to floor, wall or soffits .....  | 44.20  | 47.70  | 54.80  | 61.90  | 13200 |
| <i>Each</i>   |  |        |        |        |        |       |
| 13201   | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug ..... | 70.10  | 83.20  | 100.00 | 122.00 | 13201 |
| UPVC two-way floor outlet for surface water drainage :-                               |  |        |        |        |        |       |
| <b>Pipe diameter (mm)</b>   |  |        |        |        |        |       |
| 100   |  |        |        |        |        |       |
| A   |  |        |        |        |        |       |
| \$  |  |        |        |        |        |       |
| 13202   | Two-way floor outlet.....  |        |        |        | 50.00  | 13202 |

| Item  |   |        |        |        |        | Item   |       |
|---|---|--------|--------|--------|--------|--|-------|
| <b>CAST IRON SOIL, WASTE AND VENTILATION PIPES AND FITTINGS FOR FOUL WATER DRAINAGE</b>                 |   |        |        |        |        |  |       |
| Cast iron pipes and fittings to BS 416-1, internally and externally coated, for foul water drainage : - |   |        |        |        |        |  |       |
|   |   |        |        |        |        | Pipe diameter (mm)                               |       |
|   |   |        |        |        |        | 50      65      75 or 80      90 or 100      150 |       |
|   |   |        |        |        |        | A      B      C      D      E                    |       |
|   |   |        |        |        |        | \$      \$      \$      \$      \$               |       |
| <i>Per linear metre</i>   |   |        |        |        |        |  |       |
| 13203   | Pipe fixed to floor, wall or soffits.....   | 179.70 | 182.10 | 210.20 | 262.30 | 491.60   | 13203 |
| <i>Each</i>   |   |        |        |        |        |  |       |
| 13204   | Extra over Item 13203 for loose socket .....  | 59.60  | 66.80  | 75.30  | 95.20  | 139.00   | 13204 |
| 13205   | Ditto for large socket for and including joint to clayware pipe .....                                   | -      | -      | -      | 175.00 | 242.00   | 13205 |
| 13206   | Ditto for plug to socket end or cap to spigot end.....  | -      | 147.00 | 153.00 | 238.00 | 337.00   | 13206 |
| 13207   | Ditto for bend .....  | -      | 148.00 | 171.00 | 224.00 | 398.00   | 13207 |
| 13208   | Ditto for single junction .....   | -      | 158.00 | 195.00 | 284.00 | 511.00   | 13208 |
| 13209   | Ditto for double junction .....   | -      | 241.00 | 270.00 | 458.00 | 824.00   | 13209 |
| 13210   | Ditto for swan-neck of any projection .....   | -      | 173.00 | 329.00 | 411.00 | 740.00   | 13210 |
| 13211   | Ditto for connector to existing pipework.....   | -      | 43.80  | 53.90  | 78.60  | 214.00   | 13211 |
| 13212   | Add to either of Items 13207 to 13209 inclusive if fitted with bolted access door .....                 | -      | 46.90  | 57.70  | 84.10  | 93.40  | 13212 |
| <i>Per linear metre</i>   |   |        |        |        |        |  |       |
| 13213   | Take down and clear away pipe fixed to floor, wall or soffits .....                                     | 11.70  | 13.00  | 14.30  | 15.60  | 26.00  | 13213 |
| 13214   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                           | 14.30  | 15.60  | 16.90  | 20.80  | 27.30  | 13214 |
| 13215   | Fix only pipe to floor, wall or soffits .....   | 30.10  | 38.90  | 42.40  | 46.00  | 70.70  | 13215 |
| <i>Each</i>   |   |        |        |        |        |  |       |
| 13216   | Cut or burn out existing joint, clean socket and spigot ends, repair and make good existing joint ..... | 71.50  | 81.70  | 92.00  | 112.00 | 143.00   | 13216 |

| Item  | Item   |
|---|--|
| <b>CAST IRON SOIL, WASTE AND VENTILATION PIPES AND FITTINGS FOR FOUL WATER DRAINAGE (CONT'D)</b>    |  |
| Cast iron pipes and fittings to BS 437, internally and externally coated for foul water drainage :- |  |
|   | Pipe diameter (mm)   |
|   | 200 or 225   |
|   | A<br>S   |
|   | <i>Per linear metre</i>  |
| 13217   | Pipe fixed to floor, wall or soffits..... 746.80 13217   |
|   | <i>Each</i>  |
| 13218   | Extra over Item 13217 for loose socket ..... 209.00 13218  |
| 13219   | Ditto for large socket for and including joint to clayware pipe ..... 366.00 13219                                   |
| 13220   | Ditto for plug to socket end or cap to spigot end ..... 513.00 13220   |
| 13221   | Ditto for bend ..... 610.00 13221  |
| 13222   | Ditto for single junction ..... 778.00 13222   |
| 13223   | Ditto for double junction ..... 949.00 13223   |
| 13224   | Ditto for swan-neck of any projection ..... 1,128.00 13224   |
| 13225   | Ditto for connector to existing pipework..... 326.00 13225   |
| 13226   | Add to either of Items 13221 to 13223 inclusive if fitted with bolted access door ..... 142.00 13226                 |
|   | <i>Per linear metre</i>  |
| 13227   | Take down and clear away pipe fixed to floor, wall or soffits ..... 39.00 13227                                      |
| 13228   | Take down and set aside for re-use pipe fixed to floor, wall or soffits ..... 42.90 13228                            |
| 13229   | Fix only pipe to floor, wall or soffits ..... 84.90 13229  |
|   | <i>Each</i>  |
| 13230   | Cut or burn out existing joint, clean socket and spigot ends, repair and make good existing joint ..... 184.00 13230 |

| Item  |   | Pipe diameter (mm)      |          | Item  |
|---|---|-------------------------|----------|-------|
|   |   | 200<br>or 225           | 250      |       |
|   |   | A<br>\$                 | B<br>\$  |       |
| <b>CAST IRON SOIL, WASTE AND VENTILATION PIPES AND FITTINGS FOR FOUL WATER DRAINAGE (CONT'D)</b>      |   |                         |          |       |
| Grey iron pipes and fittings to BS 4622, internally and externally coated, for foul water drainage :- |   |                         |          |       |
|   |   | <b>Per linear metre</b> |          |       |
| 13231   | Pipe fixed to floor, wall or soffits.....   | 780.00                  | 1,081.00 | 13231 |
|   |   | <b>Each</b>             |          |       |
| 13232   | Extra over Item 13231 for loose socket .....  | 218.00                  | 303.00   | 13232 |
| 13233   | Ditto for large socket for and including joint to clayware pipe .....                                   | 382.00                  | 530.00   | 13233 |
| 13234   | Ditto for plug to socket end or cap to spigot end .....   | 538.00                  | 746.00   | 13234 |
| 13235   | Ditto for bend .....  | 632.00                  | 876.00   | 13235 |
| 13236   | Ditto for single junction .....   | 811.00                  | 1,124.00 | 13236 |
| 13237   | Ditto for double junction .....   | 952.00                  | 1,319.00 | 13237 |
| 13238   | Ditto for swan-neck of any projection .....   | 1,178.00                | 1,632.00 | 13238 |
| 13239   | Ditto for connector to existing pipework.....   | 343.00                  | 476.00   | 13239 |
| 13240   | Add to either of Items 13235 to 13237 inclusive if fitted with bolted access door .....                 | 148.00                  | 205.00   | 13240 |
|   |   | <b>Per linear metre</b> |          |       |
| 13241   | Take down and clear away pipe fixed to floor, wall or soffits .....                                     | 39.00                   | 52.00    | 13241 |
| 13242   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                           | 42.90                   | 56.30    | 13242 |
| 13243   | Fix only pipe to floor, wall or soffits .....   | 84.90                   | 99.00    | 13243 |
|   |   | <b>Each</b>             |          |       |
| 13244   | Cut or burn out existing joint, clean socket and spigot ends, repair and make good existing joint ..... | 184.00                  | 215.00   | 13244 |

| Item  |  |             |               |         |         |         |         |          | Item     |         |         |             |               |         |         |         |         |
|---|--|-------------|---------------|---------|---------|---------|---------|----------|----------|---------|---------|-------------|---------------|---------|---------|---------|---------|
| <b>CAST IRON SOCKETLESS PIPES AND FITTINGS FOR FOUL WATER DRAINAGE</b>  |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| Cast iron socketless pipes and fittings to BS EN 877, epoxy coated internally, anti-corrosive coated externally, for surface or foul water drainage : -   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| <b>Pipe diameter (mm)</b>   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 12.5%;">40</th> <th style="width: 12.5%;">50</th> <th style="width: 12.5%;">70<br/>or 75</th> <th style="width: 12.5%;">100<br/>or 125</th> <th style="width: 12.5%;">150</th> <th style="width: 12.5%;">200</th> <th style="width: 12.5%;">250</th> <th style="width: 12.5%;">300</th> </tr> </thead> </table>                       |  |             |               |         |         |         |         |          |          | 40      | 50      | 70<br>or 75 | 100<br>or 125 | 150     | 200     | 250     | 300     |
| 40  | 50   | 70<br>or 75 | 100<br>or 125 | 150     | 200     | 250     | 300     |          |          |         |         |             |               |         |         |         |         |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 12.5%;">A<br/>\$</th> <th style="width: 12.5%;">B<br/>\$</th> <th style="width: 12.5%;">C<br/>\$</th> <th style="width: 12.5%;">D<br/>\$</th> <th style="width: 12.5%;">E<br/>\$</th> <th style="width: 12.5%;">F<br/>\$</th> <th style="width: 12.5%;">G<br/>\$</th> <th style="width: 12.5%;">H<br/>\$</th> </tr> </thead> </table> |  |             |               |         |         |         |         |          |          | A<br>\$ | B<br>\$ | C<br>\$     | D<br>\$       | E<br>\$ | F<br>\$ | G<br>\$ | H<br>\$ |
| A<br>\$   | B<br>\$  | C<br>\$     | D<br>\$       | E<br>\$ | F<br>\$ | G<br>\$ | H<br>\$ |          |          |         |         |             |               |         |         |         |         |
| <i>Per linear metre</i>   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| 13245   | Pipe fixed to floor, wall or soffits.....  | 223.90      | 235.40        | 255.80  | 301.60  | 491.00  | 722.20  | 1,029.40 | 1,287.80 | 13245   |         |             |               |         |         |         |         |
| <i>Each</i>   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| 13246   | Extra over Item 13245 for cap end or plug.....   | -           | -             | 186.00  | 274.00  | 337.00  | 496.00  | 707.00   | 884.00   | 13246   |         |             |               |         |         |         |         |
| 13247   | Ditto for bend or elbow.....   | -           | -             | 208.00  | 258.00  | 398.00  | 585.00  | 834.00   | 1,044.00 | 13247   |         |             |               |         |         |         |         |
| 13248   | Ditto for three-way elbow or tee.....  | -           | -             | 237.00  | 327.00  | 511.00  | 752.00  | 1,071.00 | 1,340.00 | 13248   |         |             |               |         |         |         |         |
| 13249   | Ditto for access door.....   | -           | -             | 70.20   | 97.00   | 93.40   | 137.00  | 196.00   | 244.00   | 13249   |         |             |               |         |         |         |         |
| 13250   | Ditto for reducer.....   | -           | -             | 146.00  | 180.00  | 279.00  | 410.00  | 584.00   | 731.00   | 13250   |         |             |               |         |         |         |         |
| 13251   | Ditto for connector to existing pipework.....  | -           | -             | 65.60   | 90.40   | 214.00  | 315.00  | 449.00   | 561.00   | 13251   |         |             |               |         |         |         |         |
| <i>Per linear metre</i>   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| 13252   | Take down and clear away pipe fixed to floor, wall or soffits.....   | 10.40       | 11.70         | 13.00   | 15.60   | 26.00   | 39.00   | 52.00    | 65.00    | 13252   |         |             |               |         |         |         |         |
| 13253   | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....   | 11.70       | 14.30         | 15.60   | 20.80   | 27.30   | 42.90   | 56.30    | 71.50    | 13253   |         |             |               |         |         |         |         |
| 13254   | Fix only pipe to floor, wall or soffits.....   | 25.00       | 30.10         | 42.40   | 50.00   | 70.70   | 84.90   | 99.00    | 120.00   | 13254   |         |             |               |         |         |         |         |
| <i>Each</i>   |  |             |               |         |         |         |         |          |          |         |         |             |               |         |         |         |         |
| 13255   | Repair and make good existing joint including cleaning ends .....  | 24.10       | 32.30         | 40.50   | 42.50   | 46.60   | 51.40   | 59.50    | 76.80    | 13255   |         |             |               |         |         |         |         |
| 13256   | Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug ..... | 55.30       | 106.00        | 157.00  | 209.00  | 264.00  | 315.00  | 366.00   | 417.00   | 13256   |         |             |               |         |         |         |         |

| Item  |  | Pipe diameter (mm) |        |        |        | Item  |
|---|--|--------------------|--------|--------|--------|-------|
|   |  | 90                 | 114    | 140    | 165    |       |
|   |  | A                  | B      | C      | D      |       |
|   |  | \$                 | \$     | \$     | \$     |       |
| <b>GALVANIZED IRON PIPES AND FITTINGS FOR FOUL WATER DRAINAGE</b>   |  |                    |        |        |        |       |
| Galvanized iron pipes and fittings to BS EN 10255 medium grade and hot dip zinc coated for foul water drainage :- |  |                    |        |        |        |       |
| <i>Per linear metre</i>   |  |                    |        |        |        |       |
| 13257   | Pipe fixed to floor, wall or soffits.....  | 131.20             | 188.50 | 222.90 | 290.00 | 13257 |
| <i>Each</i>   |  |                    |        |        |        |       |
| 13258   | Extra over Item 13257 for cap end or plug.....   | 90.50              | 130.00 | 154.00 | 200.00 | 13258 |
| 13259   | Ditto for bend or elbow.....   | 106.00             | 153.00 | 181.00 | 235.00 | 13259 |
| 13260   | Ditto for three-way elbow or tee.....  | 136.00             | 196.00 | 232.00 | 302.00 | 13260 |
| 13261   | Ditto for access door.....   | 24.90              | 35.80  | 42.40  | 55.10  | 13261 |
| 13262   | Ditto for reducer.....   | 74.20              | 107.00 | 127.00 | 165.00 | 13262 |
| 13263   | Ditto for connector to existing pipework.....  | 57.70              | 82.90  | 98.10  | 128.00 | 13263 |
| <i>Per linear metre</i>   |  |                    |        |        |        |       |
| 13264   | Take down and clear away pipe fixed to floor, wall or soffits.....   | 15.00              | 17.60  | 22.80  | 29.90  | 13264 |
| 13265   | Take down and set aside for re-use pipe fixed to floor, wall or soffits.....   | 18.90              | 22.10  | 25.40  | 38.40  | 13265 |
| 13266   | Fix only pipe to floor, wall or soffits.....   | 35.40              | 40.70  | 45.10  | 50.90  | 13266 |
| <i>Each</i>   |  |                    |        |        |        |       |
| 13267   | Repair and make good existing joint including cleaning ends .....  | 41.40              | 43.50  | 45.60  | 47.60  | 13267 |
| 13268   | Seal off existing pipe laid or fixed in position including threading end and providing and jointing on cap or plug ..... | 140.00             | 201.00 | 238.00 | 284.00 | 13268 |

| Item  |  | Pipe diameter (mm) |       |        | Item  |
|---|--|--------------------|-------|--------|-------|
|   |  | 32                 | 43    | 56     |       |
|   |  | A                  | B     | C      |       |
|   |  | \$                 | \$    | \$     |       |
| <b>UPVC PIPES AND FITTINGS FOR FOUL WATER DRAINAGE</b>                      |  |                    |       |        |       |
| UPVC Non-pressure pipes and fittings to BS 5255 for foul water drainage : - |  |                    |       |        |       |
| <i>Per linear metre</i>   |  |                    |       |        |       |
| 13269   | Pipe fixed to floor, wall or soffits .....   | 47.10              | 72.60 | 83.40  | 13269 |
| <i>Each</i>   |  |                    |       |        |       |
| 13270   | Extra over Item 13269 for cap end .....  | -                  | -     | 50.30  | 13270 |
| 13271   | Ditto for bend or elbow .....  | -                  | -     | 41.10  | 13271 |
| 13272   | Ditto for branch .....   | -                  | -     | 63.20  | 13272 |
| 13273   | Ditto for double branch .....  | -                  | -     | 78.70  | 13273 |
| 13274   | Ditto for connector to existing pipework.....  | -                  | -     | 28.70  | 13274 |
| 13275   | Add to either of Items 13271 to 13273 inclusive for screwed access .....   | -                  | -     | 25.00  | 13275 |
| 13276   | Tapered socket with cap nut and joint to steel tubing or brass fittings .....                                    | -                  | -     | 80.50  | 13276 |
| 13277   | Flat roof outlet with raised grating .....   | -                  | -     | 112.00 | 13277 |
| <i>Per linear metre</i>   |  |                    |       |        |       |
| 13278   | Take down and clear away pipe fixed to floor, wall or soffits .....  | 7.80               | 9.10  | 11.10  | 13278 |
| 13279   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                                    | 10.40              | 11.70 | 13.70  | 13279 |
| 13280   | Fix only pipe to floor, wall or soffits .....  | 26.50              | 28.30 | 40.70  | 13280 |
| <i>Each</i>   |  |                    |       |        |       |
| 13281   | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug ..... | 40.60              | 52.50 | 58.10  | 13281 |



| Item  |  | Pipe diameter (mm) |        | Item  |
|---|--|--------------------|--------|-------|
|   |  | 100                | 150    |       |
| <b>UPVC PIPES AND FITTINGS FOR FOUL WATER DRAINAGE (CONT'D)</b>             |  |                    |        |       |
| UPVC Non-pressure pipes and fittings to BS 4514 for foul water drainage : - |  |                    |        |       |
|   |  | A                  | B      |       |
|   |  | \$                 | \$     |       |
| <i>Per linear metre</i>   |  |                    |        |       |
| 13282   | Pipe fixed to floor, wall or soffits .....   | 108.90             | 193.90 | 13282 |
| <i>Each</i>   |  |                    |        |       |
| 13283   | Extra over Item 13282 for cap end.....   | 36.10              | 64.30  | 13283 |
| 13284   | Ditto for bend or elbow .....  | 82.30              | 123.00 | 13284 |
| 13285   | Ditto for branch .....   | 94.80              | 158.00 | 13285 |
| 13286   | Ditto for double branch .....  | 153.00             | 255.00 | 13286 |
| 13287   | Ditto for connector to existing pipework.....  | 43.00              | 72.00  | 13287 |
| 13288   | Add to either of Items 13284 to 132586 inclusive for screwed access.....   | 28.40              | 47.50  | 13288 |
| 13289   | Tapered socket with cap nut and joint to steel tubing or brass fittings .....                                    | 161.00             | 242.00 | 13289 |
| 13290   | Flat roof outlet with raised grating .....   | 225.00             | 387.00 | 13290 |
| <i>Per linear metre</i>   |  |                    |        |       |
| 13291   | Take down and clear away pipe fixed to floor, wall or soffits .....  | 14.30              | 16.90  | 13291 |
| 13292   | Take down and set aside for re-use pipe fixed to floor, wall or soffits .....                                    | 16.90              | 22.10  | 13292 |
| 13293   | Fix only pipe to floor, wall or soffits .....  | 54.80              | 61.90  | 13293 |
| <i>Each</i>   |  |                    |        |       |
| 13294   | Seal off existing pipe fixed in position including threading end and providing and jointing on cap or plug ..... | 100.00             | 122.00 | 13294 |

| Item  |   | Pipe diameter (mm) |        |        | Item     |          |
|---|---|--------------------|--------|--------|----------|----------|
|   |   | 38                 | 51     |        |          |          |
|   |   | A                  | B      |        |          |          |
|   |   | \$                 | \$     |        |          |          |
| <b>VULCATHENE MECHANICAL WASTE PIPES AND FITTINGS FOR ABOVE GROUND DRAINAGE</b>               |   |                    |        |        |          |          |
|   | <i>Per linear metre</i>   |                    |        |        |          |          |
| 13295   | Pipe fixed to floor, wall or ceiling with and including brackets.....   | 163.20             | 244.70 |        | 13295    |          |
|   | <i>Each</i>   |                    |        |        |          |          |
| 13296   | Extra over Item 13295 for cap end.....  | -                  | 81.90  |        | 13296    |          |
| 13297   | Ditto for bend or elbow.....  | -                  | 177.00 |        | 13297    |          |
| 13298   | Ditto for branch.....   | -                  | 202.00 |        | 13298    |          |
| 13299   | Ditto for reducer.....  | -                  | 160.00 |        | 13299    |          |
| 13300   | Ditto for connector to existing pipework.....   | -                  | 91.80  |        | 13300    |          |
| <b>PRECAST CONCRETE PIPES FOR BELOW GROUND DRAINAGE</b>                                       |   |                    |        |        |          |          |
| Precast concrete pipes and fittings to BS 5911-1 or BS EN 1916, for below ground drainage : - |   |                    |        |        |          |          |
|   |   | Pipe diameter (mm) |        |        |          |          |
|   |   | 150                | 225    | 300    | 375      | 450      |
|   |   | A                  | B      | C      | D        | E        |
|   |   | \$                 | \$     | \$     | \$       | \$       |
| 13301   | Pipe, unreinforced, laid in trench.....   | 487.40             | 637.20 | 758.20 | 988.00   | 1,278.80 |
| 13302   | Ditto, reinforced, laid in trench.....  | -                  | -      | -      | -        | 1,342.70 |
|   | <i>Each</i>   |                    |        |        |          |          |
| 13303   | Extra over for either of Items 13301 to 13302 inclusive for elbow or bend including cutting pipe ends to profile, making good and grouting joints smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required.....                     | 402.40             | 537.00 | 608.00 | 729.00   | 799.00   |
| 13304   | Extra over for either of Items 13301 to 13302 inclusive for single junction including cutting through pipe and pipe end to profile, making good and grouting junction smooth with cement and sand (1:3) mortar or cast around elbow or bend with concrete surround as required..... | 435.00             | 553.00 | 614.00 | 761.00   | 894.00   |
| 13305   | Ditto for double junction.....  | 696.00             | 885.00 | 982.00 | 1,218.00 | 1,430.00 |

| Item  |  | Pipe diameter (mm)      |        |        |          |        | Item  |
|---|--|-------------------------|--------|--------|----------|--------|-------|
| <b>PRECAST CONCRETE PIPES FOR BELOW GROUND DRAINAGE (CONT'D)</b>                                      |  |                         |        |        |          |        |       |
| Precast concrete pipes and fittings to BS 5911-1 or BS EN 1916, for below ground drainage :- (Cont'd) |  |                         |        |        |          |        |       |
|   |  | <b>Per linear metre</b> |        |        |          |        |       |
|   |  | 150                     | 225    | 300    | 375      | 450    |       |
|   |  | A                       | B      | C      | D        | E      |       |
|   |  | \$                      | \$     | \$     | \$       | \$     |       |
| 13306   | Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....                         | 20.80                   | 23.40  | 26.00  | 28.60    | 31.20  | 13306 |
| 13307   | Take up and set aside for re-use ditto.....  | 23.40                   | 26.00  | 28.60  | 31.20    | 33.80  | 13307 |
| 13308   | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 115.80                  | 118.40 | 121.00 | 123.60   | 126.20 | 13308 |
| 13309   | Lay only pipe in trench.....   | 29.90                   | 32.50  | 35.10  | 37.70    | 40.30  | 13309 |
| <b>VITRIFIED CLAY PIPES AND FITTINGS FOR BELOW GROUND DRAINAGE</b>                                    |  |                         |        |        |          |        |       |
| Vitrified clay pipes and fittings to BS 65, chemical resistant, for below ground drainage :-          |  |                         |        |        |          |        |       |
|   |  | <b>Per linear metre</b> |        |        |          |        |       |
|   |  | 100                     | 150    | 225    | 300      |        |       |
|   |  | A                       | B      | C      | D        |        |       |
|   |  | \$                      | \$     | \$     | \$       |        |       |
| 13310   | Pipe laid in trench.....   | 393.60                  | 522.00 | 714.70 | 1,091.80 | 13310  |       |
| <b>Each</b>   |  |                         |        |        |          |        |       |
| 13311   | Extra over Item 13310 for taper pipe.....  | -                       | 79.20  | 206.00 | -        | 13311  |       |
| 13312   | Ditto for bend.....  | 110.00                  | 179.00 | 418.00 | -        | 13312  |       |
| 13313   | Ditto for single junction.....   | 174.00                  | 257.00 | 468.00 | 720.00   | 13313  |       |
| 13314   | Ditto for double junction.....   | 278.00                  | 411.00 | 749.00 | -        | 13314  |       |
| 13315   | Ditto for pipe stopper bedded in cement or lime mortar.....  | 118.00                  | 172.00 | 213.00 | -        | 13315  |       |
| <b>Per linear metre</b>   |  |                         |        |        |          |        |       |
| 13316   | Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....                         | 18.20                   | 20.80  | 23.40  | 26.00    | 13316  |       |
| 13317   | Take up and set aside for re-use ditto.....  | 20.80                   | 23.40  | 26.00  | 28.60    | 13317  |       |
| 13318   | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 113.20                  | 115.80 | 118.40 | 121.00   | 13318  |       |
| 13319   | Lay only pipe in trench.....   | 27.30                   | 29.90  | 32.50  | 35.10    | 13319  |       |

| Item  |  |        |        |        |        |          | Item     |       |
|---|--|--------|--------|--------|--------|----------|----------|-------|
| <b>DUCTILE IRON PIPES AND FITTINGS FOR BELOW GROUND DRAINAGE</b>  |  |        |        |        |        |          |          |       |
| Ductile iron pipes and fittings to BS EN 598 with cement lining internally and zinc coating externally, for below ground drainage : - |  |        |        |        |        |          |          |       |
| <b>Pipe diameter (mm)</b>   |  |        |        |        |        |          |          |       |
| 80      100      150      200      250      300   |  |        |        |        |        |          |          |       |
| A      B      C      D      E      F  |  |        |        |        |        |          |          |       |
| \$      \$      \$      \$      \$      \$  |  |        |        |        |        |          |          |       |
| <i>Per linear metre</i>   |  |        |        |        |        |          |          |       |
| 13320   | Pipe laid in trench.....   | 430.60 | 431.70 | 616.20 | 864.40 | 1,081.80 | 1,320.80 | 13320 |
| 13321   | Drop pipe.....   | 493.00 | 494.10 | 683.20 | 928.20 | 1,136.90 | 1,343.30 | 13321 |
| <i>Each</i>   |  |        |        |        |        |          |          |       |
| 13322   | Extra over either of Items 13320 to 13321 inclusive for cover plate for end.....   | 88.70  | 88.90  | 123.00 | 167.00 | 205.00   | 242.00   | 13322 |
| 13323   | Ditto for socket end (for repair work only).....   | 179.00 | 220.00 | 301.00 | 408.00 | 500.00   | 591.00   | 13323 |
| 13324   | Ditto for spigot end (for repair work only).....   | 191.00 | 228.00 | 314.00 | 427.00 | 522.00   | 618.00   | 13324 |
| 13325   | Ditto for connector with screwed end to existing pipework.....   | 212.00 | 256.00 | 355.00 | 483.00 | 591.00   | 699.00   | 13325 |
| 13326   | Ditto for bend.....  | 256.00 | 312.00 | 430.00 | 585.00 | 716.00   | 846.00   | 13326 |
| 13327   | Ditto for single junction.....   | 289.00 | 327.00 | 451.00 | 613.00 | 750.00   | 887.00   | 13327 |
| 13328   | Ditto for double junction.....   | 303.00 | 344.00 | 474.00 | 644.00 | 788.00   | 931.00   | 13328 |
| 13329   | Add to either of Items 13326 to 13328 inclusive if fitted with bolted access door.....   | 26.30  | 47.60  | 82.00  | 121.00 | 215.00   | 310.00   | 13329 |
| <i>Per linear metre</i>   |  |        |        |        |        |          |          |       |
| 13330   | Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....                         | 18.20  | 22.10  | 26.00  | 29.90  | 33.80    | 43.10    | 13330 |
| 13331   | Take up and set aside for re-use ditto.....  | 23.40  | 27.30  | 31.20  | 35.10  | 39.00    | 48.10    | 13331 |
| 13332   | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 54.70  | 59.90  | 75.50  | 108.00 | 128.80   | 149.60   | 13332 |
| 13333   | Take down and clear away drop pipe complete with all fittings and brackets.....  | 19.50  | 23.40  | 27.30  | 31.20  | 35.10    | 42.50    | 13333 |
| 13334   | Take down and set aside for re-use ditto.....  | 23.40  | 27.30  | 31.20  | 35.10  | 39.00    | 46.10    | 13334 |
| 13335   | Lay only pipe in trench.....   | 70.70  | 74.30  | 83.10  | 97.20  | 116.70   | 141.40   | 13335 |
| 13336   | Fix only drop pipe.....  | 133.10 | 139.10 | 150.10 | 161.00 | 171.80   | 163.90   | 13336 |
| <i>Each</i>   |  |        |        |        |        |          |          |       |
| 13337   | Remove and clear away gasket and/or cover plate to existing joint and re-joint with new gasket and/or cover plate.....                     | 56.80  | 66.50  | 78.70  | 84.70  | 90.70    | 98.00    | 13337 |



| Item   |  | Pipe diameter (mm) |          | Item  |
|--|--|--------------------|----------|-------|
|  |  | 200<br>or 225      | 250      |       |
|  |  | A<br>\$            | B<br>\$  |       |
| <b>CAST IRON PIPES AND FITTINGS FOR BELOW GROUND DRAINAGE (CONT'D)</b>                                   |  |                    |          |       |
| Grey iron pipes and fittings to BS 4622, internally and externally coated, for below ground drainage : - |  |                    |          |       |
| <i>Per linear metre</i>  |  |                    |          |       |
| 13355  | Pipe laid in trench.....   | 697.60             | 991.70   | 13355 |
| 13356  | Drop pipe.....   | 780.00             | 1,081.00 | 13356 |
| <i>Each</i>  |  |                    |          |       |
| 13357  | Extra over either of Items 13355 to 13356 inclusive for plug to socket end .....   | 538.00             | 746.00   | 13357 |
| 13358  | Ditto for cap to spigot end .....  | 538.00             | 746.00   | 13358 |
| 13359  | Ditto for bend .....   | 632.00             | 876.00   | 13359 |
| 13360  | Ditto for single junction .....  | 811.00             | 1,124.00 | 13360 |
| 13361  | Ditto for double junction .....  | 952.00             | 1,319.00 | 13361 |
| 13362  | Ditto for connector to existing pipework.....  | 343.00             | 476.00   | 13362 |
| 13363  | Add to either of Items 13359 to 13361 inclusive if fitted with bolted access door .....  | 148.00             | 205.00   | 13363 |
| <i>Per linear metre</i>  |  |                    |          |       |
| 13364  | Take up and clear away pipe laid in trench complete with all fittings (trench excavation measured separately).....                         | 29.90              | 37.70    | 13364 |
| 13365  | Take up and set aside for re-use ditto.....  | 32.50              | 40.30    | 13365 |
| 13366  | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 118.40             | 130.10   | 13366 |
| 13367  | Take down and clear away drop pipe complete with fittings and brackets .....   | 39.00              | 52.00    | 13367 |
| 13368  | Take down and set aside for re-use ditto.....  | 42.90              | 56.30    | 13368 |
| 13369  | Lay only pipe in trench.....   | 53.10              | 59.50    | 13369 |
| 13370  | Fix only drop pipe.....  | 135.50             | 148.80   | 13370 |
| <i>Each</i>  |  |                    |          |       |
| 13371  | Cut or burn out existing joint, clean spigot and socket ends and make good joint.....  | 191.00             | 234.00   | 13371 |

| Item  |  |        |        |        |        |        |        | Item   |       |
|---|--|--------|--------|--------|--------|--------|--------|--------|-------|
| <b>UPVC PIPES AND FITTINGS FOR BELOW GROUND DRAINAGE</b>  |  |        |        |        |        |        |        |        |       |
| UPVC Pressure pipes and fittings to BS 3506 for pressurized drainage with joints and fittings complying with relevant parts of BS 4346-1 and BS EN 1452-1 to 5 or BS EN ISO 1452-1 :- |  |        |        |        |        |        |        |        |       |
| <b>Pipe diameter (mm)</b>   |  |        |        |        |        |        |        |        |       |
| 80      100      125      150      200      250      300  |  |        |        |        |        |        |        |        |       |
| A      B      C      D      E      F      G   |  |        |        |        |        |        |        |        |       |
| \$      \$      \$      \$      \$      \$      \$  |  |        |        |        |        |        |        |        |       |
| <i>Per linear metre</i>   |  |        |        |        |        |        |        |        |       |
| 13372   | Pipe laid in trench.....   | 65.20  | 95.30  | 137.70 | 180.00 | 242.90 | 361.70 | 451.70 | 13372 |
| <i>Each</i>   |  |        |        |        |        |        |        |        |       |
| 13373   | Extra over Item 13372 for cap end.....   | 24.10  | 35.30  | 50.90  | 66.60  | 89.90  | 134.00 | 167.00 | 13373 |
| 13374   | Ditto for bend or elbow.....   | 32.60  | 47.70  | 68.90  | 90.00  | 121.00 | 181.00 | 226.00 | 13374 |
| 13375   | Ditto for junction.....  | 45.60  | 66.70  | 96.40  | 126.00 | 170.00 | 253.00 | 316.00 | 13375 |
| 13376   | Ditto for reducer.....   | 22.80  | 33.40  | 48.20  | 63.00  | 85.00  | 127.00 | 158.00 | 13376 |
| 13377   | Ditto for connector to existing pipework.....  | 19.60  | 28.60  | 41.30  | 54.00  | 72.90  | 109.00 | 136.00 | 13377 |
| <i>Per linear metre</i>   |  |        |        |        |        |        |        |        |       |
| 13378   | Take up and clear away pipe laid in trench (trench excavation measured separately).....  | 11.70  | 13.00  | 14.30  | 15.60  | 18.20  | 20.80  | 23.40  | 13378 |
| 13379   | Take up and set aside for re-use pipe laid in trench (ditto).....  | 14.30  | 15.60  | 18.20  | 20.80  | 23.40  | 26.00  | 29.90  | 13379 |
| 13380   | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 110.60 | 113.20 | 115.80 | 118.40 | 121.00 | 123.60 | 126.20 | 13380 |
| 13381   | Lay only pipe in trench.....   | 21.20  | 23.00  | 24.80  | 26.50  | 30.10  | 31.80  | 33.60  | 13381 |
| UPVC Pressure pipes and fittings to BS 4660 for gravity sewage and surface water drainage :-  |  |        |        |        |        |        |        |        |       |
| <b>Pipe diameter (mm)</b>   |  |        |        |        |        |        |        |        |       |
| 110      160  |  |        |        |        |        |        |        |        |       |
| A      B  |  |        |        |        |        |        |        |        |       |
| \$      \$  |  |        |        |        |        |        |        |        |       |
| <i>Per linear metre</i>   |  |        |        |        |        |        |        |        |       |
| 13382   | Pipe laid in trench.....   |        |        |        |        |        | 135.70 | 197.40 | 13382 |
| <i>Each</i>   |  |        |        |        |        |        |        |        |       |
| 13383   | Extra over Item 13382 for cap end.....   |        |        |        |        |        | 131.00 | 190.00 | 13383 |
| 13384   | Ditto for bend or elbow.....   |        |        |        |        |        | 263.00 | 381.00 | 13384 |
| 13385   | Ditto for tee.....   |        |        |        |        |        | 297.00 | 431.00 | 13385 |
| 13386   | Ditto for connector to existing pipework.....  |        |        |        |        |        | 131.00 | 191.00 | 13386 |

Item

Item

**UPVC PIPES AND FITTINGS FOR BELOW GROUND DRAINAGE (CONT'D)**

UPVC Pressure pipes and fittings to BS 4660 for gravity sewage and surface water drainage : - (Cont'd)

| Pipe diameter (mm) |        |
|--------------------|--------|
| 110                | 160    |
| A                  | B      |
| \$                 | \$     |
| 15.90              | 23.70  |
| 18.50              | 26.30  |
| 114.50             | 119.70 |
| 25.90              | 31.20  |

*Per linear metre*

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 13387 | Take up and clear away pipe laid in trench (trench excavation measured separately).....  | 15.90  | 23.70  | 13387 |
| 13388 | Take up and set aside for re-use pipe laid in trench (ditto).....  | 18.50  | 26.30  | 13388 |
| 13389 | Break up and clear away concrete beds and surrounds if any including drain pipes and fittings (trench excavation measured separately)..... | 114.50 | 119.70 | 13389 |
| 13390 | Lay only pipe in trench.....   | 25.90  | 31.20  | 13390 |

**STRAINERS**

| Nominal size (mm) |        |        |        |        |        |
|-------------------|--------|--------|--------|--------|--------|
| 15                | 20     | 25     | 32     | 40     | 50     |
| A                 | B      | C      | D      | E      | F      |
| \$                | \$     | \$     | \$     | \$     | \$     |
| 180.00            | 222.00 | 259.00 | 287.00 | 302.00 | 343.00 |
| 208.00            | 280.00 | 374.00 | 502.00 | 641.00 | 793.00 |

*Each*

|       |                              |        |        |        |        |        |        |       |
|-------|------------------------------|--------|--------|--------|--------|--------|--------|-------|
| 13391 | uPVC Y-strainer.....         | 180.00 | 222.00 | 259.00 | 287.00 | 302.00 | 343.00 | 13391 |
| 13392 | Copper alloy Y-strainer..... | 208.00 | 280.00 | 374.00 | 502.00 | 641.00 | 793.00 | 13392 |

| Nominal size (mm) |        |        |        |          |          |
|-------------------|--------|--------|--------|----------|----------|
| 65                | 80     | 100    | 150    | 200      | 250      |
| A                 | B      | C      | D      | E        | F        |
| \$                | \$     | \$     | \$     | \$       | \$       |
| 291.00            | 342.00 | 469.00 | 845.00 | 1,422.00 | 2,341.00 |

*Each*

|       |                           |        |        |        |        |          |          |       |
|-------|---------------------------|--------|--------|--------|--------|----------|----------|-------|
| 13393 | Cast iron Y-strainer..... | 291.00 | 342.00 | 469.00 | 845.00 | 1,422.00 | 2,341.00 | 13393 |
|-------|---------------------------|--------|--------|--------|--------|----------|----------|-------|

Clear and clean Y-strainer including taking out, clearing, cleaning and refixing the removable screen : -

*Each*

| Nominal size (mm) |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15                | 20    | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 150   | 200   | 250   |
| A                 | B     | C     | D     | E     | F     | G     | H     | I     | J     | K     | L     |
| \$                | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    | \$    |
| 26.00             | 31.20 | 36.40 | 41.60 | 46.80 | 52.10 | 57.30 | 62.50 | 67.70 | 78.10 | 88.50 | 98.90 |

|       |                 |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 13394 | Y-strainer..... | 26.00 | 31.20 | 36.40 | 41.60 | 46.80 | 52.10 | 57.30 | 62.50 | 67.70 | 78.10 | 88.50 | 98.90 | 13394 |
|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|



| Item  |   |  |                   |        |        |        |          |          |          |          | Item     |          |       |  |
|---|---|--|-------------------|--------|--------|--------|----------|----------|----------|----------|----------|----------|-------|--|
| <b>VALVES</b>   |   |  |                   |        |        |        |          |          |          |          |          |          |       |  |
| Copper alloy valves for fresh or flushing water supply system :-                |   |  | Nominal size (mm) |        |        |        |          |          |          |          |          |          |       |  |
|   |   |  | 15                | 20     | 25     | 32     | 40       | 50       | 65       | 80       | 100      | 150      |       |  |
| <i>Each</i>   |   |  | A                 | B      | C      | D      | E        | F        | G        | H        | I        | J        |       |  |
|   |   |  | \$                | \$     | \$     | \$     | \$       | \$       | \$       | \$       | \$       | \$       |       |  |
| 13395   | Copper alloy gate valve.....  |  | 90.00             | 111.00 | 130.00 | 148.00 | 210.00   | 302.00   | 435.00   | 626.00   | 801.00   | 945.00   | 13395 |  |
| 13396   | Ditto but flanged.....  |  | -                 | -      | -      | -      | -        | -        | -        | -        | 905.00   | 1,068.00 | 13396 |  |
| 13397   | Copper alloy non-return valve .....                                     |  | 105.00            | 129.00 | 151.00 | 172.00 | 244.00   | 351.00   | 505.00   | 727.00   | 931.00   | 1,099.00 | 13397 |  |
| 13398   | Copper alloy ball float valve with ball float for fresh water tank..... |  | -                 | 487.00 | 570.00 | 650.00 | 923.00   | 1,117.00 | -        | -        | -        | -        | 13398 |  |
| Brass or bronze or gunmetal valves for fresh or flushing water supply system :- |   |  | Nominal size (mm) |        |        |        |          |          |          |          |          |          |       |  |
|   |   |  | 15                | 20     | 25     | 30     | 40       | 50       | 65       | 80       | 100      | 150      |       |  |
| <i>Each</i>   |   |  | A                 | B      | C      | D      | E        | F        | G        | H        | I        | J        |       |  |
|   |   |  | \$                | \$     | \$     | \$     | \$       | \$       | \$       | \$       | \$       | \$       |       |  |
| 13399   | Brass or bronze ball valve with plastic float.....                      |  | 252.00            | 311.00 | 363.00 | 413.00 | 587.00   | 711.00   | 1,022.00 | 1,300.00 | 1,662.00 | 1,961.00 | 13399 |  |
| 13400   | Gun metal ball valve with plastic float .....                           |  | 366.00            | 496.00 | 748.00 | 986.00 | 1,295.00 | 1,504.00 | 2,711.00 | 3,484.00 | 4,437.00 | 5,250.00 | 13400 |  |
|   |   |  | Nominal size (mm) |        |        |        |          |          |          |          |          |          |       |  |
|   |   |  | 80                |        | 100    |        |          |          |          |          |          |          |       |  |
| <i>Each</i>   |   |  | A                 |        | B      |        |          |          |          |          |          |          |       |  |
|   |   |  | \$                |        | \$     |        |          |          |          |          |          |          |       |  |
| 13401   | Heavy pattern gunmetal full way gate valve .....                        |  |                   |        |        |        |          |          |          |          |          |          | 13401 |  |
| 13402   | Heavy pattern gunmetal full way gate valve flanged.....                 |  |                   |        |        |        |          |          |          |          |          |          | 13402 |  |
| Stainless steel Grade 316 valves for fresh or flushing water supply system :-   |   |  | Nominal size (mm) |        |        |        |          |          |          |          |          |          |       |  |
|   |   |  | 15                | 18     | 22     | 28     | 35       | 42       | 54       | 76       | 89       | 108      |       |  |
| <i>Each</i>   |   |  | A                 | B      | C      | D      | E        | F        | G        | H        | I        | J        |       |  |
|   |   |  | \$                | \$     | \$     | \$     | \$       | \$       | \$       | \$       | \$       | \$       |       |  |
| 13403   | Stainless steel gate valve .....  |  | 380.00            | 434.00 | 512.00 | 573.00 | 695.00   | 881.00   | 1,246.00 | 1,670.00 | 1,987.00 | 2,464.00 | 13403 |  |
| 13404   | Stainless steel check valve .....                                       |  | 296.00            | 347.00 | 422.00 | 531.00 | 598.00   | 757.00   | 1,046.00 | 1,370.00 | 1,630.00 | 2,021.00 | 13404 |  |

| Item  |      |   |           |           |           |           |           |           |           |           | Item      |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|---|------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------|--|--|---|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>VALVES (CONT'D)</b>  |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Ductile iron valves for fresh or flushing water supply system : -   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="margin-left: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="5">Nominal size (mm)</th> </tr> <tr> <th>80</th> <th>100</th> <th>150</th> <th>200</th> <th>250</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>  |      |   |           |           |           |           |           |           |           |           |           | Nominal size (mm) |  |  |   |   | 80 | 100 | 150 | 200 | 250 | A   | B   | C   | D   | E   | \$  | \$  | \$  | \$  | \$ |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Nominal size (mm)   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 80  | 100  | 150   | 200       | 250       |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A   | B    | C   | D         | E         |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$  | \$   | \$  | \$        | \$        |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13405   | Each | Ductile iron pressure reducing valve flanged.....                     | 2,634.00  | 2,770.00  | 3,761.00  | 4,700.00  | 6,397.00  |           |           |           |           | 13405             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Cast iron valves for fresh or flushing water supply system : -  |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="margin-left: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="10">Nominal size (mm)</th> </tr> <tr> <th>80</th> <th>100</th> <th>125</th> <th>150</th> <th>200</th> <th>250</th> <th>300</th> <th>350</th> <th>400</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table> |      |   |           |           |           |           |           |           |           |           |           | Nominal size (mm) |  |  |   |   |    |     |     |     |     | 80  | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | A  | B | C | D  | E  | F  | G  | H  | I  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Nominal size (mm)   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 80  | 100  | 125   | 150       | 200       | 250       | 300       | 350       | 400       |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A   | B    | C   | D         | E         | F         | G         | H         | I         |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$  | \$   | \$  | \$        | \$        | \$        | \$        | \$        | \$        |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13406   | Each | Cast iron gate valve flanged.....                                     | 1,395.00  | 1,662.00  | 2,180.00  | 3,704.00  | 4,448.00  | 8,533.00  | 10,752.00 | -         | -         | 13406             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13407   |      | Cast iron non-return valve flanged.....                               | 1,752.00  | 2,359.00  | 3,095.00  | 4,429.00  | 5,319.00  | 10,204.00 | 12,857.00 | -         | -         | 13407             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13408   |      | Cast iron globe valve flanged.....                                    | 2,837.00  | 3,824.00  | 5,457.00  | 7,742.00  | 11,843.00 | 20,497.00 | 27,056.00 | 41,035.00 | 60,966.00 | 13408             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13409   |      | Cast iron pressure reducing valve flanged.....                        | 9,695.00  | 12,658.00 | 18,066.00 | 27,120.00 | 27,798.00 | 34,239.00 | 43,141.00 | -         | -         | 13409             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13410   |      | Cast iron ball float valve with ball float for fresh water.....       | 14,945.00 | 15,800.00 | 20,384.00 | 24,493.00 | 30,861.00 | -         | -         | -         | -         | 13410             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| UPVC or PVC valves for flushing water supply system : -   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="margin-left: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="9">Nominal size (mm)</th> </tr> <tr> <th>15</th> <th>20</th> <th>25</th> <th>30</th> <th>40</th> <th>50</th> <th>65</th> <th>80</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>   |      |   |           |           |           |           |           |           |           |           |           | Nominal size (mm) |  |  |   |   |    |     |     |     | 15  | 20  | 25  | 30  | 40  | 50  | 65  | 80  | A   | B   | C  | D | E | F  | G  | H  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |    |    |    |    |
| Nominal size (mm)   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 15  | 20   | 25  | 30        | 40        | 50        | 65        | 80        |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A   | B    | C   | D         | E         | F         | G         | H         |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$  | \$   | \$  | \$        | \$        | \$        | \$        | \$        |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13411   | Each | PVC or UPVC screw down valve.....                                     | 74.30     | 84.70     | 129.00    | 164.00    | 300.00    | 337.00    | -         | -         | 13411     |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13412   |      | Ditto but flanged .....   | 143.00    | 174.00    | 243.00    | 288.00    | 361.00    | 380.00    | 472.00    | 567.00    | 13412     |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13413   |      | Plastic ball valve with plastic float for flushing cistern.....       | 99.40     | 112.00    | -         | -         | -         | -         | -         | -         | 13413     |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| UPVC or plastic angle valve for flushing cistern and urinal.....  |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="margin-left: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Nominal size (mm)</th> </tr> <tr> <th>6</th> <th>8</th> <th>10</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>  |      |   |           |           |           |           |           |           |           |           |           | Nominal size (mm) |  |  | 6 | 8 | 10 | A   | B   | C   | \$  | \$  | \$  |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Nominal size (mm)   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6   | 8    | 10  |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A   | B    | C   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$  | \$   | \$  |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13414   | Each | UPVC or plastic angle valve for flushing cistern and urinal.....      | 67.80     | 90.40     | 113.00    |           |           |           |           |           | 13414     |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13415   |      | UPVC or plastic connecting pipe for angle valve n.e. 600 mm long..... | 56.50     | 56.50     | 56.50     |           |           |           |           |           | 13415     |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Cast iron valves for underground drainage : -   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
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| Nominal size (mm)   |      |   |           |           |           |           |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 80  | 100  | 125   | 150       | 200       | 250       | 300       |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A   | B    | C   | D         | E         | F         | G         |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$  | \$   | \$  | \$        | \$        | \$        | \$        |           |           |           |           |           |                   |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 13416   | Each | Cast iron gate valve flanged.....                                     | 1,395.00  | 1,662.00  | 2,180.00  | 3,704.00  | 4,448.00  | 6,264.00  | 7,519.00  |           |           | 13416             |  |  |   |   |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Item

Item

**SUNDRIES REPAIRS TO VALVES AND BALL VALVES**

| Nominal size (mm) |           |            |                |
|-------------------|-----------|------------|----------------|
| 15 to 50          | 65 to 100 | 125 to 150 | 200 and beyond |
| A                 | B         | C          | D              |
| \$                | \$        | \$         | \$             |
| 26.00             | 31.00     | 36.00      | 42.00          |
| 30.00             | 35.00     | 42.00      | 47.00          |
| 44.00             | 53.00     | 62.00      | 71.00          |

*Each*

|       |   |       |       |       |       |       |
|-------|---|-------|-------|-------|-------|-------|
| 13417 | Take down and clear away valve of all types of materials and functions.....           | 26.00 | 31.00 | 36.00 | 42.00 | 13417 |
| 13418 | Take down and set aside for re-use valve of all types of materials and functions..... | 30.00 | 35.00 | 42.00 | 47.00 | 13418 |
| 13419 | Fix only valve of all types of materials and functions.....                           | 44.00 | 53.00 | 62.00 | 71.00 | 13419 |

| Nominal size (mm) |          |
|-------------------|----------|
| 15 to 50          | 65 to 80 |
| A                 | B        |
| \$                | \$       |
| 62.00             | 70.00    |
| 236.00            | 292.00   |
| 163.00            | 200.00   |
| 77.00             | 118.00   |
| 123.00            | 256.00   |

*Each*

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 13420 | Take off copper float from ball valve, solder to watertight and re-fix in position.....                          | 62.00  | 70.00  | 13420 |
| 13421 | Take off and clear away existing copper or plastic float from ball valve, provide and fix new plastic float..... | 236.00 | 292.00 | 13421 |
| 13422 | Take off and clear away metal or plastic connecting rod from ball valve, provide and fix new rod.....            | 163.00 | 200.00 | 13422 |
| 13423 | Re-wash ball valve including providing leather, vulcanized fibre, plastic or rubber washer as ordered.....       | 77.00  | 118.00 | 13423 |
| 13424 | Re-pack stuffing box, grind in valve and regulate .....  | 123.00 | 256.00 | 13424 |

| Item        |  |        |        |                          |       |       |                                    |       |       |                   |       |        | Item  |
|-------------|--|--------|--------|--------------------------|-------|-------|------------------------------------|-------|-------|-------------------|-------|--------|-------|
|             | <b>TRAPS AND WASTE OUTLETS</b>   |        |        |                          |       |       |                                    |       |       |                   |       |        |       |
|             | Supply and fix   |        |        | Take down and clear away |       |       | Take down and set aside for re-use |       |       | Fix only          |       |        |       |
|             | Nominal size (mm)  |        |        | Nominal size (mm)        |       |       | Nominal size (mm)                  |       |       | Nominal size (mm) |       |        |       |
|             | 32   | 38     | 51     | 32                       | 38    | 51    | 32                                 | 38    | 51    | 32                | 38    | 51     |       |
|             | A  | B      | C      | D                        | E     | F     | G                                  | H     | I     | J                 | K     | L      |       |
|             | \$   | \$     | \$     | \$                       | \$    | \$    | \$                                 | \$    | \$    | \$                | \$    | \$     |       |
| <i>Each</i> |  |        |        |                          |       |       |                                    |       |       |                   |       |        |       |
| 13425       | Plastic re-sealing anti-syphonic trap with 80 mm seal.....   |        |        |                          |       |       |                                    |       |       |                   |       |        | 13425 |
|             | 186.00   | 231.00 | 276.00 | 25.00                    | 27.00 | 30.00 | 27.00                              | 29.00 | 32.00 | 51.00             | 62.00 | 74.00  |       |
| 13426       | Galvanized malleable iron "P", "S" or running trap with 38 mm or 76 mm seal, as ordered, and screwed cleaning eye including joints to fitting, waste outlet, or galvanized steel or P.V.C. tubing..... |        |        |                          |       |       |                                    |       |       |                   |       |        | 13426 |
|             | 170.00   | 197.00 | 253.00 | 39.00                    | 44.00 | 50.00 | 41.00                              | 46.00 | 52.00 | 60.00             | 70.00 | 85.00  |       |
| 13427       | Cast brass ditto.....  |        |        |                          |       |       |                                    |       |       |                   |       |        | 13427 |
|             | 247.00   | 298.00 | 405.00 | 39.00                    | 44.00 | 51.00 | 41.00                              | 46.00 | 52.00 | 61.00             | 70.00 | 85.00  |       |
| 13428       | Chromium plated brass ditto.....   |        |        |                          |       |       |                                    |       |       |                   |       |        | 13428 |
|             | 259.00   | 302.00 | 442.00 | 39.00                    | 44.00 | 51.00 | 41.00                              | 46.00 | 52.00 | 57.00             | 66.00 | 126.00 |       |
| 13429       | Add to either of Items 13426 to 13428 inclusive if fitted with connector for copper tubing.....  |        |        |                          |       |       |                                    |       |       |                   |       |        | 13429 |
|             | 138.00   | 169.00 | 238.00 | -                        | -     | -     | -                                  | -     | -     | -                 | -     | -      |       |
| 13430       | Approved "P" or "S" plastic bottle trap including joints to fitting, waste outlet or P.V.C. tubing.....  |        |        |                          |       |       |                                    |       |       |                   |       |        | 13430 |
|             | 159.00   | 186.00 | -      | 25.00                    | 27.00 | -     | 27.00                              | 30.00 | -     | 49.00             | 59.00 | -      |       |



| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>CISTERNS AND TANKS</b>  |                |                          |                                    |          |       |
|       | Galvanized low carbon steel cisterns and tanks complete with vent, overflow and warning pipe, accessories, etc. including all joints to tubing :-  |                |                          |                                    |          |       |
|       | (Note :- The nominal capacity is measured based on the base area of the tank, measured on plan, and multiplied by the height of the tank, excluding any projection, and multiplied by 1,000 litres/m <sup>3</sup> .) |                |                          |                                    |          |       |
|       | <b>Each</b>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 13436 | Cistern or tank n.e. 100 litre nominal capacity.....   | 3,078.00       | 140.00                   | 49.40                              | 131.00   | 13436 |
| 13437 | Ditto but 100 - 200 litre nominal capacity.....  | 3,941.00       | 174.00                   | 58.30                              | 152.00   | 13437 |
| 13438 | Ditto but 200 - 300 litre nominal capacity.....  | 5,332.00       | 239.00                   | 77.50                              | 195.00   | 13438 |
| 13439 | Ditto but 300 - 500 litre nominal capacity.....  | 6,755.00       | 317.00                   | 118.00                             | 271.00   | 13439 |
| 13440 | Ditto but 500 - 1,000 litre nominal capacity.....  | 9,242.00       | 425.00                   | 173.00                             | 401.00   | 13440 |
| 13441 | Ditto but 1,000 - 2,000 litre nominal capacity.....  | 12,385.00      | 559.00                   | 241.00                             | 597.00   | 13441 |
| 13442 | Ditto but 2,000 - 3,000 litre nominal capacity.....  | 15,471.00      | 754.00                   | 295.00                             | 781.00   | 13442 |
| 13443 | Ditto but 3,000 - 5,000 litre nominal capacity.....  | 22,155.00      | 937.00                   | 430.00                             | 1,171.00 | 13443 |
| 13444 | Ditto but 5,000 - 10,000 litre nominal capacity.....   | 25,212.00      | 1,830.00                 | 646.00                             | 1,736.00 | 13444 |
| 13445 | Add to Item 13444 for each additional 2,500 litres or part thereof in nominal capacity.....  | 2,243.00       | 538.00                   | 194.00                             | 325.00   | 13445 |
|       | <b>GLASS-FIBRE REINFORCED PLASTIC WATER TANKS</b>  |                |                          |                                    |          |       |
|       | One-piece glass-fibre reinforced plastic (GRP) water tanks with cover complete with vent, overflow and warning pipe, accessories, etc. including all joints to tubing :-   |                |                          |                                    |          |       |
|       | (Note :- The nominal capacity is measured based on the base area of the tank, measured on plan, and multiplied by the height of the tank, excluding any projection, and multiplied by 1,000 litres/m <sup>3</sup> .) |                |                          |                                    |          |       |
|       | <b>Each</b>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 13446 | Water tank n.e. 100 litre nominal capacity.....  | 1,258.00       | 55.00                    | 39.00                              | 108.00   | 13446 |
| 13447 | Ditto but 100 - 250 litre nominal capacity.....  | 1,986.00       | 66.00                    | 47.00                              | 130.00   | 13447 |
| 13448 | Ditto but 250 - 350 litre nominal capacity.....  | 2,627.00       | 99.00                    | 71.00                              | 195.00   | 13448 |
| 13449 | Ditto but 350 - 500 litre nominal capacity.....  | 3,400.00       | 132.00                   | 94.00                              | 261.00   | 13449 |
| 13450 | Ditto but 500 - 800 litre nominal capacity.....  | 4,358.00       | 192.00                   | 137.00                             | 379.00   | 13450 |

Item

Item

**GLASS-FIBRE REINFORCED PLASTIC WATER TANKS (CONT'D)**

Panel type glass-fibre reinforced plastic (GRP) water tank with cover complete with access ladder if required, roof vent, overflow and warning pipes, bracing system, accessories, etc. and including all joints to tubing :-

(Note :- The area on plan of water tanks is measured the dimensions of the bottom of the tank.)

**Each**

|       |   | Height (m) |           |           |           |           |       |
|-------|---|------------|-----------|-----------|-----------|-----------|-------|
|       |   | 1.00       | 1.50      | 2.00      | 2.50      | 3.00      |       |
|       |   | A          | B         | C         | D         | E         |       |
|       |   | \$         | \$        | \$        | \$        | \$        |       |
| 13451 | Water tank of area on plan n.e. 2.00 m <sup>2</sup> ..... | 9,279.00   | 13,610.00 | 16,561.00 | 20,658.00 | 24,583.00 | 13451 |
| 13452 | Ditto but 2.00 - 4.00 m <sup>2</sup> .....                | 15,466.00  | 22,890.00 | 26,336.00 | 33,186.00 | 39,491.00 | 13452 |
| 13453 | Ditto but 4.00 - 6.00 m <sup>2</sup> .....                | 22,404.00  | 35,453.00 | 38,446.00 | 47,637.00 | 56,688.00 | 13453 |
| 13454 | Ditto but 6.00 - 8.00 m <sup>2</sup> .....                | 27,044.00  | 43,751.00 | 48,034.00 | 59,745.00 | 71,097.00 | 13454 |
| 13455 | Ditto but 8.00 - 10.00 m <sup>2</sup> .....               | 31,198.00  | 43,302.00 | 53,731.00 | 65,972.00 | 78,507.00 | 13455 |
| 13456 | Ditto but 10.00 - 12.00 m <sup>2</sup> .....              | 39,242.00  | 52,319.00 | 69,304.00 | 79,846.00 | 94,218.00 | 13456 |
| 13457 | Ditto but 12.00 - 16.00 m <sup>2</sup> .....              | 45,251.00  | 63,633.00 | 77,590.00 | 88,503.00 | 10,355.00 | 13457 |

(The actual rate should be : \$103,550 for Item 13457E)

Take down and clear away panel type GRP water tank with cover including all accessories :-

**Each**

|       |   | Height (m) |          |          |          |          |       |
|-------|---|------------|----------|----------|----------|----------|-------|
|       |   | 1.00       | 1.50     | 2.00     | 2.50     | 3.00     |       |
|       |   | A          | B        | C        | D        | E        |       |
|       |   | \$         | \$       | \$       | \$       | \$       |       |
| 13458 | Water tank of area on plan n.e. 2.00 m <sup>2</sup> ..... | 369.00     | 517.00   | 664.00   | 812.00   | 1,255.00 | 13458 |
| 13459 | Ditto but 2.00 - 4.00 m <sup>2</sup> .....                | 590.00     | 812.00   | 959.00   | 1,181.00 | 1,402.00 | 13459 |
| 13460 | Ditto but 4.00 - 6.00 m <sup>2</sup> .....                | 812.00     | 1,033.00 | 1,255.00 | 1,624.00 | 2,214.00 | 13460 |
| 13461 | Ditto but 6.00 - 8.00 m <sup>2</sup> .....                | 959.00     | 1,181.00 | 1,624.00 | 1,993.00 | 2,731.00 | 13461 |
| 13462 | Ditto but 8.00 - 10.00 m <sup>2</sup> .....               | 1,033.00   | 1,845.00 | 2,140.00 | 2,583.00 | 3,174.00 | 13462 |
| 13463 | Ditto but 10.00 - 12.00 m <sup>2</sup> .....              | 1,255.00   | 1,919.00 | 2,657.00 | 3,174.00 | 3,764.00 | 13463 |
| 13464 | Ditto but 12.00 - 16.00 m <sup>2</sup> .....              | 1,476.00   | 2,214.00 | 3,247.00 | 3,838.00 | 4,650.00 | 13464 |

| Item  |   | Height (m) |          |          |          |           | Item  |
|---|---|------------|----------|----------|----------|-----------|-------|
|   |   | 1.00       | 1.50     | 2.00     | 2.50     | 3.00      |       |
|   |   | A          | B        | C        | D        | E         |       |
|   |   | \$         | \$       | \$       | \$       | \$        |       |
| <b>GLASS-FIBRE REINFORCED PLASTIC WATER TANKS (CONT'D)</b>  |   |            |          |          |          |           |       |
| Take down and set aside for re-use panel type GRP water tank with cover including all accessories : - |   |            |          |          |          |           |       |
|   | <i>Each</i>   |            |          |          |          |           |       |
| 13465   | Water tank of area on plan n.e. 2.00 m <sup>2</sup> ..... | 351.00     | 491.00   | 631.00   | 771.00   | 1,192.00  | 13465 |
| 13466   | Ditto but 2.00 - 4.00 m <sup>2</sup> .....                | 561.00     | 771.00   | 912.00   | 1,122.00 | 1,332.00  | 13466 |
| 13467   | Ditto but 4.00 - 6.00 m <sup>2</sup> .....                | 771.00     | 982.00   | 1,192.00 | 1,543.00 | 2,103.00  | 13467 |
| 13468   | Ditto but 6.00 - 8.00 m <sup>2</sup> .....                | 912.00     | 1,122.00 | 1,543.00 | 1,893.00 | 2,594.00  | 13468 |
| 13469   | Ditto but 8.00 - 10.00 m <sup>2</sup> .....               | 982.00     | 1,753.00 | 2,033.00 | 2,454.00 | 3,015.00  | 13469 |
| 13470   | Ditto but 10.00 - 12.00 m <sup>2</sup> .....              | 1,192.00   | 1,823.00 | 2,524.00 | 3,015.00 | 3,576.00  | 13470 |
| 13471   | Ditto but 12.00 - 16.00 m <sup>2</sup> .....              | 1,402.00   | 2,103.00 | 3,085.00 | 3,646.00 | 4,417.00  | 13471 |
| Fix only panel type GRP water tank with cover including all accessories : -                           |   |            |          |          |          |           |       |
|   | <i>Each</i>   |            |          |          |          |           |       |
| 13472   | Water tank of area on plan n.e. 2.00 m <sup>2</sup> ..... | 880.00     | 1,232.00 | 1,584.00 | 1,936.00 | 2,992.00  | 13472 |
| 13473   | Ditto but 2.00 - 4.00 m <sup>2</sup> .....                | 1,408.00   | 1,936.00 | 2,288.00 | 2,816.00 | 3,344.00  | 13473 |
| 13474   | Ditto but 4.00 - 6.00 m <sup>2</sup> .....                | 1,936.00   | 2,464.00 | 2,992.00 | 3,872.00 | 5,280.00  | 13474 |
| 13475   | Ditto but 6.00 - 8.00 m <sup>2</sup> .....                | 2,288.00   | 2,816.00 | 3,872.00 | 4,752.00 | 6,511.00  | 13475 |
| 13476   | Ditto but 8.00 - 10.00 m <sup>2</sup> .....               | 2,464.00   | 4,400.00 | 5,104.00 | 6,160.00 | 7,567.00  | 13476 |
| 13477   | Ditto but 10.00 - 12.00 m <sup>2</sup> .....              | 2,992.00   | 4,576.00 | 6,335.00 | 7,567.00 | 8,975.00  | 13477 |
| 13478   | Ditto but 12.00 - 16.00 m <sup>2</sup> .....              | 3,520.00   | 5,280.00 | 7,743.00 | 9,151.00 | 11,087.00 | 13478 |



| Item  |  |                       |        |        |          |                          |                                    |                                    |          | Item   |        |    |
|-------|--|-----------------------|--------|--------|----------|--------------------------|------------------------------------|------------------------------------|----------|--------|--------|----|
|       | <b>BALLOON GRATINGS AND FRESH AIR INLETS</b>   |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  | <b>Supply and fix</b> |        |        |          | Take down and clear away | Take down and set aside for re-use | Fix only                           |          |        |        |    |
|       |  | Nominal size (mm)     |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  | 51                    | 75     | 100    | 150      |                          |                                    |                                    | A        | B      | C      | D  |
|       | <i>Each</i>  | \$                    | \$     | \$     | \$       | \$                       | \$                                 | \$                                 | \$       |        |        |    |
| 13479 | Stout galvanized iron wire balloon grating with pronged feet and set in top of pipe .....                                  | 33.70                 | 50.60  | 67.30  | 101.00   | 15.60                    | 18.20                              | 14.30                              |          | 13479  |        |    |
| 13480 | Stout copper wire ditto .....  | 101.00                | 152.00 | 202.00 | 303.00   | 15.60                    | 18.20                              | 14.30                              |          | 13480  |        |    |
|       |  |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  |                       |        |        |          | <b>Supply and fix</b>    | Take down and clear away           | Take down and set aside for re-use | Fix only |        |        |    |
|       |  |                       |        |        |          | A                        |                                    |                                    |          | B      | C      | D  |
|       | <i>Each</i>  |                       |        |        |          | \$                       |                                    |                                    |          | \$     | \$     | \$ |
| 13481 | Galvanized cast iron fresh air inlet valve with brass front and mica flap, and joint to top of 100 mm cast iron pipe ..... |                       |        |        | 269.00   | 38.40                    | 40.60                              | 59.20                              |          | 13481  |        |    |
|       |  |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  |                       |        |        |          |                          |                                    |                                    | A        |        |        |    |
|       | <i>Each</i>  |                       |        |        |          |                          |                                    |                                    | \$       |        |        |    |
| 13482 | Take off and clear away existing mica flap, and provide and fix new .....  |                       |        |        |          |                          |                                    |                                    | 75.60    | 13482  |        |    |
|       |  |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       | <b>HOSE REEL FOR CLEANSING</b>   |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  |                       |        |        |          | <b>Supply and fix</b>    | Take down and clear away           | Take down and set aside for re-use | Fix only |        |        |    |
|       |  |                       |        |        |          | A                        |                                    |                                    |          | B      | C      | D  |
|       | <i>Each</i>  |                       |        |        |          | \$                       |                                    |                                    |          | \$     | \$     | \$ |
| 13483 | 30 m long hose reel complete with all necessary pipework and fittings for cleansing.....                                   |                       |        |        | 3,133.00 | 88.40                    | 97.20                              | 106.00                             |          | 13483  |        |    |
|       |  |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       | <b>FIRE COLLAR</b>   |                       |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  | Pipe diameter (mm)    |        |        |          |                          |                                    |                                    |          |        |        |    |
|       |  | 15                    | 20     | 25     | 32       | 40                       | 50                                 | 65                                 | 80       | 100    | 150    |    |
|       | <i>Each</i>  | A                     | B      | C      | D        | E                        | F                                  | G                                  | H        | I      | J      |    |
|       |  | \$                    | \$     | \$     | \$       | \$                       | \$                                 | \$                                 | \$       | \$     | \$     |    |
| 13484 | Pyrosleeve 'GV' type fire collar as ordered by the Maintenance Surveyor in writing .....                                   | 103.00                | 105.00 | 108.00 | 112.00   | 124.00                   | 131.00                             | 144.00                             | 164.00   | 187.00 | 248.00 |    |

Item

Item

**GRANULAR BEDS FOR DRAIN PIPES**

Granular bedding : -

*Per cubic metre*

|        |
|--------|
| A      |
| \$     |
| 213.00 |

13485 Beds, haunching or surrounds to pipe..... 13485

**CONCRETE BEDS FOR DRAIN PIPES**

Concrete Grade 10S, Grade 10D or 10MPa in : -

*Per linear metre*

| Pipe bore (mm) |        |        |        |        |        |        |        |
|----------------|--------|--------|--------|--------|--------|--------|--------|
| 50             | 75     | 80     | 100    | 110    | 150    | 160    | 200    |
| A              | B      | C      | D      | E      | F      | G      | H      |
| \$             | \$     | \$     | \$     | \$     | \$     | \$     | \$     |
| 68.50          | 80.40  | 82.60  | 94.20  | 99.60  | 121.00 | -      | -      |
| 127.30         | 153.70 | 157.90 | 178.50 | 188.90 | 230.00 | 242.20 | 285.40 |
| 74.00          | 86.50  | 88.90  | 98.90  | 105.80 | 127.10 | 131.60 | 156.10 |

13486 Bed 300 mm wider than external diameter of pipe and 100 mm thick under pipe including haunching up after drain is tested from outside edge of bed to meet pipe barrel tangentially..... 13486

13487 Ditto but 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel..... 13487

13488 Add to Item 13487 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round..... 13488

*Per linear metre*

| Pipe bore (mm) |        |        |        |        |        |        |        |
|----------------|--------|--------|--------|--------|--------|--------|--------|
| 225            | 250    | 300    | 315    | 350    | 375    | 400    | 450    |
| A              | B      | C      | D      | E      | F      | G      | H      |
| \$             | \$     | \$     | \$     | \$     | \$     | \$     | \$     |
| 368.30         | 402.00 | 433.30 | 453.80 | 502.50 | 517.40 | 551.90 | 584.80 |
| 162.30         | 175.20 | 190.60 | 199.30 | 216.70 | 228.20 | 241.40 | 247.10 |

13489 Bed 300 mm wider than external diameter of pipe and 150 mm thick under pipe including filling up after the drain is tested to mid point of pipe barrel..... 13489

13490 Add to Item 13489 if pipe is completely surrounded after testing with similar concrete not less than 150 mm thick all round..... 13490

Extra over either of Items 13486 to 13490 inclusive for concrete Grade 20S, Grade 20D or 20MPa ..... 13%

| Item  |  |                |                        |                                  | Item     |       |
|---|--|----------------|------------------------|----------------------------------|----------|-------|
| <b>CAST IRON TRAPS AND GULLIES</b>  |  |                |                        |                                  |          |       |
| Traps and gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round : -                               |  |                |                        |                                  |          |       |
| (Note : - All Items 13491 to 13506 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.) |  |                |                        |                                  |          |       |
| <b>Each</b>   |  |                |                        |                                  |          |       |
|   |  | Supply and fix | Take up and clear away | Take up and set aside for re-use | Fix only |       |
|   |  | A<br>\$        | B<br>\$                | C<br>\$                          | D<br>\$  |       |
| 13491   | Trap with 50 mm bore outlet.....   | 199.00         | 19.20                  | 27.30                            | 112.00   | 13491 |
| 13492   | Ditto 75 mm ditto.....   | 260.00         | 23.60                  | 33.20                            | 128.00   | 13492 |
| 13493   | Ditto 100 mm ditto.....  | 314.00         | 29.50                  | 41.30                            | 174.00   | 13493 |
| 13494   | Ditto 150 mm ditto.....  | 490.00         | 38.40                  | 53.90                            | 212.00   | 13494 |
| 13495   | Ditto 225 mm ditto.....  | 879.00         | 62.00                  | 86.30                            | 309.00   | 13495 |
| 13496   | Gully with 100 mm bore trapped outlet and 150 mm diameter circular or 150 x 150 mm square top rebated for grating (measured separately).....   | 468.00         | 39.80                  | 55.30                            | 217.00   | 13496 |
| 13497   | Ditto but with 150 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top ditto (ditto).....   | 717.00         | 45.00                  | 63.50                            | 254.00   | 13497 |
| 13498   | Add to either of Items 13496 to 13497 inclusive for side or back inlet.....  | 219.00         | 24.40                  | 33.90                            | 102.00   | 13498 |
| 13499   | Grit or grease gully with 100 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top rebated for grating (measured separately) complete with removable galvanized steel strainer and handle..... | 1,189.00       | 38.40                  | 53.90                            | 243.00   | 13499 |
| 13500   | Intercepting trap with 100 mm bore outlet and square or oblique inspection arm fitted with galvanized stopper in plain or screw pattern joint.....   | 482.00         | 32.50                  | 45.00                            | 112.00   | 13500 |
| 13501   | Ditto but with 150 mm bore outlet ditto.....   | 700.00         | 39.80                  | 55.30                            | 145.00   | 13501 |
| 13502   | Ditto but with 225 mm bore outlet ditto.....   | 1,082.00       | 53.90                  | 75.30                            | 184.00   | 13502 |
| 13503   | Ditto but with 300 mm bore outlet ditto.....   | 1,459.00       | 79.70                  | 111.00                           | 217.00   | 13503 |
| 13504   | Ditto but with 375 mm bore outlet ditto.....   | 2,441.00       | 119.00                 | 167.00                           | 258.00   | 13504 |
| 13505   | Ditto but with 600 mm bore outlet ditto.....   | 3,992.00       | 179.00                 | 251.00                           | 422.00   | 13505 |
| 13506   | Add to either of Items 13500 to 13505 inclusive if fitted with cast iron stopper and lever handle, 1.80 m long galvanized chain, hook and ring.....  | 70.00          | -                      | -                                | -        | 13506 |

| Item                                    |  | Supply and fix | Take up and clear away | Take up and set aside for re-use | Fix only | Item  |
|---|--|----------------|------------------------|----------------------------------|----------|-------|
|   |  | A              | B                      | C                                | D        |       |
|   |  | \$             | \$                     | \$                               | \$       |       |
| <b>VITRIFIED CLAY TRAPS AND GULLIES</b> |  |                |                        |                                  |          |       |
|   | Traps and gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round : -  |                |                        |                                  |          |       |
|   | (Note : - All Items 13507 to 13524 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.)  |                |                        |                                  |          |       |
|   | <b>Each</b>  |                |                        |                                  |          |       |
| 13507                                   | Trap with 100 mm bore outlet.....  | 173.00         | 22.10                  | 31.00                            | 208.00   | 13507 |
| 13508                                   | Ditto with 150 mm ditto.....   | 244.00         | 26.60                  | 39.10                            | 145.00   | 13508 |
| 13509                                   | Ditto with 225 mm ditto.....   | 518.00         | 37.60                  | 53.10                            | 189.00   | 13509 |
| 13510                                   | Ditto with 300 mm bore outlet.....   | 934.00         | 56.10                  | 70.80                            | 234.00   | 13510 |
| 13511                                   | Gully with 100 mm bore trapped outlet and 150 mm diameter circular or 150 x 150 mm square top rebated for grating (measured separately).....   | 295.00         | 36.90                  | 63.50                            | 189.00   | 13511 |
| 13512                                   | Ditto but with 150 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top ditto (ditto).....   | 595.00         | 43.50                  | 70.80                            | 221.00   | 13512 |
| 13513                                   | Add to either of Items 13511 to 13512 inclusive for side or back inlet of any bore.....  | 134.00         | -                      | -                                | -        | 13513 |
| 13514                                   | Grit or grease gully with 100 mm bore trapped outlet and 225 mm diameter circular or 225 x 225 mm square top rebated for grating (measured separately) complete with removable galvanized steel strainer and handle..... | 767.00         | 42.80                  | 70.80                            | 178.00   | 13514 |
| 13515                                   | Road gully, 300 mm diameter and 600 mm deep, with plain top and 100 mm or 150 mm bore outlet.....  | 1,075.00       | 84.80                  | 134.00                           | 341.00   | 13515 |
| 13516                                   | Ditto but 300 mm diameter and 750 mm deep ditto.....   | 1,174.00       | 89.30                  | 147.00                           | 385.00   | 13516 |
| 13517                                   | Ditto but 375 mm diameter and 900 mm deep ditto.....   | 1,370.00       | 104.00                 | 164.00                           | 460.00   | 13517 |
| 13518                                   | Add to either of Items 13515 to 13517 inclusive for cleaning eye with sealing plate or stopper.....  | 44.60          | -                      | -                                | -        | 13518 |
| 13519                                   | Intercepting trap with 100 mm bore outlet and square or oblique inspection arm fitted with clayware stopper in plain or screw pattern joint.....   | 592.00         | 25.80                  | 39.10                            | 120.00   | 13519 |
| 13520                                   | Ditto but with 150 mm bore outlet ditto.....   | 817.00         | 31.00                  | 48.00                            | 139.00   | 13520 |
| 13521                                   | Ditto but with 225 mm bore outlet ditto.....   | 1,282.00       | 44.30                  | 67.10                            | 173.00   | 13521 |
| 13522                                   | Ditto but with 300 mm bore outlet ditto.....   | 1,976.00       | 64.20                  | 82.60                            | 210.00   | 13522 |
| 13523                                   | Ditto but with 375 mm bore outlet ditto.....   | 2,450.00       | 76.70                  | 98.10                            | 243.00   | 13523 |
| 13524                                   | Add to either of Items 13519 to 13523 inclusive if fitted with galvanized iron stopper and lever handle, 1.80 m long galvanized chain, hook and ring.....  | 43.70          | -                      | -                                | -        | 13524 |

| Item                                     |  |                        |                                 |                                 | Item   |       |
|--|--|------------------------|---------------------------------|---------------------------------|--------|-------|
| <b>PRECAST CONCRETE GULLIES</b>          |  |                        |                                 |                                 |        |       |
|  | Gullies with concrete Grade 20S, Grade 20D or 20MPa bed and surround minimum 100 mm thick all round : -  |                        |                                 |                                 |        |       |
|  | (Note : - All Items 13525 to 13526 (Columns (A) to (D)) inclusive include for concrete bed and surround or breaking up the same as applicable.)  |                        |                                 |                                 |        |       |
|  | <b>Each</b>  |                        |                                 |                                 |        |       |
| 13525                                    | Road gully, 225 mm diameter and 600 mm deep internally with plain top and 100 or 150 mm bore outlet.....   | 963.00                 | 118.00                          | 86.00                           | 547.00 | 13525 |
| 13526                                    | Ditto but size 450 mm diameter and 900mm deep internally.....  | 1,773.00               | 204.00                          | 156.00                          | 875.00 | 13526 |
| <b>GULLY KERBS, HOPPERS AND GRATINGS</b> |  |                        |                                 |                                 |        |       |
|  |  | Size of gully top (mm) |                                 |                                 |        |       |
|  |  | 75<br>diameter         | 150 x 150<br>or 150<br>diameter | 225 x 225<br>or 225<br>diameter |        |       |
|  | <b>Each</b>  | A<br>\$                | B<br>\$                         | C<br>\$                         |        |       |
| 13527                                    | Kerb 75 mm thick and n.e. 150 mm high, around two or three sides of gully top, of concrete Grade 10S, Grade 10D or 10MPa or bricks-on-edge in cement mortar, rendered in 15 mm thick cement and sand (1:3) trowelled smooth on all exposed surfaces and dished to gully, including all necessary formwork.....   |                        | 59.50                           | 99.80                           | 149.00 | 13527 |
| 13528                                    | Extra for raising concrete surround to trap or gully to a height n.e. 300 mm above top to form hopper (or alternatively providing and fixing glazed clayware or cast iron raising piece surrounded with and including 100 mm thick concrete) including forming rebate around top if required for grouting (measured separately), trowelling all surfaces smooth with cement and sand (1:2), forming all back inlets, and all additional excavation, disposal and formwork..... |                        | 120.00                          | 205.00                          | 291.00 | 13528 |
| 13529                                    | Add to Item 13528 for each additional 150 mm or part thereof in height.....  |                        | 51.40                           | 103.00                          | 137.00 | 13529 |
| 13530                                    | Galvanized steel or coated cast iron flat or dished grating and set in gully top or concrete surround to trap or gully.....  |                        | 85.70                           | 120.00                          | 137.00 | 13530 |
| 13531                                    | Take up and clear away galvanized steel or coated cast iron flat or dished grating set in gully top or concrete surround to trap or gully.....   |                        | 6.50                            | 7.80                            | 9.10   | 13531 |
| 13532                                    | Take up and set aside for re-use ditto.....  |                        | 10.40                           | 13.00                           | 14.30  | 13532 |
| 13533                                    | Fix only ditto.....  |                        | 8.50                            | 10.60                           | 12.70  | 13533 |
| 13534                                    | Galvanized steel or coated cast iron flat or dished hinged grating and frame and set frame in gully top or concrete surround to trap or gully.....   |                        | 180.00                          | 210.00                          | 225.00 | 13534 |
| 13535                                    | Take up and clear away galvanized steel or coated cast iron flat or dished hinged grating and frame set in gully top or concrete surround to trap or gully.....  |                        | 7.80                            | 9.10                            | 6.60   | 13535 |
| 13536                                    | Take up and set aside for re-use ditto.....  |                        | 13.00                           | 14.30                           | 18.20  | 13536 |
| 13537                                    | Fix only ditto.....  |                        | 17.00                           | 23.40                           | 27.60  | 13537 |

| Item  |  |                | Item                   |                                  |          |       |
|-------|--|----------------|------------------------|----------------------------------|----------|-------|
|       | <b>SURFACE WATER CHANNELS</b>  |                |                        |                                  |          |       |
|       | <i>Per cubic metre</i>   | A<br>\$        |                        |                                  |          |       |
| 13538 | Concrete Grade 20S, Grade 20D or 20MPa in surface water channel n.e. 0.10 m <sup>2</sup> cross sectional area (void of waterway not deducted) with 75mm (minimum) thick sides and base, level or slope.....                                | 1,313.20       | 13538                  |                                  |          |       |
| 13539 | Ditto 0.10 - 0.20 m <sup>2</sup> cross sectional area.....   | 1,149.10       | 13539                  |                                  |          |       |
| 13540 | Ditto 0.20 - 0.40 m <sup>2</sup> cross sectional area.....   | 984.90         | 13540                  |                                  |          |       |
|       | Add to either of Items 13538 to 13540 inclusive if cast to curve n.e. 3.00 m radius to centre line of waterway.....  | 25%            |                        |                                  |          |       |
| 13541 | Add to either of Items 13538 to 13540 inclusive for breaking up and carting away existing concrete surface water channel and step surface water channel including clearing away channel cover and any silting in channel, if required..... | 175.10         | 13541                  |                                  |          |       |
| 13542 | Add to either of Items 13538 to 13540 inclusive for forming step surface water channel including ditto.....  | 43.70          | 13542                  |                                  |          |       |
|       | <b>CAST IRON CHANNEL COVERS</b>  |                |                        |                                  |          |       |
|       |  | Supply and fix | Take up and clear away | Take up and set aside for re-use | Fix only |       |
|       | <i>Per kg</i>  | A<br>\$        | B<br>\$                | C<br>\$                          | D<br>\$  |       |
| 13543 | Cast iron surface channel cover with slots, weight n.e. 24 kg each.....  | 6.90           | 1.50                   | 2.20                             | 3.60     | 13543 |
| 13544 | Ditto, weight exceeding 24 kg each.....  | 6.70           | 0.70                   | 1.50                             | 3.60     | 13544 |
|       | <b>PRECAST CONCRETE CHANNEL COVERS</b>   |                |                        |                                  |          |       |
|       |  | Supply and fix | Take up and clear away | Take up and set aside for re-use | Fix only |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$                | C<br>\$                          | D<br>\$  |       |
| 13545 | Precast concrete Grade 20S, Grade 20D or 20MPa channel cover with slots, 25 mm thick including reinforcement.....  | 394.00         | 42.10                  | 52.40                            | 70.10    | 13545 |
| 13546 | Ditto but 50 mm thick.....   | 459.60         | 54.60                  | 64.90                            | 110.20   | 13546 |

| Item  |   |                |                     | Item  |
|-------|---|----------------|---------------------|-------|
|       | <b>MANHOLES, CESSPITS, SEPTIC TANKS, CATCHPITS, GREASE PITS AND OTHER DRAINAGE CHAMBERS</b>                                 |                |                     |       |
|       | Plain and/or reinforced concrete Grade 20S, Grade 20D or 20MPa (reinforcement and formwork measured separately) : -         |                |                     |       |
|       | <i>Per cubic metre</i>  |                |                     |       |
|       |   | Plain concrete | Reinforced concrete |       |
|       |   | A              | B                   |       |
|       |   | \$             | \$                  |       |
| 13547 | Base slabs.....   | 1,107.30       | 1,220.80            | 13547 |
| 13548 | Walls.....  | 1,186.30       | 1,259.60            | 13548 |
| 13549 | Suspended slabs.....  | 1,128.80       | 1,227.50            | 13549 |
|       | Extra over either of Items 13547 to 13549 inclusive for plain and/or reinforced concrete Grade 25S, Grade 25D or 25Mpa..... |                | 8%                  |       |
|       | Extra over either of Items 13547 to 13549 inclusive for plain and/or reinforced concrete Grade 30S, Grade 30D or 30Mpa..... |                | 10%                 |       |
|       | Extra over either of Items 13547 to 13549 inclusive for plain and/or reinforced concrete Grade 40S, Grade 40D or 40Mpa..... |                | 19%                 |       |
|       | <i>Per square metre</i>   |                |                     |       |
|       |   | Sawn formwork  | Wrot formwork       |       |
|       |   | A              | B                   |       |
|       |   | \$             | \$                  |       |
| 13550 | Formwork to base slabs.....   | 403.40         | 410.40              | 13550 |
| 13551 | Formwork to walls.....  | 411.30         | 418.30              | 13551 |
| 13552 | Formwork to soffit of suspended slabs.....  | 385.20         | 392.20              | 13552 |
|       | <i>Per linear metre</i>   |                |                     |       |
| 13553 | Formwork to edges n.e. 75 mm wide.....  | 45.70          | 46.40               | 13553 |
| 13554 | Ditto but 75 - 150 mm wide.....   | 79.60          | 81.10               | 13554 |
| 13555 | Ditto but 150 - 225 mm wide.....  | 105.60         | 68.80               | 13555 |
|       | <i>Per square metre</i>   |                |                     |       |
| 13556 | Concrete Grade 20S, Grade 20D or 20MPa benching and channels in any thickness.....  |                | A<br>\$<br>215.30   | 13556 |

| Item                                       |   | Supply and fix | Take up and clear away | Take up and set aside for re-use | Fix only | Item  |
|--|---|----------------|------------------------|----------------------------------|----------|-------|
|  |   | A              | B                      | C                                | D        |       |
|  |   | \$             | \$                     | \$                               | \$       |       |
| <b>CAST IRON MANHOLE COVERS AND FRAMES</b> |   |                |                        |                                  |          |       |
|  | <i>Each</i>   |                |                        |                                  |          |       |
| 13557                                      | Manhole cover and frame, approximately 37kg.....  | 239.00         | 55.30                  | 75.30                            | 47.20    | 13557 |
| 13558                                      | Ditto, approximately 52kg.....  | 333.00         | 74.50                  | 120.00                           | 61.70    | 13558 |
| 13559                                      | Ditto, approximately 143kg.....   | 897.00         | 96.70                  | 132.00                           | 177.00   | 13559 |
| 13560                                      | Ditto, approximately 178kg.....   | 1,185.00       | 121.00                 | 168.00                           | 191.00   | 13560 |
| 13561                                      | Ditto, approximately 192kg.....   | 1,205.00       | 131.00                 | 180.00                           | 201.00   | 13561 |
| 13562                                      | Ditto, approximately 308kg.....   | 1,925.00       | 204.00                 | 276.00                           | 322.00   | 13562 |
| 13563                                      | Circular manhole cover and manhole frame, approximately 95kg.....   | 601.00         | 63.50                  | 88.50                            | 109.00   | 13563 |
| 13564                                      | Double triangular manhole cover and frame approximately 140kg.....  | 880.00         | 97.40                  | 131.00                           | 157.00   | 13564 |
| 13565                                      | Gully sump cover and frame, approximately 69kg.....   | 436.00         | 47.20                  | 62.00                            | 81.10    | 13565 |
| 13566                                      | Ditto, approximately 83kg.....  | 526.00         | 53.90                  | 75.30                            | 93.20    | 13566 |
|  | Deduct from any of Items 13557 to 13566 inclusive for work of manhole cover only or gully sump cover only.....                                    | -              | -                      | ( 30% )                          | ( 30% )  |       |
| <b>STEP IRONS</b>                          |   |                |                        |                                  |          |       |
|  | <i>Each</i>   |                |                        |                                  | A        |       |
|  |   |                |                        |                                  | \$       |       |
| 13567                                      | Manhole step irons built into concrete or grouted into existing mortice.....  |                |                        |                                  | 68.50    | 13567 |
| 13568                                      | Cut out and clear away existing step iron including making good side or cutting mortice ready to receive new step iron (measured separately)..... |                |                        |                                  | 13.30    | 13568 |







| Item   | Item   |
|--|--|
| <b>SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION (CONT'D)</b>                                |  |
| <b>SERVICES PROVIDED TO FRESH WATER PLUMBING SYSTEM</b>  |  |
| <i>Per inspection</i>  |  |
| 13584  | Carry out inspection to the fresh water plumbing system for each building in accordance with Special Conditions Clauses SC13.44 and SC13.52..... |
|  | A<br>\$<br>4,259.00  |
|  | 13584  |
| Carry out cleaning of fresh water tank : -   |  |
| <i>Per number</i>  |  |
| 13585  | Cleaning of water tank of internal volume not exceeding 2 m <sup>3</sup> .....   |
|  | 904.00   |
|  | 13585  |
| 13586  | Ditto 2 m <sup>3</sup> to 6 m <sup>3</sup> .....   |
|  | 970.00   |
|  | 13586  |
| 13587  | Ditto 6 m <sup>3</sup> to 10 m <sup>3</sup> .....  |
|  | 1,030.00   |
|  | 13587  |
| 13588  | Ditto 10 m <sup>3</sup> to 20 m <sup>3</sup> .....   |
|  | 1,192.00   |
|  | 13588  |
| 13589  | Ditto 20 m <sup>3</sup> to 30 m <sup>3</sup> .....   |
|  | 1,356.00   |
|  | 13589  |
| 13590  | Ditto 30 m <sup>3</sup> to 50 m <sup>3</sup> .....   |
|  | 1,582.00   |
|  | 13590  |
| 13591  | Ditto 50 m <sup>3</sup> to 100 m <sup>3</sup> .....  |
|  | 1,808.00   |
|  | 13591  |
| 13592  | Add to Item 13591 for each additional 10 m <sup>3</sup> or part thereof in internal volume.....  |
|  | 40.00  |
|  | 13592  |
| Carry out sampling and conduct water analysis of fresh water for water quality examination : - |  |
| <i>Each</i>  |  |
| 13593  | Carry out sampling.....  |
|  | 113.00   |
|  | 13593  |
| 13594  | Conduct water analysis.....  |
|  | 509.00   |
|  | 13594  |

| Item  |  | Item     |       |
|---|--|----------|-------|
| <b>SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION (CONT'D)</b> |  |          |       |
| <b>SERVICES PROVIDED TO FLUSHING WATER SYSTEM</b>               |  |          |       |
| Carry out cleaning of flushing water tank : -                   |  |          |       |
| <i>Per number</i>   |  | A<br>\$  |       |
| 13595   | Cleaning of water tank of internal volume not exceeding 2 m <sup>3</sup> .....   | 1,040.00 | 13595 |
| 13596   | Ditto 2 m <sup>3</sup> to 6 m <sup>3</sup> .....   | 1,300.00 | 13596 |
| 13597   | Ditto 6 m <sup>3</sup> to 10 m <sup>3</sup> .....  | 1,300.00 | 13597 |
| 13598   | Ditto 10 m <sup>3</sup> to 20 m <sup>3</sup> .....   | 1,559.00 | 13598 |
| 13599   | Ditto 20 m <sup>3</sup> to 30 m <sup>3</sup> .....   | 1,559.00 | 13599 |
| 13600   | Ditto 30 m <sup>3</sup> to 50 m <sup>3</sup> .....   | 1,819.00 | 13600 |
| 13601   | Ditto 50 m <sup>3</sup> to 100 m <sup>3</sup> .....  | 2,079.00 | 13601 |
| 13602   | Add to Item 13601 for each additional 10 m <sup>3</sup> or part thereof in internal volume.....  | 46.00    | 13602 |
| <i>Each</i>   |  | A<br>\$  |       |
| 13603   | Empty galvanized steel, concrete water cistern, cylinder or tank or fibreglass tanks n.e. 1.00 m <sup>3</sup> internal volume, scrape or brush off internally and remove all growth, rust, scale, etc., from bottom, sides and top, scrub out and clean with chloride of lime solution (less than 1 kg chloride of lime to 6,000 litre of water) and thoroughly flush and wash through with fresh water..... | 452.00   | 13603 |
| 13604   | Ditto but 1.00 - 2.00 m <sup>3</sup> .....   | 904.00   | 13604 |
| 13605   | Add to Item 13604 for each additional 1.00 m <sup>3</sup> or part thereof in internal volume.....  | 163.00   | 13605 |

| Item  |  |   | Item  |
|-------|--|---|-------|
|       | <b>SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION (CONT'D)</b>  |   |       |
|       | <b>SERVICES FOR INSPECTION, TESTING AND CLEANING OF EXISTING DRAINAGE SYSTEM</b>   |   |       |
|       | <b>UTILITIES SURVEY</b>  |   |       |
|       | <i>Per square metre</i>  | A<br>\$                                   |       |
| 13606 | Carry out utilities survey by an approved specialist to ascertain the alignment of the buried/exposed existing underground utilities/services and related surface features, including power cables, gas pipes, telecommunication lines, cable TV, water mains, drainage, fuel tank and pipes, fire hydrants, valve chambers/pits, manholes, combined services ducts, etc., within and in the vicinity of the site; determine the sizes and the horizontal and vertical alignments of these utilities by means of electromagnetic induction method including submission of survey report in 2 copies, record drawings, photo records, text reports and layout plan and 2 sets of CD-ROMS..... | 79.00                                     | 13606 |
|       | <b>DETECTION OF LEAKING BURIED WATER PIPES</b>   |   |       |
|       | <i>Per linear metre</i>  |   |       |
| 13607 | Carry out acoustic water leakage detection works by an approved specialist including leak noise correlation survey, ground microphone survey for identification of the location of any possible leakage along the pressurized fresh water and flushing water supply pipes within the hatched areas, including submission of survey report in 2 copies, record drawings, photo records, text reports and layout plan and 2 sets of CD-ROMS.....   | 133.10                                    | 13607 |
|       | <b>CLEANING OF EXISTING DRAINAGE SYSTEM</b>  |   |       |
|       | <i>Per item</i>  | Pipe<br>bore<br>n.e.<br>300 mm<br>A<br>\$ |       |
| 13608 | Cleaning of existing drainage system including manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers including branches and connection by using high pressure water jet up to 2200 PSI and 262 litre/min. by an approved specialist for a period not exceeding 4 hours.....   | 1,366.00                                  | 13608 |
| 13609 | Add to Item 13608 for each additional 4 hours or part thereof in hour.....   | 982.00                                    | 13609 |
| 13610 | Cleaning of existing drainage system including manholes, cesspits, septic tanks, catch pits, grease pits, and other drainage chambers including branches and connection by using high pressure water jet from 2,200 PSI to 10,000 PSI and 262 litre/min. by an approved specialist for a period not exceeding 4 hours.....   | 1,746.00                                  | 13610 |
| 13611 | Add to Item 13610 for each additional 4 hours or part thereof in hour.....   | 1,255.00                                  | 13611 |
|       | <i>Each</i>  |   |       |
| 13612 | Cleaning existing manholes, cesspits, septic tanks, catch pits, grease pits, or other drainage chambers n.e. 6.0 m <sup>3</sup> including branches and connections by sludge and sewage vacuum pump/sucker with branch up to 204mm diameter including hoses n.e. 100 metre long.....   | 637.00                                    | 13612 |
| 13613 | Add to Item 13612 for each additional 6.0 m <sup>3</sup> or part thereof in volume.....  | 425.00                                    | 13613 |
| 13614 | Cleaning existing manholes, cesspits, septic tanks, catch pits, grease pits, or other drainage chambers n.e. 2.0 m <sup>3</sup> including branches and connections by using methods other than high pressure water jet or vacuum pump/sucker.....  | 425.00                                    | 13614 |
| 13615 | Add to Item 13614 for each additional 2.0 m <sup>3</sup> or part thereof in volume.....  | 106.00                                    | 13615 |

| Item  |   |                                | Item  |
|-------|---|--------------------------------|-------|
|       | <b>SERVICES FOR PLUMBING AND DRAINAGE INSTALLATION (CONT'D)</b>   |                                |       |
|       | <b>SERVICES FOR INSPECTION, TESTING AND CLEANING OF EXISTING DRAINAGE SYSTEM (CONT'D)</b>   |                                |       |
|       | <b>CCTV INSPECTION SURVEY TO EXISTING DRAINAGE SYSTEM</b>   |                                |       |
|       |   | Pipe<br>bore<br>n.e.<br>300 mm |       |
|       | <i>Per item</i>   | A<br>\$                        |       |
| 13616 | Carrying out CCTV inspection survey to existing drainage system by an approved specialist for a period not exceeding 4 hours..... | 3,032.00                       | 13616 |
| 13617 | Add to Item 13616 for each additional 4 hours or part thereof in hour.....  | 1,516.00                       | 13617 |
|       | <b>TESTING EXISTING DRAINS</b>  |                                |       |
|       | <i>Each</i>   | A<br>\$                        |       |
| 13618 | Water test as described to existing branch or drain between manholes, up to 150 mm diameter.....                                  | 282.00                         | 13618 |
| 13619 | Ditto but for 150 - 300 mm diameter.....  | 365.00                         | 13619 |

## **Section 14**

### **GLAZING**

## SECTION 14

### GLAZING

#### SPECIAL CONDITIONS

**Measurement  
generally**

**SC14.01**

Glazing works shall be measured the net area as glazed. No deduction shall be made for opening not exceeding 0.50 m<sup>2</sup>.

Panes of glass of circular or irregular shape shall be measured the smallest rectangular or square out of which such circular or irregular shape can be cut.

Special glazing works shall only be paid when specifically ordered by the Maintenance Surveyor in writing.

Window and door films shall be measured the net area covered.

Glazing to timber doors including glazing to observation panel/openings is included in the respective timber door items in Section 08 - Carpentry and Joinery and will not be measured separately in this Section unless specifically instructed otherwise.

**Measurement  
of cutting and  
forming holes**

**SC14.02**

All finished works shall include for cutting to the required sizes. No measurement shall be made unless the glass is not supplied by the Contractor himself.

Forming holes through glass shall be measured separately. In the case of forming hole through existing fixed glass. "Take down and set aside for re-use" and "Fix only" shall be measured separately.

Forming hole exceeding 0.20 m<sup>2</sup> through glass shall be measured as straight or circular cutting.

**Measurement  
of fire  
resisting glass  
block panels**

**SC14.03**

Fire resisting glass block panels shall be measured by the net area of the structural opening of the glass block panels as fixed. No deduction shall be made for voids not exceeding 0.50 m<sup>2</sup>.

**Rates for  
glazing  
generally**

**SC14.04**

The rates for glazing shall generally include for : -

- (a) Panes or sheets in any size unless otherwise stated, fixed in any positions including glazing to fixed sash in position behind guard bars and including all colours.
- (b) All cutting including straight, raking and/or curved cutting and waste, breakage and replacing scratched or cracked panes.
- (c) Painting to wood or steel beads and rebate surfaces with one coat of priming paint before glazing.
- (d) Fixing panes or sheets to wood or metal including all putty or glazing compound, plastic setting and location blocks, pointing and sealing junctions between glass and glazing beads or the like with approved non-acidic and anti-mould sealant materials.



**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Rates for glazing generally (Cont'd)</b>         | <b>SC14.04 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(e) Fixing panes or sheets to wood or metal with beads including supply of new beads and taking out, setting aside and re-fixing existing beads.</li> <li>(f) Painting cut edges of wired glass with bitumastic paint.</li> <li>(g) Protecting and cleaning.</li> <li>(h) Fixing in accordance with the manufacturer's instructions.</li> </ul>   |
| <b>Rates for glazing of louvre blades</b>           | <b>SC14.05</b>          | <p>The rates for glazing of louvre blades shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Fixing in adjustable metal clips including adjusting and oiling clips.</li> <li>(b) Fixing in fixed metal clips.</li> <li>(c) Making good surfaces disturbed.</li> </ul>  |
| <b>Rates for take out glass, glass blocks, etc.</b> | <b>SC14.06</b>          | <p>The rates for take out and clear away or take out and set aside for re-use glass or glass blockwork shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Taking out and clearing away or taking out and setting aside for re-use wood or metal beads including replacement of any damaged beads with new beads.</li> <li>(b) Hacking out old putty or glazing compound and cleaning glass, blockwork and window bead and frames.</li> <li>(c) Protecting and storing glass or blockwork and beads.</li> </ul>                           |
| <b>Rates for forming holes through glass</b>        | <b>SC14.07</b>          | <p>The rates for forming holes through glass shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Cutting holes in any size and polishing all edges.</li> <li>(b) Forming holes in any size.</li> </ul>  |
| <b>Rates for fully tempered glass</b>               | <b>SC14.08</b>          | <p>The rates for fully tempered glass shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Glass that has been treated under heat soak testing and conforming to the relevant safety glass requirements determined by the required testing standards as G.S. Items 20.01.01, 20.01.05 and 20.08.</li> <li>(b) Submission of methodology of the heat soak testing to the Maintenance Surveyor's approval.</li> <li>(c) Provision of a quality supervision plan for a quality supervisor of the manufacturer's heat soak process.</li> </ul> |

**SPECIAL CONDITIONS**

|   |                         |   |
|---|-------------------------|---|
| <b>Rates for fully tempered glass (Cont'd)</b>                    | <b>SC14.08 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(d) Provision of a full time technically competent persons (TCP) with experience and qualification accepted by the Maintenance Surveyor and the TCP shall supervise the heat soak process in the manufacturer's factory.</li> <li>(e) Submission of compliance test certificates and manufacturer's guarantee.</li> </ul>  |
| <b>Rates for polycarbonate sheet</b>                              | <b>SC14.09</b>          | <p>The rates for polycarbonate sheet shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All cutting and waste, breakage and replacing scratched or cracked panes.</li> <li>(b) All cold or heat bent to shape and fixing to metal or wood frames.</li> <li>(c) In the case of fixing to metal or wood frames, drilling holes for and providing all drive screws, self-tapping screws, rivets, bolts, hook, bolts, nuts, metal and rubber washers, and plastic caps for fixing to purlins or framing spaced at any interval.</li> <li>(d) Drilling holes to existing or new purlins or framing spaced at any interval for the fixing of polycarbonate sheet as required.</li> <li>(e) Submission of technical literature, catalogue, shop drawings, test certificates and warranties.</li> </ul> |
| <b>Rates for laminated glass</b>                                  | <b>SC14.10</b>          | <p>The rates for laminated glass shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Laminated glass, either as a safety glass or a security glass, in conformity to the relevant safety class requirements determined by the required testing standards as G.S. Items 20.01.01 and 20.11.</li> <li>(b) Two or more sheets of glass bonded together incorporating a plastic inlay of the required thickness.</li> <li>(c) Laminated glass conforming to category 1 as a minimum standard and/or categories 2 or 3 as may be required, all as specified in G.S. Item 20.11(ii).</li> <li>(d) Submission of test certificates and manufacturer's guarantee.</li> </ul>   |
| <b>Rates for bullet or blast resistant laminated safety glass</b> | <b>SC14.11</b>          | <p>The rates for bullet or blast resistant laminated safety glass shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Adding an applied adhesive film, either to the external face or the internal face, if required.</li> <li>(b) Submission of technical literature, catalogue, shop drawings, test certificates and warranties.</li> </ul>  |

### SPECIAL CONDITIONS

**Rates for fire rated glass**

**SC14.12**

The rates for fire rated glass shall further include for : -

- (a) Supply of fire rated glass with integrity and insulation of the fire resistance rating in accordance with the testing standards as stated in G.S. Item 20.05 and complying with the latest fire safety code and relevant statutory requirements.
- (b) Providing and filling jambs and head of panels with expansion strips, joint filler and sealant of fire resisting type.
- (c) Submission of test certificates and manufacturer's guarantee.

**Rates for glass block panels**

**SC14.13**

The rates for glass block panels shall further include for : -

- (a) Painting all sides of structural opening to receive glass block panels with two coats of bituminous paint.
- (b) Providing and filling jambs and head of panels with expansion strips, joint filler and sealant.
- (c) Providing and fixing expanded metal reinforcement, galvanized, weighting not less than 1.6 kg/m<sup>2</sup> including securing to structure using proprietary fixing components.
- (d) Bedding and pointing in cement/lime mortar.
- (e) Supply and installation of glass block panels with panel anchors in accordance with the manufacturer's instructions.

**Rates for fire resisting glass block panels**

**SC14.14**

The rates for fire resisting glass block panels shall further include for : -

- (a) Supply and installation of glass block panels with panel anchors in accordance with the manufacturer's instructions and in compliance with statutory requirements.
- (b) Painting all sides of structural opening to receive glass block panels with two coats of bituminous paint, if required.
- (c) Providing and filling jambs and head of panels with expansion strips, joint filler and sealant of fire resisting type.
- (d) Providing and fixing reinforcement including securing to structure using proprietary fixing components.
- (e) Bedding and pointing in proprietary screeds and sealant of fire resisting type.
- (f) Submission of test certificates and manufacturer's guarantee.

**SPECIAL CONDITIONS****Rates for window and door films****SC14.15**

The rates for window and door films shall include for : -

- (a) Films of minimum nominal thickness of polyester of 0.08 mm pigmented to provide black or other colour as required by the Maintenance Surveyor.
- (b) Cleaning of bonding surface and coating with a solvent based adhesive prior to applying films.
- (c) Providing technical information, test certificate and manufacturer's guarantee as required by the Maintenance Surveyor for approval or as stated in the Contract.

**Glass block panels****SC14.16**

G.S. clauses for glass block panels can be found in the Brickwork and Blockwork Section of the General Specification for Building.

| Item                     |   |        |        |        |                            |              |                  |                   |                  |                            | Item   |       |
|--------------------------|---|--------|--------|--------|----------------------------|--------------|------------------|-------------------|------------------|----------------------------|--------|-------|
| <b>GENERAL GLAZING</b>   |   |        |        |        |                            |              |                  |                   |                  |                            |        |       |
| Glass panes or sheet : - |   |        |        |        |                            |              |                  |                   |                  |                            |        |       |
|                          | Clear float glass   |        |        |        | Figure rolled glass        | Reeded glass | Rough cast glass |                   | Wired cast glass | Wired polished plate glass |        |       |
|                          | Thickness (mm)  | 3      | 4      | 5      | 6                          | 3            | 3                | 5                 | 6                | 6                          | 6      |       |
|                          |   | A      | B      | C      | D                          | E            | F                | G                 | H                | I                          | J      |       |
|                          | <i>Per square metre</i>   | \$     | \$     | \$     | \$                         | \$           | \$               | \$                | \$               | \$                         | \$     |       |
| 14001                    | Glass and glazing to wood with putty or to metal with glazing compound.....                                     | 109.70 | 119.00 | 140.00 | 165.20                     | 125.70       | 140.30           | 151.50            | 190.40           | 262.90                     | 398.10 | 14001 |
| 14002                    | Ditto with beads.....   | 139.20 | 149.00 | 177.50 | 208.50                     | 156.10       | 170.80           | 180.10            | 220.50           | 319.90                     | 484.50 | 14002 |
| 14003                    | Add to either of Items 14001 and 14002 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> ..... | 11.50  | 12.50  | 14.30  | 17.00                      | 11.10        | 13.10            | 15.90             | 18.60            | 25.80                      | 39.00  | 14003 |
| 14004                    | Take out and clear away serviceable glass.....  | 25.10  | 27.30  | 29.50  | 31.70                      | 25.10        | 25.10            | 29.50             | 31.70            | 31.70                      | 31.70  | 14004 |
| 14005                    | Take out and set aside for re-use serviceable glass.....  | 30.30  | 32.50  | 36.20  | 37.60                      | 30.30        | 30.30            | 36.20             | 37.60            | 37.60                      | 37.60  | 14005 |
| 14006                    | Fix only glass and glazing to wood with putty or to metal with glazing compound.....                            | 25.90  | 28.20  | 30.40  | 33.90                      | 25.90        | 25.90            | 30.40             | 33.90            | 33.90                      | 33.90  | 14006 |
| 14007                    | Ditto with beads.....   | 46.30  | 48.50  | 49.60  | 52.00                      | 46.30        | 46.30            | 49.60             | 52.00            | 52.00                      | 52.00  | 14007 |
| Glass panes or sheet : - |   |        |        |        |                            |              |                  |                   |                  |                            |        |       |
|                          | Float plate glass (Polished plate or float)   |        |        |        | Tinted glass in any colour |              |                  | Reflec-tive glass | Obscure glass    |                            |        |       |
|                          | Thickness (mm)  | 5      | 6      | 10     | 12                         | 6            | 10               | 12                | 6                | 5                          | 6      |       |
|                          |   | A      | B      | C      | D                          | E            | F                | G                 | H                | I                          | J      |       |
|                          | <i>Per square metre</i>   | \$     | \$     | \$     | \$                         | \$           | \$               | \$                | \$               | \$                         | \$     |       |
| 14008                    | Glass and glazing to wood with putty or to metal with glazing compound.....                                     | 196.40 | 227.10 | 384.30 | 470.50                     | 252.30       | 428.90           | 504.60            | 357.40           | 154.50                     | 193.20 | 14008 |
| 14009                    | Ditto with beads.....   | 232.80 | 263.00 | 428.40 | 517.20                     | 287.70       | 471.80           | 550.10            | 382.60           | 182.40                     | 226.00 | 14009 |
| 14010                    | Add to either of Items 14008 and 14009 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> ..... | 16.70  | 18.60  | 29.90  | 37.10                      | 36.20        | 66.10            | 77.80             | 58.80            | 18.60                      | 21.80  | 14010 |
| 14011                    | Take out and clear away serviceable glass.....  | 29.50  | 31.70  | 36.90  | 41.30                      | 27.30        | 32.50            | 36.20             | 29.50            | 27.30                      | 28.80  | 14011 |
| 14012                    | Take out and set aside for re-use serviceable glass.....  | 36.20  | 37.60  | 44.30  | 49.40                      | 34.70        | 43.50            | 49.40             | 36.20            | 33.20                      | 36.20  | 14012 |
| 14013                    | Fix only glass and glazing to wood with putty or to metal with glazing compound.....                            | 30.40  | 33.90  | 39.50  | 44.00                      | 32.70        | 39.50            | 45.10             | 33.90            | 31.60                      | 34.90  | 14013 |
| 14014                    | Ditto with beads.....   | 49.60  | 52.00  | 58.70  | 63.20                      | 52.00        | 63.20            | 70.00             | 53.00            | 52.00                      | 55.30  | 14014 |

| Item   |   |                             |        |        |        |        | Item   |        |       |
|--|---|-----------------------------|--------|--------|--------|--------|--------|--------|-------|
| <b>GENERAL GLAZING (CONT'D)</b>                    |   |                             |        |        |        |        |        |        |       |
| Polycarbonate glazing sheet :-                     |   |                             |        |        |        |        |        |        |       |
|  |   | Polycarbonate glazing sheet |        |        |        |        |        |        |       |
|  |   | Thickness (mm)              | 2      | 3      | 5      | 6      | 10     | 12     |       |
|  |   | A                           | B      | C      | D      | E      | F      |        |       |
|  |   | \$                          | \$     | \$     | \$     | \$     | \$     |        |       |
|  |   | <i>Per square metre</i>     |        |        |        |        |        |        |       |
| 14015  | Polycarbonate glazing sheet fixed to wood or metal frames (measured separately) with screws.....  | 112.60                      | 137.70 | 169.60 | 199.30 | 262.10 | 283.20 | 14015  |       |
| 14016  | Polycarbonate glazing sheet glazed to wood with putty or to metal with glazing compound.....  | 113.80                      | 139.10 | 171.20 | 203.60 | 264.30 | 286.00 | 14016  |       |
| 14017  | Ditto with beads.....   | 160.50                      | 185.80 | 217.90 | 250.30 | 311.00 | 332.70 | 14017  |       |
| 14018  | Add to either of Items 14015 to 14017 inclusive for coloured polycarbonate sheet.....   | 3.20                        | 4.50   | 5.90   | 7.60   | 12.90  | 14.20  | 14018  |       |
| 14019  | Add to either of Items 14015 to 14017 inclusive for polycarbonate sheet, when fixed, is in single pane exceeding 5 m <sup>2</sup> .....             | 11.60                       | 16.50  | 21.20  | 27.00  | 46.00  | 50.60  | 14019  |       |
| 14020  | Add to either of Items 14015 to 14017 inclusive for polycarbonate with surface hardened treatment sheet.....  | 57.10                       | 67.50  | 71.90  | 88.10  | 108.20 | 118.00 | 14020  |       |
| 14021  | Take out and clear away polycarbonate glazing sheet .....   | 19.90                       | 21.60  | 24.70  | 26.60  | 31.70  | 33.90  | 14021  |       |
| 14022  | Take out and set aside for re-use polycarbonate glazing sheet.....  | 21.80                       | 23.00  | 26.00  | 28.00  | 34.60  | 37.00  | 14022  |       |
| 14023  | Fix only polycarbonate glazing sheet to wood or metal frames with self-tapping screws or hooks.....   | 23.50                       | 24.60  | 27.80  | 30.10  | 37.40  | 42.50  | 14023  |       |
| 14024  | Ditto to wood with putty or to metal with glazing compound.....   | 25.30                       | 27.00  | 30.30  | 32.00  | 38.80  | 43.80  | 14024  |       |
| 14025  | Ditto with beads.....   | 42.10                       | 45.50  | 50.60  | 52.30  | 59.00  | 64.10  | 14025  |       |
| Clear float heat strengthened glass 19 mm thick :- |   |                             |        |        |        |        |        |        |       |
|  |   | <i>Per square metre</i>     |        |        |        |        |        | A      |       |
|  |   |                             |        |        |        |        |        | \$     |       |
| 14026  | Glass and glazing to wood with putty or to metal with glazing compound.....   |                             |        |        |        |        |        | 937.30 | 14026 |
| 14027  | Ditto with beads.....   |                             |        |        |        |        |        | 965.50 | 14027 |
| 14028  | Add to either of Items 14026 and 14027 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> and not exceeding 30 m <sup>2</sup> ..... |                             |        |        |        |        |        | 157.50 | 14028 |
| 14029  | Add to either of Items 14026 and 14027 if glass, when fixed, is in single pane exceeding 30 m <sup>2</sup> .....                                    |                             |        |        |        |        |        | 150.90 | 14029 |
| 14030  | Take out and clear away serviceable glass .....   |                             |        |        |        |        |        | 39.80  | 14030 |
| 14031  | Take out and set aside for re-use serviceable glass.....  |                             |        |        |        |        |        | 61.20  | 14031 |
| 14032  | Fix only glass and glazing to wood with putty or to metal with glazing compound.....  |                             |        |        |        |        |        | 66.50  | 14032 |
| 14033  | Ditto with beads.....   |                             |        |        |        |        |        | 86.90  | 14033 |

| Item   |   |  |  |                   |    |                  |                  |                            | Item  |       |       |       |       |
|--|---|--|--|-------------------|----|------------------|------------------|----------------------------|---|-------|-------|-------|-------|
| <b>GENERAL GLAZING (CONT'D)</b>  |   |  |  |                   |    |                  |                  |                            |   |       |       |       |       |
| Fully tempered glass :-  |   |  |  |                   |    | Thickness (mm)   |                  |                            |   |       |       |       |       |
|  |   |  |  |                   |    | 6                | 10               | 12                         | 19  |       |       |       |       |
| <i>Per square metre</i>  |   |  |  |                   |    | A                | B                | C                          | D   |       |       |       |       |
|  |   |  |  |                   |    | \$               | \$               | \$                         | \$  |       |       |       |       |
| 14034  | Glass and glazing to wood with putty or to metal with glazing compound.....   |  |  |                   |    | 368.30           | 479.00           | 526.50                     | 946.90                                      | 14034 |       |       |       |
| 14035  | Ditto with beads.....   |  |  |                   |    | 409.00           | 517.40           | 568.60                     | 975.40                                      | 14035 |       |       |       |
| 14036  | Add to either of Items 14034 and 14035 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> and not exceeding 30 m <sup>2</sup> ..... |  |  |                   |    | 61.90            | 80.50            | 88.40                      | 159.10                                      | 14036 |       |       |       |
| 14037  | Add to either of Items 14034 and 14035 if glass, when fixed, is in single pane exceeding 30 m <sup>2</sup> .....                                    |  |  |                   |    | 59.40            | 77.20            | 84.80                      | 152.50                                      | 14037 |       |       |       |
| 14038  | Take out and clear away serviceable glass .....   |  |  |                   |    | 27.30            | 31.00            | 36.90                      | 39.80                                       | 14038 |       |       |       |
| 14039  | Take out and set aside for re-use serviceable glass.....  |  |  |                   |    | 33.90            | 43.50            | 48.00                      | 61.20                                       | 14039 |       |       |       |
| 14040  | Fix only glass and glazing to wood with putty or to metal with glazing compound.....  |  |  |                   |    | 32.70            | 39.50            | 44.00                      | 66.50                                       | 14040 |       |       |       |
| 14041  | Ditto with beads.....   |  |  |                   |    | 52.00            | 61.00            | 68.90                      | 86.90                                       | 14041 |       |       |       |
| <b>GLASS LOUVRE BLADES</b>   |   |  |  |                   |    |                  |                  |                            |   |       |       |       |       |
| Glass louvre blades with ground and arrived edges and fixing to slots in frames or adjustable louvre metal clips (slots or clips measured separately) :- |   |  |  | Clear float glass |    | Rough cast glass | Wired cast glass | Wired polished plate glass | Clear plate glass (polished plate or float) |       |       |       |       |
|  |   |  |  | Thickness (mm)    | 4  | 5                | 6                | 6                          | 6   | 6     |       |       |       |
| <i>Per linear metre</i>  |   |  |  | A                 | B  | C                | D                | E                          | F   | G     |       |       |       |
|  |   |  |  | \$                | \$ | \$               | \$               | \$                         | \$  | \$    |       |       |       |
| 14042  | Blade 75 mm wide.....   |  |  |                   |    | 27.80            | 31.20            | 32.90                      | 36.50                                       | 56.60 | 78.90 | 41.90 | 14042 |
| 14043  | Ditto 100 mm wide.....  |  |  |                   |    | 29.20            | 32.70            | 34.50                      | 38.20                                       | 59.40 | 82.90 | 44.00 | 14043 |
| 14044  | Ditto 150 mm wide.....  |  |  |                   |    | 31.90            | 37.50            | 39.50                      | 43.70                                       | 67.80 | 94.70 | 50.20 | 14044 |
| 14045  | Take out and set aside for re-use blade not exceeding 150 mm wide including risk and making good breakages.....                                     |  |  |                   |    | 2.20             | 2.20             | 2.20                       | 2.20  | 2.20  | 2.20  | 2.20  | 14045 |
| <i>Each</i>  |   |  |  |                   |    |                  |                  |                            |   |       |       |       |       |
| 14046  | Fix only louvre blades of any length, width or thickness in slot or clip (measured separately).....   |  |  |                   |    |                  |                  |                            |   | 3.70  | 14046 |       |       |
| 14047  | Take out and clear away broken or serviceable louvre blade of any length, width or thickness in slot or clip.....                                   |  |  |                   |    |                  |                  |                            |   | 1.50  | 14047 |       |       |

| Item  |  |  |        |        |        |        |        |        |        |  | Item  |       |
|-------|--|--|--------|--------|--------|--------|--------|--------|--------|--|-------|-------|
|       | <b>CELLULAR POLYCARBONATE SHEET</b>  |  |        |        |        |        |        |        |        |  |       |       |
|       | Double layer "Cellular Type" clear UV protection polycarbonate sheet   |  |        |        |        |        |        |        |        |  |       |       |
|       | Thickness (mm) overall   | 4  | 4.5    | 6      | 8      | 10     | 16     | 20     | 30     |  |       |       |
|       | Approx. weight g/m <sup>2</sup>  | 800  | 1000   | 1300   | 1500   | 1700   | 2700   | 3100   | 3500   |  |       |       |
|       | Light transmission %   | 88   | 88     | 88     | 88     | 88     | 82     | 79     | 82     |  |       |       |
|       | U-value W/m <sup>2</sup> K   | 3.9  | 3.9    | 3.7    | 3.4    | 3.2    | 2.9    | 2.8    | 2.6    |  |       |       |
|       | Falling dare Gardiner impact at 23°C Nm  | 21.3   | 21.3   | >27    | >27    | >27    | >27    | >27    | >27    |  |       |       |
|       | <i>Per square metre</i>  | A  | B      | C      | D      | E      | F      | G      | H      |  |       |       |
|       |  | \$   | \$     | \$     | \$     | \$     | \$     | \$     | \$     |  |       |       |
| 14048 | Cellular polycarbonate sheet fixed to wood or metal frames (measured separately) with screws or metal beads..... | 160.30   | 169.00 | 203.40 | 235.00 | 265.20 | 332.60 | 392.50 | 518.80 |  | 14048 |       |
| 14049 | Take down and clear away cellular polycarbonate sheet .....  | 22.20  | 23.70  | 26.60  | 28.00  | 31.70  | 40.60  | 43.50  | 53.10  |  | 14049 |       |
| 14050 | Take down and set aside for re-use cellular polycarbonate sheet .....  | 23.60  | 25.10  | 28.00  | 31.00  | 34.70  | 43.50  | 50.90  | 62.70  |  | 14050 |       |
| 14051 | Fix only cellular polycarbonate sheet to wood or metal frames with screws or metal beads.....                    | 27.00  | 28.70  | 30.30  | 33.70  | 37.10  | 47.20  | 53.90  | 69.10  |  | 14051 |       |
|       |  | Triple layer "Cellular Type" clear UV protection polycarbonate sheet |        |        |        |        |        |        |        |  |       |       |
|       |  | Thickness (mm)   |        | 16     | 20     |        |        |        |        |  |       |       |
|       |  | Approx. weight g/m <sup>2</sup>                                      |        | 2700   | 3100   |        |        |        |        |  |       |       |
|       |  | Light transmission %   |        | 82     | 79     |        |        |        |        |  |       |       |
|       |  | U-value W/m <sup>2</sup> K   |        | 2.4    | 2.2    |        |        |        |        |  |       |       |
|       |  | Falling dare Gardiner impact at 23°C Nm                              |        | >27    | >27    |        |        |        |        |  |       |       |
|       | <i>Per square metre</i>  | A  | B      |        |        |        |        |        |        |  |       |       |
|       |  | \$   | \$     |        |        |        |        |        |        |  |       |       |
| 14052 | Cellular polycarbonate sheet fixed to wood or metal frames (measured separately) with screws or metal beads..... |  | 352.60 | 416.10 |        |        |        |        |        |  |       | 14052 |
| 14053 | Take down and clear away cellular polycarbonate sheet.....   |  | 35.40  | 38.40  |        |        |        |        |        |  |       | 14053 |
| 14054 | Take down and set aside for re-use cellular polycarbonate sheet.....   |  | 39.10  | 43.50  |        |        |        |        |        |  |       | 14054 |
| 14055 | Fix only cellular polycarbonate sheet to wood or metal frames with screws or metal beads.....                    |  | 62.70  | 71.60  |        |        |        |        |        |  |       | 14055 |
|       | Add to either of Items 14048 and 14052 for bronze and opal white polycarbonate plastic sheet.....                |  |        | 5%     |        |        |        |        |        |  |       |       |
|       | Add to either of Items 14048 and 14052 for coloured polycarbonate plastic other than bronze or opal white.....   |  |        | 15%    |        |        |        |        |        |  |       |       |



| Item  |  |                         |                          |                                    |          |          | Item     |          |       |
|---|--|-------------------------|--------------------------|------------------------------------|----------|----------|----------|----------|-------|
| <b>LAMINATED GLASS</b>  |  |                         |                          |                                    |          |          |          |          |       |
|   |  | Glass thickness (mm)    | 6 + 6                    | 8 + 8                              | 6 + 6    | 8 + 8    | 10 + 10  | 12 + 12  |       |
|   |  | Pvb thickness (mm)      | 0.76                     | 0.76                               | 1.52     | 1.52     | 1.52     | 1.52     |       |
|   |  | <i>Per square metre</i> | A<br>\$                  | B<br>\$                            | C<br>\$  | D<br>\$  | E<br>\$  | F<br>\$  |       |
| 14056   | Supply and fix laminated float glass with Pvb inlay and glazing to wood with putty or to metal with silicone mastic sealant or other glazing compound and drilling holes through the glass.....                            | 654.20                  | 684.30                   | 754.70                             | 805.10   | 885.70   | 1,003.00 | 14056    |       |
| 14057   | Ditto with beads.....  | 700.90                  | 731.00                   | 801.40                             | 851.80   | 932.40   | 1,049.70 | 14057    |       |
|   |  |                         |                          |                                    |          |          |          |          |       |
|   |  | Glass thickness (mm)    | 6 + 6                    | 8 + 8                              | 10 + 10  | 12 + 12  |          |          |       |
|   |  | Pvb thickness (mm)      | 1.52                     | 1.52                               | 1.52     | 1.52     |          |          |       |
|   |  | <i>Per square metre</i> | A<br>\$                  | B<br>\$                            | C<br>\$  | D<br>\$  |          |          |       |
| 14058   | Supply and fix laminated clear glass with Pvb inlay and heat soak test process and glazing to wood with putty or to metal with silicone mastic sealant or other glazing compound and drilling holes through the glass..... |                         |                          |                                    | 959.50   | 1,046.60 | 1,134.00 | 1,268.10 | 14058 |
| 14059   | Ditto with beads.....  |                         |                          |                                    | 1,006.20 | 1,093.30 | 1,180.70 | 1,314.80 | 14059 |
|   |  |                         |                          |                                    |          |          |          |          |       |
| Add to either of Items 14056 to 14059 inclusive for tinted glass in any colour.....                           |  |                         |                          |                                    |          |          | 10%      |          |       |
| Add to either of Items 14056 to 14059 inclusive for glass bent to curve to radius n.e. 3.00 m.....            |  |                         |                          |                                    |          |          | 20%      |          |       |
| Add to either of Items 14056 to 14059 inclusive for glass bent to curve to radius 3.00 - 15.00 m.....         |  |                         |                          |                                    |          |          | 10%      |          |       |
| <b>BULLET OR BLAST RESISTANT LAMINATED SAFETY GLASS</b>   |  |                         |                          |                                    |          |          |          |          |       |
| Bullet or blast resistant laminated safety glass fixed in accordance with the manufacturer's instructions : - |  | Supply and fix          | Take down and clear away | Take down and set aside for re-use | Fix only |          |          |          |       |
|   |  | A<br>\$                 | B<br>\$                  | C<br>\$                            | D<br>\$  |          |          |          |       |
| 14060   | 7.52 mm Thick bullet or blast resistant laminated safety glass.....  | 2,844.50                | 38.50                    | 57.30                              | 117.10   |          |          | 14060    |       |

| Item  |   |             |              |                    |                | Item  |
|-------|---|-------------|--------------|--------------------|----------------|-------|
|       | <b>FIRE RATED GLASS</b>   |             |              |                    |                |       |
|       | (Note : - The following Items 14061 to 14064 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)                   |             |              |                    |                |       |
|       | Fire rated glass with 1/2 hour FRR :-   |             |              |                    |                |       |
|       |   | Clear glass | Tinted glass | Sand-blasted glass | Tempered glass |       |
|       | <i>Per square metre</i>   | A<br>\$     | B<br>\$      | C<br>\$            | D<br>\$        |       |
| 14061 | Glass and glazing to wood with putty or to metal with glazing compound.....   | 1,174.80    | 2,254.30     | 1,895.30           | 2,791.20       | 14061 |
| 14062 | Ditto with beads.....   | 1,307.50    | 2,509.00     | 2,109.30           | 3,106.60       | 14062 |
| 14063 | Add to either of Items 14061 and 14062 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> and not exceeding 30 m <sup>2</sup> ..... | 197.40      | 378.80       | 318.30             | 468.90         | 14063 |
| 14064 | Add to either of Items 14061 and 14062 if glass, when fixed, is in single pane exceeding 30 m <sup>2</sup> .....                                    | 189.20      | 362.90       | 305.20             | 449.30         | 14064 |
| 14065 | Take out and clear away serviceable glass.....  | 31.70       | 27.30        | 28.80              | 27.30          | 14065 |
| 14066 | Take out and set aside for re-use serviceable glass.....  | 37.60       | 34.70        | 36.20              | 33.90          | 14066 |
| 14067 | Fix only glass and glazing to wood with putty or to metal with glazing compound.....  | 88.50       | 88.50        | 88.50              | 88.50          | 14067 |
| 14068 | Ditto with beads.....   | 99.60       | 99.60        | 99.60              | 99.60          | 14068 |
|       | (Note : - The following Items 14069 to 14072 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)                   |             |              |                    |                |       |
|       | Fire rated glass with 1 hour FRR :-   |             |              |                    |                |       |
|       |   | Clear glass | Tinted glass | Sand-blasted glass | Tempered glass |       |
|       | <i>Per square metre</i>   | A<br>\$     | B<br>\$      | C<br>\$            | D<br>\$        |       |
| 14069 | Glass and glazing to wood with putty or to metal with glazing compound.....   | 1,331.90    | 2,527.30     | 2,108.20           | 3,104.80       | 14069 |
| 14070 | Ditto with beads.....   | 1,482.50    | 2,812.80     | 2,346.30           | 3,455.60       | 14070 |
| 14071 | Add to either of Items 14069 and 14070 if glass, when fixed, is in single pane exceeding 5 m <sup>2</sup> and not exceeding 30 m <sup>2</sup> ..... | 223.80      | 424.60       | 354.20             | 521.60         | 14071 |
| 14072 | Add to either of Items 14069 and 14070 if glass, when fixed, is in single pane exceeding 30 m <sup>2</sup> .....                                    | 214.40      | 406.90       | 339.40             | 499.90         | 14072 |
| 14073 | Take out and clear away serviceable glass.....  | 31.70       | 27.30        | 28.80              | 27.30          | 14073 |
| 14074 | Take out and set aside for re-use serviceable glass.....  | 37.60       | 34.70        | 36.20              | 33.90          | 14074 |
| 14075 | Fix only glass and glazing to wood with putty or to metal with glazing compound.....  | 99.60       | 99.60        | 99.60              | 99.60          | 14075 |
| 14076 | Ditto with beads.....   | 110.70      | 110.70       | 110.70             | 110.70         | 14076 |

| Item  |   |          | Item  |
|-------|---|----------|-------|
|       | <b>SUNDRIES</b>   |          |       |
|       | <i>Per square metre</i>   | A<br>\$  |       |
| 14077 | Grind surface of sheet glass (any size).....  | 107.90   | 14077 |
| 14078 | Hack out old broken glass (any type and thickness) from wood or metal sash glazed with putty, glazing compound or beads, set aside beads for re-use if any, clean and prepare rebates for re-glazing (re-glazing measured separately).....  | 44.70    | 14078 |
|       | <i>Per linear metre</i>   |          |       |
| 14079 | Grind and round edge of glass (any type and thickness).....   | 19.40    | 14079 |
| 14080 | Bed edge of glass (any type and thickness) in and including strip of wash leather or approved felt or plastic.....  | 12.50    | 14080 |
|       | <i>Each</i>   |          |       |
| 14081 | Grind recess of any size in pane of glass (as for sliding doors to hatches).....  | 21.40    | 14081 |
| 14082 | Cutting hole with straight sides n.e. 0.20 m <sup>2</sup> through pane of glass or glazing sheet (any type) n.e. 6 mm thick.....  | 16.90    | 14082 |
| 14083 | Ditto but 6 mm to 12 mm thick.....  | 21.90    | 14083 |
| 14084 | Ditto but exceeding 12 mm thick.....  | 30.30    | 14084 |
| 14085 | Cutting circular or elliptical hole n.e. 0.20 m <sup>2</sup> through pane of glass or glazing sheet (any type) n.e. 6 mm thick.....   | 25.30    | 14085 |
| 14086 | Ditto but 6 mm to 12 mm thick.....  | 33.70    | 14086 |
| 14087 | Ditto but exceeding 12 mm thick.....  | 42.10    | 14087 |
|       | <i>Per linear metre</i>   |          |       |
| 14088 | Point and seal joint between glass and beads, window frames and the like with 3 x 3 mm silicone mastic sealant.....   | 3.20     | 14088 |
| 14089 | Ditto but with 3 x 6 mm silicone mastic sealant.....  | 4.30     | 14089 |
| 14090 | Cut out existing sealant.....   | 5.20     | 14090 |
|       | <b>GLASS BLOCK PANELS</b>   |          |       |
|       | Hollow glass blocks size: 150 x 150 - 250 x 250 mm square and 80 - 120 mm thick in any pattern and colour and including all special blocks at junctions, corners and the like bedded and jointed in cement/lime mortar and pointed both sides with white cement or white cement/lime mortar : - |          |       |
|       | <i>Per square metre</i>   | A<br>\$  |       |
| 14091 | Glass block panel.....  | 1,140.10 | 14091 |
| 14092 | Take down and clear away glass block panel.....   | 34.30    | 14092 |
| 14093 | Take down and set aside for re-use glass block panel.....   | 91.20    | 14093 |
| 14094 | Lay only glass block panel.....   | 148.20   | 14094 |
|       | <i>Each</i>   |          |       |
| 14095 | Cut out existing defective glass block in isolated patches n.e. 10 glass blocks, fill up, joint in and replace with new glass block and make good (each glass block measured).....  | 70.50    | 14095 |

| Item  |   | FRR            |                          |                                    | Item           |       |
|---|---|----------------|--------------------------|------------------------------------|----------------|-------|
|   |   | ½ Hour         | 1 Hour                   | 1½ Hour                            |                |       |
|   |   | A<br>\$        | B<br>\$                  | C<br>\$                            |                |       |
| <b>FIRE RESISTING GLASS BLOCK PANELS</b>  |   |                |                          |                                    |                |       |
| Fire resisting hollow glass blocks size: 150 x 150 - 250 x 250 mm square and 80 - 120 mm thick in any pattern and colour and including all special blocks at junctions, corners and the like bedded and jointed :-  |   |                |                          |                                    |                |       |
| <i>Per square metre</i>   |   |                |                          |                                    |                |       |
| 14096   | Fire resisting glass block panels.....  | 4,436.40       | 6,144.50                 | 8,982.90                           | 14096          |       |
| 14097   | Take down and clear away fire resisting glass block panels including corner glass blocks.....   | 31.00          | 31.00                    | 31.00                              | 14097          |       |
| 14098   | Take down and set aside for re-use fire resisting glass block panels including corner glass blocks.....   | 84.10          | 84.10                    | 84.10                              | 14098          |       |
| 14099   | Lay only fire resisting glass block panels including corner glass blocks.....   | 225.70         | 375.70                   | 375.70                             | 14099          |       |
| <b>MIRRORS</b>  |   |                |                          |                                    |                |       |
| Glass mirror silver backed and painted with two coats of shellac varnish after silvering, bevel edged, if required, and fixed with chromium plated clips or screws with chromium plated clip-on heads, including drilling mirror and screwing clips or screws to backing or plugging and screwing the same to wall :- |   |                |                          |                                    |                |       |
| <i>Per square metre</i>   |   |                |                          |                                    |                |       |
|   |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only       |       |
|   |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$        |       |
| 14100   | 6 mm Thick single side reflective mirror fixed to wood or metal frames (measured separately) with screws or beads.....  | 146.00         | 7.90                     | 16.90                              | 47.20          | 14100 |
| 14101   | 6 mm Thick silvering quality polished plate glass mirror.....   | 234.30         | 7.90                     | 16.90                              | 47.20          | 14101 |
|   |   |                |                          |                                    | Supply and fix |       |
|   |   |                |                          |                                    | A<br>\$        |       |
| 14102   | 600 mm (Minimum) diameter convex mirror including brackets, mounting poles, visors, bolts, screws and the like, and drilling or cutting mortices in concrete or other surfaces, grouting and make good..... |                |                          |                                    | 1,051.40       | 14102 |

Item

Item

**WINDOW AND DOOR FILMS**

Supply  
and  
fix  
A  
S

*Per square metre*

14103 Approved clear polyester window film which removes destructive ultraviolet rays from sunlight complying with the following :-

|                             | Not Less than |
|-----------------------------|---------------|
| Total solar energy rejected | 57%           |
| Visible light transmitted   | 35%           |
| Shading coefficient         | 0.49          |
| Interior reflection         | 12%           |
| Exterior reflection         | 18%           |
| Glare reduction             | 60%           |
| UN blocked                  | 99%           |

442.10 14103

14104 Approved tough, durable, tear- and penetration-resistant film which bonds to the windows for protection complying with the following :-

|                                  |  |
|----------------------------------|--|
| Film thickness                   | 0.15 mm  |
| Tensile strength                 | 28,000 PSI (172MPa) (ASTM D882-95a in PSI)   |
| Break strength                   | 168 lbs/ inch width (747N/25mm) (ASTM D882-95a in lbs./inch width)                   |
| Tear resistance                  | 1,000 lbs  |
| Elongation (percentage at break) | 140% (ASTM D882-95a in stretch %)  |
| Peel strength                    | >8 lbs/inch (36N/25mm)   |
| Abrasion resistance test         | <5% (ASTM D-1044 in % change of haze)  |
| Impact tests                     | Pass ANSI Class B/ CPSC Category I (standard : ANSI Z97.1-2009 and CPSC 16 CFR 1201) |
| Bomb blast test                  | ASTM F1642 and GSA TS01-2003   |
| Visible light reflected          | 9% (ASTM E-308)  |
| Visible light transmitted        | 87% (ASTM E-308)   |
| UV blocked                       | 99% (ASTM E-308)   |

530.50 14104

14105 Ditto complying with the following :-

|                                  |  |
|----------------------------------|--|
| Film thickness                   | 0.1mm  |
| Tensile strength                 | 25,000 PSI (172MPa) (ASTM D882-95a in PSI)   |
| Break strength                   | 110 lbs/ inch width (747N/25mm) (ASTM D882-95a in lbs./inch width)                   |
| Tear resistance                  | N/A  |
| Elongation (percentage at break) | 125% (ASTM D882-95a in stretch %)  |
| Peel strength                    | >5 lbs/inch (22N/25mm)   |
| Abrasion resistance test         | <5% (ASTM D-1044 in % change of haze)  |
| Impact tests                     | Pass ANSI Class B/ CPSC Category I (standard : ANSI Z97.1-2009 and CPSC 16 CFR 1201) |
| Bomb blast test                  | ASTM F1642 and GSA TS01-2003   |
| Visible light reflected          | 9% (ASTM E-308)  |
| Visible light transmitted        | 86% (ASTM E-308)   |
| UV blocked                       | 99% (ASTM E-308)   |

459.80 14105

Item

Item

**WINDOW AND DOOR FILMS (CONT'D)**

Supply  
and  
fix  
A  
S

*Per square metre*

14106 Approved transparent, infra-red reflective polyester film which can be bonded to glass surfaces complying with the following : -

|                              |      |
|------------------------------|------|
| Total solar transmission     | 17%  |
| Total solar absorption       | 35%  |
| Visible light transmission   | 21%  |
| Visible light reflectance    | 53%  |
| Shading coefficient          | 0.30 |
| Emissivity                   | 0.68 |
| Total solar energy rejection | 74%  |
| Glare reduction              | 76%  |
| Total solar energy rejection | 74%  |
| Ultra violet rejection       | 99%  |

282.90

14106

14107 Ditto complying with the following : -

|                              |        |
|------------------------------|--------|
| Total solar transmission     | 22.7%  |
| Total solar absorption       | 59.25% |
| Visible light transmission   | 16%    |
| Visible light reflectance    | 13%    |
| Shading coefficient          | 0.43   |
| Emissivity                   | 0.71   |
| Total solar energy rejection | 63%    |
| Glare reduction              | 82%    |
| Total solar energy rejection | 63%    |
| Ultra violet rejection       | 99%    |

282.90

14107

14108 Ditto complying with the following : -

|                              |      |
|------------------------------|------|
| Total solar transmission     | 28%  |
| Total solar absorption       | 54%  |
| Visible light transmission   | 33%  |
| Visible light reflectance    | 21%  |
| Shading coefficient          | 0.50 |
| Emissivity                   | 0.87 |
| Total solar energy rejection | 57%  |
| Glare reduction              | 63%  |
| Total solar energy rejection | 57%  |
| Ultra violet rejection       | 99%  |

282.90

14108

14109 Ditto complying with the following : -

|                              |      |
|------------------------------|------|
| Total solar transmission     | 82%  |
| Total solar absorption       | 16%  |
| Visible light transmission   | 87%  |
| Visible light reflectance    | 11%  |
| Shading coefficient          | 0.95 |
| Emissivity                   | 0.89 |
| Total solar energy rejection | 15%  |
| Ultra violet rejection       | 99%  |

Safety Standard ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 1/4 inch annealed glass

282.90

14109

| Item                         |   |                        | Item  |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
|------------------------------|---|------------------------|-------|----------------------------|-----|---------------------------|------|---------------------------|------|------------|-------|------------------------------|-----|------------------------|-----|-----------------|--|--------|-------|
|                              | <b>WINDOW AND DOOR FILMS (CONT'D)</b>   | Supply<br>and<br>fix   |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
|                              | <i>Per square metre</i>   | A<br>\$                |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| 14110                        | Approved transparent, infra-red reflective polyester film which can be bonded to glass surfaces complying with the following :-<br><br><table border="1" style="margin-left: 20px;"> <tr><td>Total solar absorption</td><td>18%</td></tr> <tr><td>Visible light transmission</td><td>85%</td></tr> <tr><td>Visible light reflectance</td><td>13%</td></tr> <tr><td>Shading coefficient</td><td>0.96</td></tr> <tr><td>Emissivity</td><td>0.88</td></tr> <tr><td>Total solar energy rejection</td><td>17%</td></tr> <tr><td>Ultra violet rejection</td><td>99%</td></tr> <tr><td>Safety Standard</td><td>ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 5/32 inch, 1/8 inch and 1/4 inch annealed glass</td></tr> </table> | Total solar absorption | 18%   | Visible light transmission | 85% | Visible light reflectance | 13%  | Shading coefficient       | 0.96 | Emissivity | 0.88  | Total solar energy rejection | 17% | Ultra violet rejection | 99% | Safety Standard | ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 5/32 inch, 1/8 inch and 1/4 inch annealed glass | 421.70 | 14110 |
| Total solar absorption       | 18%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Visible light transmission   | 85%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Visible light reflectance    | 13%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Shading coefficient          | 0.96  |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Emissivity                   | 0.88  |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Total solar energy rejection | 17%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Ultra violet rejection       | 99%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Safety Standard              | ANSIZ97-1 Unlimited (Section 5.1) applied to nominal 5/32 inch, 1/8 inch and 1/4 inch annealed glass  |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| 14111                        | Approved frosted/opaque/translucent/coloured film which can be bonded to glass surfaces complying with the following :-<br><br><table border="1" style="margin-left: 20px;"> <tr><td>Surface hardness</td><td>2H</td></tr> <tr><td>Heat transmission</td><td>5.9</td></tr> <tr><td>Shade Factor</td><td>0.81</td></tr> <tr><td>Visible light transmitted</td><td>72%</td></tr> </table>   | Surface hardness       | 2H    | Heat transmission          | 5.9 | Shade Factor              | 0.81 | Visible light transmitted | 72%  | 420.30     | 14111 |                              |     |                        |     |                 |  |        |       |
| Surface hardness             | 2H  |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Heat transmission            | 5.9   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Shade Factor                 | 0.81  |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| Visible light transmitted    | 72%   |                        |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
|                              | <i>Per square metre</i>   | A<br>\$                |       |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |
| 14112                        | Take down and clear away window and door films and safety and security films.....   | 62.70                  | 14112 |                            |     |                           |      |                           |      |            |       |                              |     |                        |     |                 |  |        |       |

**Section 15**

**PAINTING**



## SECTION 15

### PAINTING

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Paints generally</b>   | <b>SC15.01</b> | All paints in this Section shall comply with the Air Pollution Control Ordinance (Cap. 311), Air Pollution Control (Volatile Organic Compounds) Regulation (Cap. 311W) and G.S. Item 21.90 whether the paint is a low VOC paint or not.   |
| <b>New surfaces and redecoration</b>  | <b>SC15.02</b> | Painting of any type shall only be measured as on "new surfaces" when a complete wall face, door, frame or other area is of new or previously undecorated materials, or has been completely stripped of existing decoration. Where patches of new plaster occur within an area of existing plaster or portions of paintwork has been stripped off and stopped or portions only of metal or woodwork insert in repairs, the painting to the complete area shall be measured as "redecoration".   |
| <b>Surfaces described as walls and soffits</b>  | <b>SC15.03</b> | Surfaces described as "walls and soffits" include all vertical, horizontal, sloping or curved walls, columns, soffits of slabs, beams, cills and the like, of concrete, brick, clay or concrete block, mason, or smooth or rough plastered or rendered, or unplastered or unrendered surface of any type, regardless of texture or porosity.  |
| <b>Particular Specifications for cleaning and protective coating for fair-face concrete</b> | <b>SC15.04</b> | <p>The works relating to cleaning and protective coating for fair-face concrete shall generally be read and used in conjunction with Particular Specification for High Pressure Water Jet Cleaning Method to Fair-face Concrete Construction, Particular Specification for Proprietary Multi-purpose Cleaning Agent to Fair-face Concrete Construction, Particular Specification for Colorless Protective Coating System (Type A) for Fair-face Concrete Construction and Particular Specification for Translucent Protective Coating System (Type B) for Fair-face Concrete Construction adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages for complying with all requirements as stipulated in the Specification and Employer's Requirements adopted in the Contract for high pressure water jet cleaning method, proprietary multi-purpose cleansing agent, colorless and translucent protective coating systems for fair-face concrete coating systems.</p> |
| <b>Measurement generally</b>  | <b>SC15.05</b> | <p>All works shall be measured the net area as painted. No deduction shall be made for voids not exceeding 0.50 m<sup>2</sup>.</p> <p>Surfaces to be painted exceeding 300 mm wide or girth or pipework exceeding 300 mm nominal diameter shall be measured as general surfaces.</p> <p>Articles not exceeding 0.01 m<sup>2</sup> each where not in conjunction with surrounding painted work shall be measured separately. Articles exceeding 0.01 m<sup>2</sup> shall be measured as general surfaces.</p> <p>Allowance shall be made for the measurements of walls and soffits for additional area of moulded or carved work and the like.</p>   |

**SPECIAL CONDITIONS**

**Measurement  
of certain  
specific items**

**SC15.06**

Certain specific items shall be measured as follows :-

Chinese roof tiling, corrugated or profiled sheeting.

Measured flat overall. Girth on rolls, corrugations or profiles and the like shall be held to be included in the items.

Metal work - glazed windows and door the like.

Measured flat overall on both sides.

Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.

Metal work - mesh covered or ornamental fencing, gates and the like.

Measured flat overall on both sides.

All surfaces of frames, posts, braces, rails, projection and the like shall be held to be included in the items.

Manhole covers and frames, tree grilles, channel covers and the like.

Measured flat overall on both sides.

All surfaces of frames and the like should be held to be included in the items.

Wood sashes, glazed wooden doors, windows, partitions, panels, decorating or grilled panels and the like.

Measured flat overall on both sides.

Opening edges and all surfaces of frames, mullions, transoms, cills and the like shall be held to be included in the items.

Wire mesh or mosquito gauge panels.

Measured flat on both sides for individual construction.

Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.

Jalousies, louvre panels and the like.

Measured flat on both sides for individual construction.

Painting shall be deemed to be included in the sashes, doors, partitions or panels if it forms part of the construction.

## SPECIAL CONDITIONS

|   |                         |   |  |
|---|-------------------------|---|--|
| <b>Measurement of certain specific items (Cont'd)</b>           | <b>SC15.06 (Cont'd)</b> | Collapsible gates.  | Measured flat overall on both sides.   |
|   |                         | Nuts, bolts, locks, brackets, staples, knobs, access panels, switch and cover plates and the like less than 0.01 m <sup>2</sup> each and isolated lengths of pipe or rod less than 300 mm long.   | Measured separately if it is isolated from the surrounding work.<br><br>Painting to nuts and bolts shall be deemed to be carried out after fixing in position. |
|   |                         | Railings and balustrades with balusters less than 200 mm centres.   | Measured flat overall on both sides.<br><br>All surfaces of frames, posts, braces, rails and the like shall be held to be included in the items.               |
|   |                         | All other railings and balustrades.   | Measured in accordance with aforesaid Special Conditions Clause SC15.05.   |
| <b>Measurement of stripping of existing decorative material</b> | <b>SC15.07</b>          | Throughout this Section, rates for all types of painting shall include all kinds of preparatory work. No payment will be made for stripping of existing decoration under any circumstances, with the following exceptions : -   |  |
|   |                         | (a) Stripping of existing decorative material is specifically ordered by the Maintenance Surveyor in writing and there will be no further decorative material applied on the prepared surface.<br><br>(b) Stripping of existing decorative material due to compatibility problem, which is specifically ordered by the Maintenance Surveyor in writing. |  |
|   |                         | Stripping of existing decoration shall be measured the net area of existing decoration to be stripped. No deduction shall be made for voids not exceeding 0.50 m <sup>2</sup> .   |  |
| <b>Measurement of paper hanging</b>                             | <b>SC15.08</b>          | Paper hanging shall be measured the net area covered. No deduction shall be made for voids not exceeding 0.50 m <sup>2</sup> .  |  |
| <b>Measurement of writing</b>                                   | <b>SC15.09</b>          | Writing of letters, numbers or Chinese characters shall include for all full stops and commas. No separate payment shall be made. All punctuation excluding full stops and commas shall be treated as letters. Logos, features, symbols and the like shall be measured as Chinese characters of the same size.  |  |

**SPECIAL CONDITIONS**

**Rates for painting generally**

**SC15.10**

The rates for painting shall generally include for : -

- (a) The application of low Volatile Organic Compound (VOC) paint in accordance with the manufacturer's recommendation.
- (b) Execution of work either internally or externally and in any position at any height.
- (c) Working to flat, curved or sloping surfaces.
- (d) All preparation work to surfaces as G.S. Items 21.45 and 21.48.
- (e) Mixing and applying as G.S. Item 21.53.
- (f) Multi-coloured work and cutting to line.
- (g) Painting on associated beads, hinges and other fittings, brackets, bolts, nuts, lugs and the like (unless isolated from other paintwork which will be measured separately).
- (h) Painting all surfaces with an approved primer.
- (i) All identification of pipelines as G.S. Item 21.78.
- (j) Keeping adjacent surfaces clean and painting surfaces disturbed as G.S. Item 21.44.
- (k) Removing all articles of ironmongery, hardware and the like before painting and replacing after painting has been completed.
- (l) Rubbing down smooth with sand paper on hardened coatings before the subsequent coating is applied.
- (m) Painting sample panels.
- (n) Touching up coated surfaces on completion.
- (o) Protecting and cleaning as G.S. Item 21.43.
- (p) Removing painted sample panels.
- (q) Submission of technical literature, test certificates and manufacturer's guarantee or warranty.
- (r) On-site checking, quality tests and surveillance tests.
- (s) All necessary tests as specified in the Specification.

**Rates for paintwork on new surfaces**

**SC15.11**

The rates for paintwork on new surfaces shall further include for : -

- (a) All preparation work to new surfaces as G.S. Item 21.46.

**SPECIAL CONDITIONS**

|   |                |  |
|---|----------------|--|
| <b>Rates for paintwork on existing surfaces</b>   | <b>SC15.12</b> | <p>The rates for paintwork on existing surfaces shall further include for : -</p> <p>(a) All preparation work to existing surfaces as G.S. Items 21.48 and 21.49.</p>  |
| <b>Rates for painting metal windows and doors</b>   | <b>SC15.13</b> | <p>The rates for painting metal windows and doors shall further include for : -</p> <p>(a) Painting opening edges and all surfaces of frames, mullions, transoms, cills, guard bars, glazing beads and the like.</p> <p>(b) Sealing putty with primer and paint as required.</p>   |
| <b>Rates for painting wire mesh, expanded metal mesh, chain link and the like in gates, fencing, etc.</b> | <b>SC15.14</b> | <p>The rates for painting wire mesh, expanded metal mesh, chain link and the like in gates, fencing, guards, door and partition panels, etc. shall further include for : -</p> <p>(a) Painting edge framing, posts, braces, rails and the like.</p>  |
| <b>Rates for painting pipework</b>  | <b>SC15.15</b> | <p>The rates for painting pipework shall further include for : -</p> <p>(a) Painting on pipe clips, holders, hangers, conduit boxes and the like.</p>  |
| <b>Rates for painting wood</b>  | <b>SC15.16</b> | <p>The rates for painting general surfaces of wood including wood panels and flush doors, wood sashes, wood partitions, etc. shall further include for : -</p> <p>(a) Preparing and applying wood preservative.</p> <p>(b) Painting opening edges, mouldings, glazing beads and the like.</p>  |
| <b>Rates for painting jalousies, louvre panels, etc.</b>  | <b>SC15.17</b> | <p>The rates for painting jalousies, louvre panels in doors and the like shall further include for : -</p> <p>(a) Painting all frames, stiles, rails, edges, louvre blades and the like.</p>   |
| <b>Rates for surface protection to structural steel</b>   | <b>SC15.18</b> | <p>The rates for surface protection to structural steel shall further include for any combination of the following where applicable : -</p> <p>(a) All preparation work to new surfaces as G.S. Item 15.61.</p> <p>(b) All preparation work to existing surfaces as G.S. Item 15.62.</p> <p>(c) Painting to all joints as G.S. Item 15.64.</p> <p>(d) Making good damaged galvanized coating as G.S. Item 15.63.</p> |

### SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Rates for intumescent paint to structural steel surfaces</b> | <b>SC15.19</b> | <p>The rates for intumescent paint to structural steel surfaces shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All preparation work to existing surfaces as recommended by the manufacturer.</li> <li>(b) Application by an approved applicator including submission of method statement and provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract.</li> </ul>   |
| <b>Rates for road marking materials</b>                         | <b>SC15.20</b> | <p>The rates for road marking materials shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All preparation work to new or existing surfaces as G.S. Item 21.71.</li> <li>(b) Marking out to the required size and styles as ordered by the Maintenance Surveyor.</li> <li>(c) Executing work at specific time to avoid disturbance to public and traffic, and provision of temporary lighting and traffic diversion arrangement when required.</li> <li>(d) Testing of road marking materials, if required.</li> <li>(e) Submission of samples and test certificate as G.S. Item 21.75.</li> </ul>   |
| <b>Rates for proprietary paintwork system</b>                   | <b>SC15.21</b> | <p>The rates for proprietary paintwork system shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All preparation work to existing surfaces or new surfaces as recommended by the manufacturer where required.</li> <li>(b) Complying with the relevant British Standards, Japanese Industrial Standards, ASTM International or other recognized international standards approved by Maintenance Surveyor and carrying out all works in accordance with the manufacturer's recommendation.</li> <li>(c) Application by an approved applicator including submission of method statement and provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract, the warranty period of which shall not be less than 4 years.</li> <li>(d) Submission of a copy of related purchasing information including invoice and delivery note to the Maintenance Surveyor before completion of the works.</li> </ul> |
| <b>Rates for proprietary floor coating system</b>               | <b>SC15.22</b> | <p>The rates for proprietary floor coating system shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All preparation work to existing surfaces or new surfaces as recommended by the manufacturer.</li> <li>(b) Repairing minor cracks and voids to the substrate with approved proprietary materials.</li> <li>(c) Submission of method statement and provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract.</li> </ul>   |

**SPECIAL CONDITIONS**

**Rates for protective coating system for fair-face concrete surfaces**

**SC15.23**

The rates for protective coating system on fair-face concrete surfaces shall further include for :-

- (a) Application by an approved applicator accredited / endorsed by the manufacturer of the protective coating system.
- (b) Cleaning to remove any contamination and deleterious matters from existing surfaces.
- (c) Coating in various degree of translucent opacity and colours.
- (d) Carrying out mock-ups on Site together with water tests, to demonstrate the functional and performance requirements of the protective coating system.
- (e) Carrying out final water test upon completion of the protective coating system.
- (f) Submission of method statement, material submission documents and completion report.
- (g) Submission of a future maintenance plan in joint name with the manufacturer.
- (h) Provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract, the warranty period of which shall not be less than 5 years.

**Rates for proprietary paintwork system and line marking to sport hall flooring**

**SC15.24**

The rates for proprietary paintwork system and line marking to existing or new sport hall flooring system shall further include for :-

- (a) All preparation work to existing surfaces or new surfaces as recommended by the manufacturer where required.
- (b) Application by an approved applicator including submission of method statement and provision of a warranty for the period as required by the Maintenance Surveyor or as stated in the Contract, the warranty period of which shall not be less than 2 years.
- (c) Applying and obtaining accreditation / certification from recognized international sports organizations when required.

**Rates for re-enamel on bath tub**

**SC15.25**

The rates for re-enamel on bath tub shall include for :-

- (a) Cleaning and touch up existing surfaces of bath tub.
- (b) Different colour of paint.
- (c) Each bath tub ordered without any adjustment for minimum order.
- (d) Protection of adjacent surfaces and make good all works damaged and disturbed.
- (e) The provision of a one-year warranty.

**SPECIAL CONDITIONS****Rates for writing, line marking, etc.****SC15.26**

The rates for painting lines, letters, characters, numbers, logos, symbols and the like shall further include for : -

- (a) Marking out to the required size and styles.
- (b) Setting out and paint all line marking to the required standards.

**Rates for paper hanging****SC15.27**

The rates for paper hanging shall further include for : -

- (a) Execution of work internally and in any position at any height.
- (b) Working to flat, curved or sloping surfaces.
- (c) Preparing new or existing decorated surfaces.
- (d) All necessary cleaning and preparation of substrate including applying skim coat prior to hanging wall paper covering.
- (e) All straight, raking or circular cutting.
- (f) All cutting and waste and adhesive.
- (g) Hanging in required pattern.
- (h) Fixing around holes and openings, pipes, switches, brackets and the like.
- (i) Bonding to match existing works.
- (j) Submission of samples and mock-up.
- (k) Protecting and covering up.

**Rates for stripping of existing decoration****SC15.28**

The rates for stripping of existing decoration shall further include for : -

- (a) Preparing surfaces as G.S. Item 21.48 after stripping the existing decoration.



**SPECIAL CONDITIONS**

**Rates for high pressure water jet cleaning on fair-face concrete surfaces including the use of multi-purpose cleansing agent**

**SC15.29**

The rates for high pressure water jet cleaning on fair-face concrete surfaces including the use of multi-purpose cleansing agent shall further include for :-

- (a) Removal and cleaning of different types of stains including efflorescence, oil stains, grease, bitumen, paint, fungi, moss, algae, graffiti and the like.
- (b) All preparation work to existing surfaces or new surfaces as G.S. Item 18.13 and G.S. Item 21.46.
- (c) Carrying out trial cleaning on Site to determine the suitable pressure rating and type of additives, if required, to avoid damage of the substrate.
- (d) Using either cold water or hot water, and if required, with addition of chemical solution such as detergents and bleaching agents, approved by the Maintenance Surveyor.
- (e) Application by an approved applicator accredited / endorsed by the manufacturer of the cleansing agent.
- (f) Using heavy duty, environmental friendly, non-toxic and water-based material with low VOC contents for proprietary multi-purpose cleansing agent.
- (g) Where the existing ink or graffiti marks cannot be removed, addition of further proprietary ink and graffiti remover approved by the Maintenance Surveyor.
- (h) Carrying out a test patch on Site to demonstrate the cleaning method using multi-purpose cleansing agent.
- (i) Protection of adjacent surfaces and making good all works damaged and disturbed.
- (j) Submission of method statement.

| Item  |  |                                     |  |               |                |                                     |  |               |                |  | Item  |  |
|---|--|-------------------------------------|--|---------------|----------------|-------------------------------------|--|---------------|----------------|--|-------|--|
| <b>LIMEWASH</b>   |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
| Prepare and apply limewash to the following surfaces :-       |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
| <i>Per square metre</i>                                       |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
|   |  | Internal                            |  |               |                |                                     |  | External      |                |  |       |  |
|   |  | New surfaces                        |  | Redecoration  |                | New surfaces                        |  | Redecoration  |                |  |       |  |
|   |  | Two coats                           | One coat   | Two coats     | Two coats      | One coat                            | Two coats  | One coat      | Two coats      |  |       |  |
|   |  | A                                   | B  | C             | D              | E                                   | F  |               |                |  |       |  |
|   |  | \$                                  | \$   | \$            | \$             | \$                                  | \$   |               |                |  |       |  |
| 15001   | Walls and soffits.....   | 18.90                               | 14.00  | 20.60         | 19.80          | 14.80                               | 22.10  |               |                |  | 15001 |  |
| 15002   | Profiled compressed particle sheeting.....   | 25.20                               | 19.60  | 28.10         | 26.00          | 20.10                               | 29.50  |               |                |  | 15002 |  |
| <b>EMULSION PAINT</b>   |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
| Prepare and apply emulsion paint to the following surfaces :- |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
| <i>Per square metre</i>                                       |  |                                     |  |               |                |                                     |  |               |                |  |       |  |
|   |  | Internal                            |  |               |                | External                            |  |               |                |  |       |  |
|   |  | New surfaces                        |  | Redecoration  |                | New surfaces                        |  | Redecoration  |                |  |       |  |
|   |  | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats |  |       |  |
|   |  | A                                   | B  | C             | D              | E                                   | F  | G             | H              |  |       |  |
|   |  | \$                                  | \$   | \$            | \$             | \$                                  | \$   | \$            | \$             |  |       |  |
| 15003   | Walls and soffits.....   | 41.00                               | 45.40  | 19.60         | 31.70          | 42.70                               | 47.30  | 21.50         | 34.80          |  | 15003 |  |
| 15004   | Extra over Item 15003 for moulded enriched surface picked out in one or more different colours from general surface..... | 17.00                               | 18.00  | 8.00          | 13.60          | 20.30                               | 20.90  | 8.10          | 14.20          |  | 15004 |  |
| 15005   | Grille block wall of any thickness including painting into recesses.....   | 61.50                               | 64.00  | 31.40         | 53.30          | 65.10                               | 70.70  | 32.00         | 55.80          |  | 15005 |  |
| 15006   | Soft or hard fibre board, insulating board, acoustic tiles and similar surfaces.....                                     | 38.90                               | 47.30  | 20.10         | 33.00          | 41.90                               | 48.10  | 22.10         | 35.10          |  | 15006 |  |
| 15007   | Profiled compressed particle sheeting.....   | 56.20                               | 63.70  | 27.00         | 41.10          | 59.60                               | 64.50  | 30.40         | 42.80          |  | 15007 |  |

| Item   |   |                                     |  |               |                |                                     |  |               | Item           |       |
|--|---|-------------------------------------|--|---------------|----------------|-------------------------------------|--|---------------|----------------|-------|
| <b>ANTI-MOULD ACRYLIC EMULSION PAINT</b>   |   |                                     |  |               |                |                                     |  |               |                |       |
| Prepare and apply anti-mould acrylic emulsion paint to the following surfaces :- |   |                                     |  |               |                |                                     |  |               |                |       |
| <i>Per square metre</i>  |   |                                     |  |               |                |                                     |  |               |                |       |
|  |   | Internal                            |  |               |                | External                            |  |               |                |       |
|  |   | New surfaces                        |  | Redecoration  |                | New surfaces                        |  | Redecoration  |                |       |
|  |   | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats |       |
|  |   | A                                   | B  | C             | D              | E                                   | F  | G             | H              |       |
|  |   | \$                                  | \$   | \$            | \$             | \$                                  | \$   | \$            | \$             |       |
| 15008  | Walls and soffits.....  | 47.20                               | 50.60  | 21.80         | 37.60          | 51.40                               | 52.90  | 23.30         | 41.70          | 15008 |
| 15009  | Extra over Item 15008 for moulded enriched surface picked out in one or more different colours from general surface ..... | 19.70                               | 21.20  | 9.00          | 15.00          | 22.20                               | 23.20  | 8.90          | 15.50          | 15009 |
| 15010  | Grille block wall of any thickness including painting into recesses.....  | 67.40                               | 73.40  | 35.10         | 60.60          | 71.10                               | 75.90  | 37.80         | 63.10          | 15010 |
| 15011  | Soft or hard fibre board, insulating board, acoustic tiles and similar surfaces .....                                     | 44.80                               | 49.20  | 25.40         | 39.20          | 46.10                               | 50.90  | 25.70         | 41.00          | 15011 |
| 15012  | Profiled compressed particle sheeting.....  | 58.80                               | 62.50  | 29.40         | 52.60          | 62.10                               | 66.40  | 31.20         | 54.80          | 15012 |
| <b>TEXTURED EMULSION PAINT</b>   |   |                                     |  |               |                |                                     |  |               |                |       |
| Prepare and apply textured emulsion paint to the following surfaces :-           |   |                                     |  |               |                |                                     |  |               |                |       |
| <i>Per square metre</i>  |   |                                     |  |               |                |                                     |  |               |                |       |
|  |   | Internal                            |  |               |                | External                            |  |               |                |       |
|  |   | New surfaces                        |  | Redecoration  |                | New surfaces                        |  | Redecoration  |                |       |
|  |   | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats | One thinned coat and two full coats | Water based lime resistant primer and two full coats | One full coat | Two full coats |       |
|  |   | A                                   | B  | C             | D              | E                                   | F  | G             | H              |       |
|  |   | \$                                  | \$   | \$            | \$             | \$                                  | \$   | \$            | \$             |       |
| 15013  | Walls and soffits.....  | 42.90                               | 45.00  | 22.00         | 36.20          | 46.40                               | 49.60  | 23.60         | 39.10          | 15013 |
| 15014  | Grille block wall of any thickness including painting into recesses.....  | 66.30                               | 72.40  | 31.50         | 53.90          | 69.80                               | 74.90  | 33.10         | 54.60          | 15014 |
| 15015  | Profiled compressed particle sheeting.....  | 53.70                               | 56.90  | 27.40         | 44.70          | 57.60                               | 59.80  | 30.00         | 47.60          | 15015 |

| Item  |   |   | Item                                   |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|---|---|---|--|--------------|-----------|----------|--------------|--------------|---------------|--------------|---------------|---|--|---|--|-----------|----------|-----------|-----------|----------|-----------|----|----|---|---|---|---|----|----|----|----|----|----|
|   | <b>CEMENT PAINT</b>   | <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="3">Internal</th> <th colspan="3">External</th> </tr> <tr> <th>New surfaces</th> <th colspan="2">Redecoration</th> <th>New surfaces</th> <th colspan="2">Redecoration</th> </tr> <tr> <th>Two coats</th> <th>One coat</th> <th>Two coats</th> <th>Two coats</th> <th>One coat</th> <th>Two coats</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>  |  | Internal     |           |          | External     |              |               | New surfaces | Redecoration  |   | New surfaces                           | Redecoration  |  | Two coats | One coat | Two coats | Two coats | One coat | Two coats | A  | B  | C | D | E | F | \$ | \$ | \$ | \$ | \$ | \$ |
| Internal  |   |   | External                               |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| New surfaces  | Redecoration  |   | New surfaces                           | Redecoration |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| Two coats   | One coat  | Two coats   | Two coats                              | One coat     | Two coats |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| A   | B   | C   | D                                      | E            | F         |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| \$  | \$  | \$  | \$                                     | \$           | \$        |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | Prepare and apply cement paint to the following surfaces :-                   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <i>Per square metre</i>   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15016   | Walls and soffits.....  | 34.40   | 22.70                                  | 39.20        | 36.60     | 24.20    | 41.50        | 15016        |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15017   | Grille block wall of any thickness including painting into recesses.....      | 59.10   | 36.60                                  | 66.20        | 60.90     | 37.80    | 67.50        | 15017        |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15018   | Chinese roof tiling.....  | 61.60   | 35.20                                  | 67.80        | 64.30     | 38.40    | 68.70        | 15018        |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <b>EXTERNAL TEXTURED PAINT</b>  | <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="3">External</th> </tr> <tr> <th>New surfaces</th> <th colspan="2">Redecoration</th> </tr> <tr> <th>Two coats</th> <th>One coat</th> <th>Two coats</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table>   |  | External     |           |          | New surfaces | Redecoration |               | Two coats    | One coat      | Two coats   | A                                      | B   | C                                      | \$        | \$       | \$        |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| External  |   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| New surfaces  | Redecoration  |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| Two coats   | One coat  | Two coats   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| A   | B   | C   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| \$  | \$  | \$  |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | Prepare and apply external textured paint to the following surfaces :-        |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <i>Per square metre</i>   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15019   | Walls and soffits.....  | 48.90   | 32.10                                  | 55.20        | 15019     |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15020   | Grille block wall of any thickness including painting into recesses.....      | 84.10   | 54.30                                  | 91.50        | 15020     |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15021   | Chinese roof tiling.....  | 89.20   | 54.40                                  | 94.70        | 15021     |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15022   | Profiled compressed particle sheeting.....                                    | 73.50   | 45.90                                  | 78.80        | 15022     |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <b>MULTI-COLOUR PAINT</b>   | <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">Internal</th> <th colspan="2">External</th> </tr> <tr> <th>New surfaces</th> <th>Redeco-ration</th> <th>New surfaces</th> <th>Redeco-ration</th> </tr> </thead> <tbody> <tr> <td>One coat primer, one binder coat and one finishing coat</td> <td>One binder coat and one finishing coat</td> <td>One coat primer, one binder coat and one finishing coat</td> <td>One binder coat and one finishing coat</td> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </tbody> </table> |  | Internal     |           | External |              | New surfaces | Redeco-ration | New surfaces | Redeco-ration | One coat primer, one binder coat and one finishing coat | One binder coat and one finishing coat | One coat primer, one binder coat and one finishing coat | One binder coat and one finishing coat | A         | B        | C         | D         | \$       | \$        | \$ | \$ |   |   |   |   |    |    |    |    |    |    |
| Internal  |   | External  |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| New surfaces  | Redeco-ration   | New surfaces  | Redeco-ration                          |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| One coat primer, one binder coat and one finishing coat | One binder coat and one finishing coat  | One coat primer, one binder coat and one finishing coat   | One binder coat and one finishing coat |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| A   | B   | C   | D                                      |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| \$  | \$  | \$  | \$                                     |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | Prepare and apply multi-colour paint to the following surfaces by spraying :- |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <i>Per square metre</i>   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15023   | Walls and soffits.....  | 88.80   | 76.10                                  | 91.80        | 78.00     | 15023    |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
|   | <i>Per linear metre</i>   |   |  |              |           |          |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15024   | Surfaces n.e. 150 mm girth.....   | 13.90   | 11.90                                  | 17.40        | 15.00     | 15024    |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |
| 15025   | Ditto but 150 - 300 mm girth.....   | 25.00   | 21.90                                  | 28.60        | 25.20     | 15025    |              |              |               |              |               |   |  |   |  |           |          |           |           |          |           |    |    |   |   |   |   |    |    |    |    |    |    |



| Item   |  |                                      |   |                    |                                      |       | Item  |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
|--|--|--------------------------------------|---|--------------------|--------------------------------------|-------|-------|----------|--|--|----------|--|--|--------------|--------------|--|--------------|--------------|--|---|--------------------|--------------------------------------|---|--------------------|--------------------------------------|---|---|---|---|---|---|----|----|----|----|----|----|
| <b>POLYURETHANE PAINT</b>  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| Prepare and apply polyurethane paint to the following surfaces :-  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
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| Internal   |  |                                      | External  |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| New Surfaces   | Redecoration   |                                      | New Surfaces  | Redecoration       |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| One coat primer, one undercoat and one finishing coat  | One finishing coat   | One undercoat and one finishing coat | One coat primer, one undercoat and one finishing coat | One finishing coat | One undercoat and one finishing coat |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| A  | B  | C                                    | D   | E                  | F                                    |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| \$   | \$   | \$                                   | \$  | \$                 | \$                                   |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| <i>Per square metre</i>  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15035  | Walls and soffits.....   | 55.00                                | 31.50   | 43.30              | 62.50                                | 35.80 | 47.30 | 15035    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15036  | Grille block wall of any thickness including painting into recesses..... | 81.20                                | 40.10   | 67.20              | 83.90                                | 44.00 | 68.90 | 15036    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15037  | Profiled compressed particle sheeting.....                               | 67.40                                | 37.20   | 61.30              | 70.90                                | 39.00 | 63.80 | 15037    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15038  | Concrete paving, kerb stones and the like.....                           | 49.40                                | 27.30   | 40.70              | 51.20                                | 28.60 | 43.10 | 15038    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>COLD CURE EPOXY PAINT</b>   |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| Prepare and apply cold cure epoxy paint (coloured) to the following surfaces :-  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
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| Internal   |  |                                      | External  |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| New surfaces   | Redecoration   |                                      | New surfaces  | Redecoration       |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| One undercoat and one finishing coat   | One finishing coat   | One undercoat and one finishing coat | One undercoat and one finishing coat                  | One finishing coat | One undercoat and one finishing coat |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| A  | B  | C                                    | D   | E                  | F                                    |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| \$   | \$   | \$                                   | \$  | \$                 | \$                                   |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| <i>Per square metre</i>  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15039  | Walls and soffits.....   | 51.90                                | 36.40   | 56.70              | 53.10                                | 37.70 | 59.40 | 15039    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15040  | Grille block wall of any thickness including painting into recesses..... | 77.70                                | 46.40   | 79.50              | 82.20                                | 50.80 | 84.20 | 15040    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15041  | Profiled compressed particle sheeting.....                               | 61.90                                | 41.40   | 75.30              | 65.70                                | 42.60 | 78.60 | 15041    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| <i>Per linear metre</i>  |  |                                      |   |                    |                                      |       |       |          |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15042  | Surfaces n.e. 150 mm girth.....  | 4.90                                 | 3.80  | 5.80               | 5.00                                 | 4.10  | 6.20  | 15042    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |
| 15043  | Ditto but 150 - 300 mm girth.....  | 16.10                                | 9.60  | 17.10              | 18.10                                | 11.60 | 18.60 | 15043    |  |  |          |  |  |              |              |  |              |              |  |   |                    |                                      |   |                    |                                      |   |   |   |   |   |   |    |    |    |    |    |    |

| Item  |   |   |  |                                      |                                       | Item  |
|-------|---|---|--|--------------------------------------|---------------------------------------|-------|
|       | <b>GRANITE COATING</b>  |   |  |                                      |                                       |       |
|       | Prepare and apply 2 mm thick spray granite coating system to the following surfaces : -   | Internal  |  | External                             |                                       |       |
|       |   | New surfaces                                    | Redecoration                                   | New surfaces                         | Redecoration                          |       |
|       | <i>Per square metre</i>   | A<br>\$   | B<br>\$  | C<br>\$                              | D<br>\$                               |       |
| 15044 | Walls and soffits.....  | 129.70  | 139.00   | 137.30                               | 136.40                                | 15044 |
| 15045 | Grille block wall of any thickness including painting into recesses.....  | 161.30  | 182.90   | 172.20                               | 188.00                                | 15045 |
| 15046 | Masonry walls.....  | 161.20  | 182.90   | 172.20                               | 188.00                                | 15046 |
|       | <b>WATER-BASED PAINT ON SLOPEWORK</b>   |   |  |                                      |                                       |       |
|       | Prepare and spray water-based paint (any colour) on : -   | New Surfaces                                    |  | Redecoration                         |                                       |       |
|       |   | One undercoat and one finishing coat            | One finishing coat                             | One undercoat and one finishing coat |                                       |       |
|       | <i>Per square metre</i>   | A<br>\$   | B<br>\$  | C<br>\$                              |                                       |       |
| 15047 | Sprayed concrete surfaces on slopes.....  | 98.40   | 72.40  | 113.80                               |                                       | 15047 |
|       | <b>SYNTHETIC PAINT ON PLASTIC WORK</b>  |   |  |                                      |                                       |       |
|       | Prepare and apply synthetic paint on the following plastic work : -   | New surfaces                                    |  | Redecoration                         |                                       |       |
|       |   | Primer only (No subsequent paint to be applied) | Primer, two under-coats and one finishing coat | One finishing coat                   | One under-coat and one finishing coat |       |
|       | <i>Per square metre</i>   | A<br>\$   | B<br>\$  | C<br>\$                              | D<br>\$                               |       |
| 15048 | General surfaces.....   | 16.90   | 57.80  | 26.30                                | 40.50                                 | 15048 |
|       | <i>Per linear metre</i>   |   |  |                                      |                                       |       |
| 15049 | Surfaces n.e. 150 mm girth.....   | 3.00  | 8.80   | 4.80                                 | 6.80                                  | 15049 |
| 15050 | Ditto but 150 - 300 mm girth.....   | 5.50  | 17.20  | 8.20                                 | 12.70                                 | 15050 |
| 15051 | Pipe n.e. 55 mm nominal diameter.....   | 3.90  | 10.50  | 4.80                                 | 7.80                                  | 15051 |
| 15052 | Ditto but 55 - 110 mm nominal diameter.....   | 6.90  | 30.60  | 12.70                                | 20.00                                 | 15052 |
| 15053 | Ditto but 110 - 300 mm nominal diameter.....  | 13.50   | 51.50  | 21.10                                | 33.90                                 | 15053 |
| 15054 | Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead ..... | 46.00   | 77.60  | 54.30                                | 62.30                                 | 15054 |

| Item  | SYNTHETIC PAINT ON METAL WORK   | New surfaces                                       |  | Redecoration       |                                       | Item  |
|-------|---|--|--|--------------------|---------------------------------------|-------|
|       | Prepare and apply synthetic paint on the following metal work : -   | Primer only<br>(No subsequent paint to be applied) | Primer, two under-coats and one finishing coat | One finishing coat | One under-coat and one finishing coat |       |
|       | <i>Per square metre</i>   | A<br>\$  | B<br>\$  | C<br>\$            | D<br>\$                               |       |
| 15055 | General surfaces.....   | 16.90  | 57.80  | 26.30              | 40.50                                 | 15055 |
| 15056 | Glazed windows, doors and the like.....   | 17.20  | 77.90  | 36.50              | 56.10                                 | 15056 |
| 15057 | Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....   | 17.10  | 59.80  | 29.50              | 46.00                                 | 15057 |
| 15058 | Surfaces of corrugated or profiled sheeting .....   | 21.40  | 66.50  | 29.70              | 47.30                                 | 15058 |
| 15059 | Surfaces of collapsible gate.....   | 24.80  | 109.50   | 45.60              | 72.20                                 | 15059 |
| 15060 | Jalousies, louvre panels and the like with fixed or moveable louvres.....   | 22.90  | 90.60  | 37.80              | 61.80                                 | 15060 |
|       | <i>Per linear metre</i>   |  |  |                    |                                       |       |
| 15061 | Surfaces n.e. 150 mm girth.....   | 3.00   | 8.80   | 4.80               | 6.80                                  | 15061 |
| 15062 | Ditto but 150 - 300 mm girth.....   | 5.50   | 17.20  | 8.20               | 12.70                                 | 15062 |
| 15063 | Pipe n.e. 55 mm nominal diameter.....   | 3.90   | 10.50  | 4.80               | 7.80                                  | 15063 |
| 15064 | Ditto but 55 - 110 mm nominal diameter.....   | 6.90   | 30.60  | 12.70              | 20.00                                 | 15064 |
| 15065 | Ditto but 110 - 300 mm nominal diameter.....  | 13.50  | 51.50  | 21.10              | 33.90                                 | 15065 |
| 15066 | Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead ..... | 46.00  | 77.60  | 54.30              | 62.30                                 | 15066 |
|       | <i>Each</i>   |  |  |                    |                                       |       |
| 15067 | Small isolated article n.e. 0.01 m <sup>2</sup> .....   | 3.00   | 3.80   | 3.10               | 3.40                                  | 15067 |
| 15068 | W.C. cistern including brackets.....  | 10.60  | 36.10  | 12.70              | 20.80                                 | 15068 |
| 15069 | Rainwater or waste head of any size, inside and outside, including cleaning out.....  | 42.50  | 69.40  | 46.70              | 55.50                                 | 15069 |



| Item  |   |  |   |                          |  | Item  |       |
|-------|---|--|---|--------------------------|--|---|-------|
|       | <b>METALLIC PAINT ON METAL WORK</b>   |  |   |                          |  |   |       |
|       | Prepare and apply metallic paint (bright or bronze finish) on the following metal work :-   |  |   |                          |  |   |       |
|       |   | New Surfaces   |   | Redecoration             |  |   |       |
|       |   | Primer<br>only<br>(No<br>subse-<br>quent<br>paint<br>to be<br>applied) | Primer,<br>two<br>under-<br>coats<br>and one<br>finishing<br>coat | One<br>finishing<br>coat | One<br>under-<br>coat<br>and<br>one<br>finishing<br>coat | Two<br>under-<br>coats<br>and<br>one<br>finishing<br>coat |       |
|       |   | A  | B   | C                        | D  | E   |       |
|       |   | \$   | \$  | \$                       | \$   | \$  |       |
|       | <b>Per square metre</b>   |  |   |                          |  |   |       |
| 15070 | General surfaces.....   | 18.50  | 81.20   | 36.70                    | 51.80  | 75.10   | 15070 |
| 15071 | Glazed windows, doors and the like.....   | 21.20  | 96.30   | 42.20                    | 67.50  | 92.20   | 15071 |
| 15072 | Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....   | 20.00  | 82.70   | 37.30                    | 53.90  | 76.30   | 15072 |
| 15073 | Surfaces of corrugated or profiled sheeting.....  | 25.30  | 90.70   | 44.60                    | 60.50  | 80.10   | 15073 |
| 15074 | Surfaces of collapsible gate.....   | 26.70  | 133.70  | 53.10                    | 85.50  | 120.90  | 15074 |
| 15075 | Jalousies, louvre panels and the like with fixed or moveable louvres.....   | 25.60  | 108.90  | 48.30                    | 73.50  | 100.90  | 15075 |
|       | <b>Per linear metre</b>   |  |   |                          |  |   |       |
| 15076 | Surfaces n.e. 150 mm girth.....   | 2.80   | 10.30   | 4.50                     | 7.80   | 9.80  | 15076 |
| 15077 | Ditto but 150 - 300 mm girth.....   | 6.00   | 20.10   | 9.30                     | 14.90  | 18.20   | 15077 |
| 15078 | Pipe n.e. 55 mm nominal diameter.....   | 3.70   | 12.70   | 5.30                     | 9.00   | 12.40   | 15078 |
| 15079 | Ditto but 55 - 110 mm nominal diameter.....   | 7.60   | 37.30   | 14.60                    | 23.10  | 34.30   | 15079 |
| 15080 | Ditto but 110 - 300 mm nominal diameter.....  | 15.00  | 66.20   | 27.50                    | 45.00  | 58.20   | 15080 |
| 15081 | Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead ..... | 46.90  | 89.00   | 59.80                    | 78.50  | 86.20   | 15081 |
|       | <b>Each</b>   |  |   |                          |  |   |       |
| 15082 | Small isolated article n.e. 0.01 m <sup>2</sup> .....   | 2.50   | 4.40  | 2.70                     | 4.10   | 4.20  | 15082 |
| 15083 | W.C. cistern including brackets.....  | 9.40   | 41.90   | 16.20                    | 26.20  | 31.80   | 15083 |
| 15084 | Rainwater or waste head of any size, inside and outside, including cleaning out.....  | 46.30  | 81.50   | 53.10                    | 59.80  | 75.60   | 15084 |

| Item  |   |  |  |                    |                                       | Item                                   |
|---|---|--|--|--------------------|---------------------------------------|--|
| <b>HEAT RESISTING PAINT ON METAL WORK</b>                                 |   |  |  |                    |                                       |  |
| Prepare and apply heat resisting paint on the following metal work :-     |   |  |  |                    |                                       |  |
|   |   | New Surfaces                                       |  | Redecoration       |                                       |  |
|   |   | Primer only<br>(No subsequent paint to be applied) | Primer, two under-coats and one finishing coat | One finishing coat | One under-coat and one finishing coat | Two under-coats and one finishing coat |
|   |   | A  | B  | C                  | D                                     | E                                      |
|   |   | \$   | \$   | \$                 | \$                                    | \$                                     |
| <i>Per square metre</i>   |   |  |  |                    |                                       |  |
| 15085   | General surfaces.....                                 | 24.50  | 87.10  | 38.20              | 59.20                                 | 80.30                                  |
| <i>Per linear metre</i>   |   |  |  |                    |                                       |  |
| 15086   | Surfaces n.e. 150 mm girth.....                       | 3.40   | 9.80   | 4.50               | 7.20                                  | 9.60                                   |
| 15087   | Ditto but 150 - 300 mm girth.....                     | 6.70   | 24.40  | 9.70               | 15.00                                 | 20.10                                  |
| 15088   | Pipe n.e. 55 mm nominal diameter.....                 | 4.90   | 14.20  | 6.00               | 10.00                                 | 13.90                                  |
| 15089   | Ditto but 55 - 110 mm nominal diameter.....           | 10.00  | 41.70  | 16.50              | 27.10                                 | 36.60                                  |
| 15090   | Ditto but 110 - 300 mm nominal diameter.....          | 18.60  | 73.50  | 32.40              | 46.50                                 | 63.30                                  |
| <i>Each</i>   |   |  |  |                    |                                       |  |
| 15091   | Small isolated article n.e. 0.01 m <sup>2</sup> ..... | 1.90   | 5.10   | 2.00               | 3.40                                  | 4.60                                   |
| <b>CHEMICAL RESISTING PAINT ON METAL WORK</b>                             |   |  |  |                    |                                       |  |
| Prepare and apply chemical resisting paint on the following metal work :- |   |  |  |                    |                                       |  |
| <i>Per square metre</i>   |   |  |  |                    |                                       |  |
| 15092   | General surfaces.....                                 | 26.80  | 89.90  | 38.20              | 59.20                                 | 80.30                                  |
| <i>Per linear metre</i>   |   |  |  |                    |                                       |  |
| 15093   | Surfaces n.e. 150 mm girth.....                       | 3.40   | 10.10  | 4.50               | 7.20                                  | 9.60                                   |
| 15094   | Ditto but 150 - 300 mm girth.....                     | 6.90   | 25.30  | 9.70               | 15.00                                 | 20.10                                  |

| Item  |  | New surfaces   |                           | Redeco-<br>ration | Item  |
|-------|--|--|---------------------------|-------------------|-------|
|       | <b>BLACK ENAMEL PAINT ON METAL WORK</b>  | Primer<br>only<br>(No<br>subse-<br>quent<br>paint<br>to be<br>applied) | Primer<br>and one<br>coat | One<br>coat       |       |
|       | Prepare and apply black enamel paint on the following metal work :-  | A<br>\$  | B<br>\$                   | C<br>\$           |       |
|       | <i>Per square metre</i>  |  |                           |                   |       |
| 15095 | General surfaces.....  | 18.20  | 33.10                     | 29.20             | 15095 |
|       | <i>Per linear metre</i>  |  |                           |                   |       |
| 15096 | Surfaces n.e. 150 mm girth.....  | 2.80   | 6.50                      | 5.10              | 15096 |
| 15097 | Ditto but 150 - 300 mm girth.....  | 5.20   | 11.00                     | 8.70              | 15097 |
| 15098 | Pipe n.e. 55 mm nominal diameter.....  | 4.50   | 10.10                     | 7.90              | 15098 |
| 15099 | Ditto but 55 - 110 mm nominal diameter.....  | 9.80   | 21.10                     | 13.80             | 15099 |
| 15100 | Ditto but 110 - 300 mm nominal diameter.....   | 16.30  | 36.30                     | 26.20             | 15100 |
|       | <i>Each</i>  |  |                           |                   |       |
| 15101 | Small isolated article n.e. 0.01 m <sup>2</sup> .....  | 1.20   | 2.70                      | 2.00              | 15101 |
|       | <b>NON-TOXIC PAINT ON METAL WORK</b>   |  |                           |                   |       |
|       | Prepare and apply non-toxic paint on the following metal work :-   |  |                           |                   |       |
|       | <i>Per square metre</i>  |  |                           |                   |       |
| 15102 | General surfaces.....  | 17.80  | 67.90                     | 63.30             | 15102 |
| 15103 | Surfaces of corrugated or profiled sheeting.....   | 23.40  | 86.00                     | 77.50             | 15103 |
|       | <i>Per linear metre</i>  |  |                           |                   |       |
| 15104 | Surfaces n.e. 150 mm girth.....  | 2.80   | 10.40                     | 7.80              | 15104 |
| 15105 | Ditto but 150 - 300 mm girth.....  | 6.20   | 18.40                     | 14.90             | 15105 |
| 15106 | Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in approved non-toxic mastic ..... | 49.30  | 84.70                     | 71.50             | 15106 |

| Item  |   |  |  |                          |  | Item  |
|-------|---|--|--|--------------------------|--|-------|
|       | <b>POLYURETHANE PAINT ON METAL WORK</b>   | New surfaces   |  | Redecoration             |  |       |
|       | Prepare and apply polyurethane paint (coloured) on the following metal work :-      | Primer<br>only<br>(No<br>subse-<br>quent<br>paint<br>to be<br>applied) | Primer,<br>one<br>under-<br>coat<br>and one<br>finishing<br>coat | One<br>finishing<br>coat | One<br>under-<br>coat<br>and<br>one<br>finishing<br>coat |       |
|       | <i>Per square metre</i>   | A<br>\$  | B<br>\$  | C<br>\$                  | D<br>\$  |       |
| 15107 | General surfaces.....   | 18.70  | 64.20  | 36.20                    | 54.40  | 15107 |
| 15108 | Glazed windows, doors and the like.....   | 20.00  | 77.60  | 53.50                    | 68.40  | 15108 |
| 15109 | Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like..... | 20.00  | 64.60  | 36.60                    | 57.30  | 15109 |
|       | <i>Per linear metre</i>   |  |  |                          |  |       |
| 15110 | Surfaces n.e. 150 mm girth.....   | 3.10   | 8.20   | 5.20                     | 6.90   | 15110 |
| 15111 | Ditto but 150 - 300 mm girth.....   | 6.60   | 18.40  | 10.00                    | 14.90  | 15111 |
| 15112 | Pipe n.e. 55 mm nominal diameter.....   | 4.50   | 12.20  | 8.10                     | 12.00  | 15112 |
| 15113 | Ditto but 55 - 110 mm nominal diameter.....   | 8.70   | 39.20  | 15.60                    | 28.80  | 15113 |
| 15114 | Ditto but 110 - 300 mm nominal diameter.....  | 15.00  | 54.70  | 37.40                    | 46.80  | 15114 |
|       | <i>Each</i>   |  |  |                          |  |       |
| 15115 | Small isolated article n.e. 0.01 m <sup>2</sup> .....                               | 1.40   | 4.40   | 2.20                     | 3.70   | 15115 |

| Item  |   |  |  |                          |  | Item    |         |         |       |
|---|---|--|--|--------------------------|--|---------|---------|---------|-------|
|   | <b>COLD CURE EPOXY PAINT ON METAL WORK</b>  | New surfaces   |  | Redecoration             |  |         |         |         |       |
|   | Prepare and apply cold cure epoxy paint (coloured) on the following metal work :-             | Primer only<br>(No subse-<br>quent<br>paint<br>to be<br>applied) | Primer,<br>one<br>under-<br>coat<br>and one<br>finishing<br>coat | One<br>finishing<br>coat | One<br>under-<br>coat<br>and<br>one<br>finishing<br>coat |         |         |         |       |
|   | <i>Per square metre</i>   | A<br>\$  | B<br>\$  | C<br>\$                  | D<br>\$  |         |         |         |       |
| 15116   | General surfaces.....   | 19.00  | 59.90  | 32.60                    | 52.90  | 15116   |         |         |       |
| 15117   | Glazed windows, doors and the like.....   | 20.30  | 69.10  | 38.20                    | 61.00  | 15117   |         |         |       |
| 15118   | Wire mesh, expanded metal mesh, chain link, railing, balustrades and the like.....            | 19.60  | 64.70  | 35.30                    | 55.50  | 15118   |         |         |       |
|   | <i>Per linear metre</i>   |  |  |                          |  |         |         |         |       |
| 15119   | Surfaces n.e. 150 mm girth.....   | 3.20   | 8.90   | 4.50                     | 6.70   | 15119   |         |         |       |
| 15120   | Ditto but 150 - 300 mm girth.....   | 7.50   | 17.20  | 9.10                     | 14.20  | 15120   |         |         |       |
| 15121   | Pipe n.e. 55 mm nominal diameter.....   | 4.50   | 12.20  | 7.90                     | 9.10   | 15121   |         |         |       |
| 15122   | Ditto but 55 - 110 mm nominal diameter.....   | 8.90   | 29.40  | 19.30                    | 24.60  | 15122   |         |         |       |
| 15123   | Ditto but 110 - 300 mm nominal diameter.....  | 14.50  | 47.30  | 24.00                    | 40.60  | 15123   |         |         |       |
|   | <i>Each</i>   |  |  |                          |  |         |         |         |       |
| 15124   | Small isolated article n.e. 0.01 m <sup>2</sup> .....   | 1.20   | 4.30   | 2.20                     | 3.70   | 15124   |         |         |       |
|   | <b>SURFACE PROTECTION TO STRUCTURAL STEEL</b>   |  |  |                          |  |         |         |         |       |
|   | Prepare and apply surface protection on the following surfaces as G.S. Items 15.61 & 15.62 :- |  |  |                          |  |         |         |         |       |
|   | <i>Per square metre</i>   |  |  |                          |  |         |         |         |       |
|   |   | Type A   | Type B   | Type C                   | Type D   | Type E  | Type F  | Type G  |       |
|   |   | A<br>\$  | B<br>\$  | C<br>\$                  | D<br>\$  | E<br>\$ | F<br>\$ | G<br>\$ |       |
| 15125   | Structural steel (new surfaces).....  | 69.80  | 81.80  | 186.10                   | 163.40   | 235.70  | 59.00   | 58.70   | 15125 |
| 15126   | Structural steel (redecorating).....  | 73.80  | 86.20  | 183.60                   | 161.70   | 194.30  | 56.60   | 58.30   | 15126 |
| <p>(Note :- The above Items 15125 to 15126 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)</p> |   |  |  |                          |  |         |         |         |       |

| Item  |  |                 | Item              |       |
|-------|--|-----------------|-------------------|-------|
|       | <b>POWDER COATING ON METAL WORK</b>  |                 |                   |       |
|       | Prepare and apply epoxy or polyester or polyurethane resin based dry powder coating with dry film thickness 50 - 70 microns on metal surface, including surface preparation all in strict accordance with manufacturer's instructions :- |                 |                   |       |
|       | <i>Per square metre</i>  | A<br>\$         |                   |       |
| 15127 | Powder coating on metal surfaces.....  | 115.50          | 15127             |       |
|       | <i>Per linear metre</i>  |                 |                   |       |
| 15128 | Surfaces n.e. 150 mm girth.....  | 17.00           | 15128             |       |
| 15129 | Ditto but 150 - 300 mm girth.....  | 32.10           | 15129             |       |
|       | <i>Each</i>  |                 |                   |       |
| 15130 | Small isolated article n.e. 0.01m <sup>2</sup> .....   | 2.10            | 15130             |       |
|       | (Note :- The above Items 15127 to 15130 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)   |                 |                   |       |
|       | <b>FLUOROCARBON PVF2 COATING ON METAL WORK</b>   |                 |                   |       |
|       | Prepare and apply fluoropolymer resin based coating with dry film thickness 30 - 72 microns on metal surface, including surface preparation all in strict accordance with the manufacturer's instructions :-                             |                 |                   |       |
|       | <i>Per square metre</i>  | A<br>\$         |                   |       |
| 15131 | 2 Coats system (dry film thickness 30 - 37 microns) comprising primer coat and top coat on metal surface.....  | 126.40          | 15131             |       |
| 15132 | 3 Coats system (dry film thickness 40 - 52 microns) comprising primer coat, top coat and clear coat on metal surface.....  | 164.40          | 15132             |       |
| 15133 | 4 Coats system (dry film thickness 60 - 72 microns) comprising primer coat, barrier coat, top coat and clear coat on metal surface.....  | 230.30          | 15133             |       |
|       | (Note :- The above Items 15131 to 15133 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)   |                 |                   |       |
|       | <b>FIRE RETARDANT PAINT</b>  |                 |                   |       |
|       | Prepare and apply fire retardant paint as G.S. Item 21.14 on the following surfaces :-   |                 |                   |       |
|       | <i>Per square metre</i>  | New<br>surfaces | Redeco-<br>ration |       |
|       |  | A<br>\$         | B<br>\$           |       |
| 15134 | Fabric surfaces.....   | 21.10           | 24.10             | 15134 |
| 15135 | Wood surfaces.....   | 22.20           | 24.90             | 15135 |
| 15136 | Metal surfaces.....  | 21.30           | 24.30             | 15136 |

| Item   |   | FRR          |           | Item  |       |       |
|--|---|--------------|-----------|-------|-------|-------|
|  |   | 1 hour       | 2 hours   |       |       |       |
|  |   | A            | B         |       |       |       |
|  |   | \$           | \$        |       |       |       |
| <b>INTUMESCENT PAINT</b>   |   |              |           |       |       |       |
| Prepare and apply fire rated intumescent paint on structural steel surfaces :-   |   |              |           |       |       |       |
|  |   |              |           |       |       |       |
|  | <i>Per square metre</i>   |              |           |       |       |       |
| 15137  | Structural steel general surfaces.....  | 320.00       | 505.50    | 15137 |       |       |
|  |   |              |           |       |       |       |
|  | <i>Per linear metre</i>   |              |           |       |       |       |
| 15138  | Structural steel surfaces not exceeding 150 mm girth.....                                   | 65.50        | 70.90     | 15138 |       |       |
| 15139  | Ditto but 150 - 300 mm girth.....   | 83.80        | 119.20    | 15139 |       |       |
|  |   |              |           |       |       |       |
|  | <i>Each</i>   |              |           |       |       |       |
| 15140  | Structural steel small isolated article n.e. 0.01 m <sup>2</sup> .....                      | 10.50        | 17.90     | 15140 |       |       |
| (Note :- The above Items 15137 to 15140 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.) |   |              |           |       |       |       |
| <b>BLACK BITUMASTIC PAINT</b>  |   |              |           |       |       |       |
| Prepare and apply black bitumastic paint on the following surfaces :-  |   |              |           |       |       |       |
|  |   | New surfaces |           |       |       |       |
|  |   | One coat     | Two coats |       |       |       |
|  |   | A            | B         |       |       |       |
|  |   | \$           | \$        |       |       |       |
|  |   | Redecoration |           |       |       |       |
|  |   | One coat     | Two coats |       |       |       |
|  |   | C            | D         |       |       |       |
|  |   | \$           | \$        |       |       |       |
| 15141  | Concrete, brick, stone, plastered or rendered, or similarly finished walls and soffits..... | 21.30        | 34.10     | 26.70 | 41.40 | 15141 |
| 15142  | General metal surfaces.....   | 22.00        | 36.00     | 28.60 | 42.60 | 15142 |
| 15143  | General surface of concrete and fixing fillets under floor boarding.....                    | 24.80        | 42.10     | 29.30 | 45.10 | 15143 |
| 15144  | Glazed metal windows, doors and the like.....   | 31.50        | 51.00     | 35.80 | 56.50 | 15144 |
| 15145  | Wire mesh, expanded metal mesh, chain link, railings, balustrades and the like.....         | 23.30        | 37.00     | 28.60 | 44.30 | 15145 |
| 15146  | Surfaces of corrugated or profiled metal sheeting.....                                      | 23.70        | 38.10     | 30.40 | 45.50 | 15146 |
| 15147  | Metal manhole covers, channel covers, tree grilles and the like.....                        | 21.50        | 36.10     | 28.50 | 44.30 | 15147 |

| Item  |   |   |   |  |                    | Item                                  |       |
|-------|---|---|---|--|--------------------|---------------------------------------|-------|
|       | <b>BLACK BITUMASTIC PAINT (CONT'D)</b>  |   |   |  |                    |                                       |       |
|       | Prepare and apply black bitumastic paint on the following surfaces :- (Cont'd)  | New surfaces                                    |   | Redecoration                                   |                    |                                       |       |
|       |   | One coat  | Two coats                                     | One coat                                       | Two coats          |                                       |       |
|       | <i>Per linear metre</i>   | A   | B   | C  | D                  |                                       |       |
|       |   | \$  | \$  | \$   | \$                 |                                       |       |
| 15148 | Surfaces of metal n.e. 150 mm girth.....  | 2.00  | 3.00  | 2.80   | 3.50               | 15148                                 |       |
| 15149 | Ditto but 150 - 300 mm girth.....   | 4.70  | 8.90  | 5.90   | 10.40              | 15149                                 |       |
| 15150 | Pipe n.e. 55 mm nominal diameter.....   | 3.90  | 6.10  | 4.50   | 6.90               | 15150                                 |       |
| 15151 | Ditto but 55 - 110 mm nominal diameter.....   | 9.30  | 15.90   | 11.20  | 16.50              | 15151                                 |       |
| 15152 | Ditto but 110 - 300 mm nominal diameter.....  | 17.00   | 29.90   | 17.50  | 31.20              | 15152                                 |       |
| 15153 | Eaves gutter of any type, inside and outside n.e. 600 mm total girth, including cleaning out and making good joints in red lead ..... | 43.90   | 53.80   | 51.40  | 61.90              | 15153                                 |       |
|       | <i>Each</i>   |   |   |  |                    |                                       |       |
| 15154 | Small isolated article n.e. 0.01 m <sup>2</sup> .....   | 5.90  | 10.80   | 6.90   | 11.30              | 15154                                 |       |
| 15155 | W.C. cistern including brackets.....  | 9.50  | 16.50   | 11.00  | 17.80              | 15155                                 |       |
| 15156 | Rainwater or waste head of any size, inside and outside, including cleaning out.....  | 43.70   | 53.70   | 48.50  | 57.50              | 15156                                 |       |
|       | <b>SYNTHETIC PAINT ON WOOD WORK</b>   |   |   |  |                    |                                       |       |
|       | Prepare and apply synthetic paint on the following wood work :-   | New surfaces                                    |   | Redecoration                                   |                    |                                       |       |
|       |   | Primer only (No subsequent paint to be applied) | Primer, one under-coat and one finishing coat | Primer, two under-coats and one finishing coat | One finishing coat | One under-coat and one finishing coat |       |
|       | <i>Per square metre</i>   | A   | B   | C  | D                  | E                                     |       |
|       |   | \$  | \$  | \$   | \$                 | \$                                    |       |
| 15157 | General surfaces including doors and sashes.....  | 12.50   | 45.20   | 53.30  | 28.50              | 37.00                                 | 15157 |
| 15158 | Jalousies, louvre panels and the like with fixed or moveable louvres.....   | 19.10   | 72.40   | 102.20   | 48.30              | 63.20                                 | 15158 |
|       | <i>Per linear metre</i>   |   |   |  |                    |                                       |       |
| 15159 | Surfaces n.e. 150 mm girth.....   | 2.40  | 6.10  | 8.30   | 3.40               | 4.20                                  | 15159 |
| 15160 | Ditto but 150 - 300 mm girth.....   | 3.80  | 13.30   | 16.80  | 7.20               | 10.40                                 | 15160 |
|       | <i>Each</i>   |   |   |  |                    |                                       |       |
| 15161 | Small isolated article n.e. 0.01 m <sup>2</sup> .....   | 0.90  | 3.40  | 4.50   | 1.90               | 3.00                                  | 15161 |



| Item  |   |       |       |       | Item  |       |
|-------|---|-------|-------|-------|-------|-------|
|       | <b>POLYURETHANE PAINT ON WOOD WORK</b>  |       |       |       |       |       |
|       | Prepare and apply polyurethane paint on the following wood work : -             |       |       |       |       |       |
|       |   |       |       |       |       |       |
|       | <i>Per square metre</i>   |       |       |       |       |       |
| 15162 | General surfaces including doors and sashes.....                                | 48.80 | 36.50 | 55.70 | 59.80 | 15162 |
| 15163 | Jalousies, louvre panels and the like with fixed or moveable louvres.....       | 77.40 | 51.60 | 84.90 | 94.30 | 15163 |
|       | <i>Per linear metre</i>   |       |       |       |       |       |
| 15164 | Surfaces n.e. 150 mm girth.....   | 5.70  | 3.90  | 6.40  | 7.30  | 15164 |
| 15165 | Ditto but 150 - 300 mm girth.....   | 12.40 | 9.30  | 14.00 | 15.30 | 15165 |
|       | <i>Each</i>   |       |       |       |       |       |
| 15166 | Small isolated article n.e. 0.01 m <sup>2</sup> .....                           | 2.20  | 1.90  | 2.90  | 3.40  | 15166 |
|       |   |       |       |       |       |       |
|       | <i>Per square metre</i>   |       |       |       |       |       |
| 15167 | Wood block, strip or parquet flooring.....                                      |       |       | 34.90 | 40.40 | 15167 |
|       | <b>POLYURETHANE SEALER AND POLISH ON WOOD WORK</b>                              |       |       |       |       |       |
|       | Prepare and apply polyurethane sealer and polish on the following wood work : - |       |       |       |       |       |
|       |   |       |       |       |       |       |
|       | <i>Per square metre</i>   |       |       |       |       |       |
| 15168 | Wood block or wood strip flooring.....  | 54.00 | 34.50 | 49.90 |       | 15168 |

| Item  |   |              |             |              |           | Item  |
|-------|---|--------------|-------------|--------------|-----------|-------|
|       | <b>WAX POLISH ON WOOD WORK</b>                                      |              |             |              |           |       |
|       | Prepare and wax polish on the following wood work :-                | New surfaces |             | Redecoration |           |       |
|       |   | Two coats    | Three coats | One coat     | Two coats |       |
|       | <i>Per square metre</i>   | A<br>\$      | B<br>\$     | C<br>\$      | D<br>\$   |       |
| 15169 | General surfaces.....   | -            | 52.40       | 25.80        | 39.90     | 15169 |
|       | <i>Per linear metre</i>   |              |             |              |           |       |
| 15170 | Surfaces n.e. 150 mm girth.....                                     | -            | 4.30        | 2.20         | 3.40      | 15170 |
| 15171 | Surfaces 150 - 300 mm girth.....                                    | -            | 12.50       | 6.10         | 9.50      | 15171 |
|       | <i>Per square metre</i>   |              |             |              |           |       |
| 15172 | Surfaces of wood block or wood strip flooring.....                  | 22.20        | -           | 14.50        | 23.60     | 15172 |
|       | <b>NATURAL OIL ON LANDSCAPE TIMBER</b>                              |              |             |              |           |       |
|       | Prepare and apply natural oil coating on the following wood work :- | New surfaces |             | Redecoration |           |       |
|       |   | Three coats  | Two coats   | Three coats  | Two coats |       |
|       | <i>Per square metre</i>   | A<br>\$      | B<br>\$     | A<br>\$      | B<br>\$   |       |
| 15173 | General surfaces of landscape timber.....                           | 92.90        | 63.20       | 92.90        | 63.20     | 15173 |
|       | <b>LINSEED OIL ON WOOD WORK</b>                                     |              |             |              |           |       |
|       | Prepare and apply linseed oil on the following wood work :-         | New surfaces |             | Redecoration |           |       |
|       |   | Three coats  | Two coats   | Three coats  | Two coats |       |
|       | <i>Per square metre</i>   | A<br>\$      | B<br>\$     | A<br>\$      | B<br>\$   |       |
| 15174 | General surfaces.....   | 46.60        | 36.20       | 46.60        | 36.20     | 15174 |
|       | <i>Per linear metre</i>   |              |             |              |           |       |
| 15175 | Surfaces n.e. 150 mm girth.....                                     | 3.80         | 3.00        | 3.80         | 3.00      | 15175 |
| 15176 | Surfaces 150 - 300 mm girth.....                                    | 11.30        | 9.00        | 11.30        | 9.00      | 15176 |

| Item   |   |           |             |                    |           |                      |          |           |                   |              |               | Item |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|--|---|-----------|-------------|--------------------|-----------|----------------------|----------|-----------|-------------------|--------------|---------------|------|--------------|--|--|--|--|--|--------------|--|--|--|--------------|---------------|-------|--|---------|--|--------------------|-------|--|---------|--|-------------------|---|-----------|----------------------|-----------|-------------|-------------|-----------|----------------------|----------|-----------|----------|-----------|----|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| <p><b>STAIN, VARNISH AND LACQUER ON WOOD WORK</b></p> <p>Prepare and apply and stain, varnish and/or lacquer on the following wood work : -</p>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6">New surfaces</th> <th colspan="6">Redecoration</th> </tr> <tr> <th colspan="2">Stain</th> <th colspan="2">Varnish</th> <th>Cellu-lose lacquer</th> <th colspan="2">Stain</th> <th colspan="2">Varnish</th> <th colspan="2">Cellulose lacquer</th> </tr> <tr> <th>Two coats</th> <th>Addi-tional one coat</th> <th>Two coats</th> <th>Three coats</th> <th>Three coats</th> <th>Two coats</th> <th>Addi-tional one coat</th> <th>One coat</th> <th>Two coats</th> <th>One coat</th> <th>Two coats</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>H</th> <th>I</th> <th>J</th> <th>K</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> </table> |   |           |             |                    |           |                      |          |           |                   |              |               |      | New surfaces |  |  |  |  |  | Redecoration |  |  |  |              |               | Stain |  | Varnish |  | Cellu-lose lacquer | Stain |  | Varnish |  | Cellulose lacquer |   | Two coats | Addi-tional one coat | Two coats | Three coats | Three coats | Two coats | Addi-tional one coat | One coat | Two coats | One coat | Two coats | A  | B  | C | D | E | F | G | H | I | J | K | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| New surfaces   |   |           |             |                    |           | Redecoration         |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| Stain  |   | Varnish   |             | Cellu-lose lacquer | Stain     |                      | Varnish  |           | Cellulose lacquer |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| Two coats  | Addi-tional one coat  | Two coats | Three coats | Three coats        | Two coats | Addi-tional one coat | One coat | Two coats | One coat          | Two coats    |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| A  | B   | C         | D           | E                  | F         | G                    | H        | I         | J                 | K            |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| \$   | \$  | \$        | \$          | \$                 | \$        | \$                   | \$       | \$        | \$                | \$           |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <i>Per square metre</i>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15177  | General surfaces including doors and sashes .....   |           |             |                    |           |                      |          |           |                   |              | 15177         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15178  | Jalousies, louvre panels and the like with fixed or movable louvres .....                         |           |             |                    |           |                      |          |           |                   |              | 15178         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <i>Per linear metre</i>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15179  | Surfaces n.e. 150 mm girth .....  |           |             |                    |           |                      |          |           |                   |              | 15179         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15180  | Ditto but 150 - 300 mm girth.....   |           |             |                    |           |                      |          |           |                   |              | 15180         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <i>Each</i>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15181  | Small isolated article not exceeding 0.01 m <sup>2</sup> .....                                    |           |             |                    |           |                      |          |           |                   |              | 15181         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <p><b>PESTICIDAL COATING</b></p> <p>Prepare and apply pesticidal coating to the following surfaces : -</p>   |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="10"></th> <th>New surfaces</th> <th>Redeco-ration</th> </tr> <tr> <th colspan="10"></th> <th>A</th> <th>B</th> </tr> <tr> <th colspan="10"></th> <th>\$</th> <th>\$</th> </tr> </thead> </table>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  | New surfaces | Redeco-ration |       |  |         |  |                    |       |  |         |  |                   | A | B         |                      |           |             |             |           |                      |          |           |          |           | \$ | \$ |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|  |   |           |             |                    |           |                      |          |           |                   | New surfaces | Redeco-ration |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|  |   |           |             |                    |           |                      |          |           |                   | A            | B             |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|  |   |           |             |                    |           |                      |          |           |                   | \$           | \$            |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <i>Per square metre</i>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15182  | General surfaces of plaster, render, concrete, brick, block, stone or wood.....                   |           |             |                    |           |                      |          |           |                   |              | 15182         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| <i>Per linear metre</i>  |   |           |             |                    |           |                      |          |           |                   |              |               |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 15183  | Ditto but in band n.e. 150 mm wide at joints, junctions, skirting tops and similar positions..... |           |             |                    |           |                      |          |           |                   |              | 15183         |      |              |  |  |  |  |  |              |  |  |  |              |               |       |  |         |  |                    |       |  |         |  |                   |   |           |                      |           |             |             |           |                      |          |           |          |           |    |    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

| Item  |   |  |                           |              | Item                        |       |
|-------|---|--|---------------------------|--------------|-----------------------------|-------|
|       | <b>MARKING MATERIALS</b>  |  |                           |              |                             |       |
|       | Prepare and paint the following lines, etc., in white or yellow thermoplastic road marking material (Type A) as BS 3262:1989 on tarmac, concrete or other surfaces for roads, carriageways, car parks, paving and the like :- |  |                           |              |                             |       |
|       |   | Mark<br>out<br>and<br>paint<br>in two<br>coats | Re-paint over<br>existing |              | Oblit-<br>erate<br>existing |       |
|       |   |  | One<br>coat               | Two<br>coats |                             |       |
|       |   | A  | B                         | C            | D                           |       |
|       |   | \$   | \$                        | \$           | \$                          |       |
| 15184 | Line n.e. 150 mm wide.....  | 15.60  | 8.70                      | 16.00        | 4.40                        | 15184 |
| 15185 | Ditto but 150 - 300 mm wide.....  | 30.70  | 16.90                     | 31.70        | 8.60                        | 15185 |
| 15186 | Line n.e. 150 mm wide and circular on plan n.e. 15.00 m radius.....   | 16.70  | 9.60                      | 17.00        | 4.90                        | 15186 |
| 15187 | Ditto but 150 - 300 mm wide.....  | 31.90  | 17.90                     | 33.80        | 9.10                        | 15187 |
|       | <b>Each</b>   |  |                           |              |                             |       |
| 15188 | Letter, number, Chinese character, logo, symbol and the like n.e. 75 mm high.....   | 10.20  | 7.10                      | 10.90        | 2.90                        | 15188 |
| 15189 | Ditto but 75 - 150 mm high.....   | 21.40  | 13.90                     | 22.10        | 6.40                        | 15189 |
| 15190 | Ditto but 150 - 225 mm high.....  | 29.40  | 19.00                     | 30.70        | 9.60                        | 15190 |
| 15191 | Ditto but 225 - 300 mm high.....  | 40.70  | 25.80                     | 42.00        | 14.30                       | 15191 |
| 15192 | Ditto but 300 - 450 mm high.....  | 56.90  | 35.90                     | 59.90        | 22.40                       | 15192 |
| 15193 | Ditto but 450 - 600 mm high.....  | 84.40  | 51.60                     | 86.20        | 36.80                       | 15193 |
| 15194 | Ditto but 600 - 1,000 mm high.....  | 112.90   | 76.60                     | 130.30       | 55.00                       | 15194 |
| 15195 | Ditto but 1,000 - 2,000 mm high.....  | 167.10   | 101.50                    | 175.10       | 73.90                       | 15195 |
| 15196 | Arrow-head n.e. 150 mm long.....  | 14.70  | 9.60                      | 15.50        | 5.30                        | 15196 |
| 15197 | Ditto but 150 - 300 mm long.....  | 22.10  | 14.20                     | 22.90        | 8.80                        | 15197 |
| 15198 | Ditto but 300 - 450 mm long.....  | 31.50  | 19.80                     | 32.60        | 11.80                       | 15198 |
| 15199 | Ditto but 450 - 900 mm long.....  | 50.20  | 30.80                     | 53.20        | 17.20                       | 15199 |
| 15200 | Ditto but 900 - 1,350 mm long.....  | 89.90  | 52.40                     | 93.30        | 24.40                       | 15200 |
| 15201 | Ditto but 1,350 - 2,000 mm long.....  | 137.00   | 77.80                     | 140.80       | 36.70                       | 15201 |
| 15202 | Ditto but 2,000 - 3,000 mm long.....  | 178.80   | 104.30                    | 187.60       | 48.60                       | 15202 |
| 15203 | Arrow-head with left/right and straight 1,350 - 2,000 mm long.....  | 159.70   | 92.30                     | 164.20       | 42.20                       | 15203 |
| 15204 | Ditto but 2,000 - 3,000 mm long.....  | 203.80   | 116.90                    | 211.00       | 54.90                       | 15204 |

| Item  |   |  |                           |              | Item                        |       |
|-------|---|--|---------------------------|--------------|-----------------------------|-------|
|       | <b>MARKING MATERIALS (CONT'D)</b>   |  |                           |              |                             |       |
|       | Prepare and paint the following lines, etc., in white or yellow thermoplastic road marking material (Type B) as BS 3262:1989 on tarmac, concrete or other surfaces for roads, carriageways, car parks, paving and the like :- |  |                           |              |                             |       |
|       |   | Mark<br>out<br>and<br>paint<br>in two<br>coats | Re-paint over<br>existing |              | Oblit-<br>erate<br>existing |       |
|       |   |  | One<br>coat               | Two<br>coats |                             |       |
|       |   | A  | B                         | C            | D                           |       |
|       |   | \$   | \$                        | \$           | \$                          |       |
| 15205 | Line n.e. 150 mm wide.....  | 16.50  | 9.00                      | 16.90        | 4.40                        | 15205 |
| 15206 | Ditto but 150 - 300 mm wide.....  | 31.40  | 17.20                     | 33.60        | 8.60                        | 15206 |
| 15207 | Line n.e. 150 mm wide and circular on plan n.e. 15.00 m.....  | 17.10  | 9.50                      | 18.20        | 4.60                        | 15207 |
| 15208 | Ditto but 150 - 300 mm wide.....  | 33.20  | 18.40                     | 35.60        | 9.30                        | 15208 |
|       | <b>Each</b>   |  |                           |              |                             |       |
| 15209 | Letter, number, Chinese character, logo, symbol & the like n.e. 75 mm high.....   | 10.40  | 7.10                      | 10.90        | 2.90                        | 15209 |
| 15210 | Ditto but 75 - 150 mm high.....   | 21.40  | 13.90                     | 22.20        | 6.40                        | 15210 |
| 15211 | Ditto but 150 - 225 mm high.....  | 29.60  | 18.60                     | 31.00        | 9.60                        | 15211 |
| 15212 | Ditto but 225 - 300 mm high.....  | 35.30  | 31.60                     | 42.80        | 14.30                       | 15212 |
| 15213 | Ditto but 300 - 450 mm high.....  | 57.50  | 37.50                     | 60.50        | 22.40                       | 15213 |
| 15214 | Ditto but 450 - 600 mm high.....  | 85.30  | 52.70                     | 88.90        | 36.80                       | 15214 |
| 15215 | Ditto but 600 - 1,000 mm high.....  | 128.80   | 78.50                     | 132.20       | 55.00                       | 15215 |
| 15216 | Ditto but 1,000 - 2,000 mm high.....  | 171.50   | 104.40                    | 175.40       | 73.90                       | 15216 |
| 15217 | Arrow-head n.e. 150 mm long.....  | 14.70  | 9.60                      | 15.50        | 5.30                        | 15217 |
| 15218 | Ditto but 150 - 300 mm long.....  | 22.30  | 14.30                     | 23.10        | 8.80                        | 15218 |
| 15219 | Ditto but 300 - 450 mm long.....  | 31.90  | 19.90                     | 33.10        | 11.80                       | 15219 |
| 15220 | Ditto but 450 - 900 mm long.....  | 51.10  | 30.90                     | 54.00        | 17.20                       | 15220 |
| 15221 | Ditto but 900 - 1,350 mm long.....  | 91.90  | 54.00                     | 96.50        | 24.40                       | 15221 |
| 15222 | Ditto but 1,350 - 2,000 mm long.....  | 137.80   | 79.40                     | 143.40       | 36.60                       | 15222 |
| 15223 | Ditto but 2,000 - 3,000 mm long.....  | 183.60   | 106.50                    | 189.40       | 48.60                       | 15223 |
| 15224 | Arrow-head with left/right and straight 1,350 - 2,000 mm long.....  | 160.70   | 93.00                     | 166.80       | 41.80                       | 15224 |
| 15225 | Ditto but 2,000 - 3,000 mm long.....  | 210.80   | 120.70                    | 213.40       | 55.00                       | 15225 |

| Item  |  |  |  |              | Item         |  |   |  |  |      |      |      |  |  |
|---|--|--|--|--------------|--------------|--|---|--|--|------|------|------|--|--|
|   | <p><b>FLUORESCENT PAINT</b></p> <p>Prepare and apply fluorescent paint of any colour ordered on the following surfaces :-</p>  |  |  |              |              |  |   |  |  |      |      |      |  |  |
|   |  |  | <table border="1"> <thead> <tr> <th>New surfaces</th> <th colspan="2">Redecoration</th> </tr> </thead> <tbody> <tr> <td>Alkali resisting primer, one white flat water or oil based undercoat and one finishing coat</td> <td>One finishing coat</td> <td>One white flat water or oil based undercoat and one finishing coat</td> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> </tr> </tbody> </table>  | New surfaces | Redecoration |  | Alkali resisting primer, one white flat water or oil based undercoat and one finishing coat | One finishing coat   | One white flat water or oil based undercoat and one finishing coat                                   | A \$ | B \$ | C \$ |  |  |
| New surfaces  | Redecoration   |  |  |              |              |  |   |  |  |      |      |      |  |  |
| Alkali resisting primer, one white flat water or oil based undercoat and one finishing coat | One finishing coat   | One white flat water or oil based undercoat and one finishing coat                                   |  |              |              |  |   |  |  |      |      |      |  |  |
| A \$  | B \$   | C \$   |  |              |              |  |   |  |  |      |      |      |  |  |
| 15226   | Concrete paving, kerb stones and the like.....   | 57.60  | 35.60  | 47.70        | 15226        |  |   |  |  |      |      |      |  |  |
| 15227   | Plastered or rendered vertical surfaces.....   | 59.60  | 37.60  | 49.90        | 15227        |  |   |  |  |      |      |      |  |  |
|   | <p><b>REFLECTING PAINT</b></p> <p>Prepare and apply reflecting paint on the following surfaces including applying a surface coating of fine grain reflective aggregate, applied at a rate of not less than 0.6 kg/m<sup>2</sup> while finishing coat is still wet :-</p> |  |  |              |              |  |   |  |  |      |      |      |  |  |
|   |  |  | <table border="1"> <thead> <tr> <th>New surfaces</th> <th colspan="2">Redecoration</th> </tr> </thead> <tbody> <tr> <td>One finishing coat of white synthetic paint with high gloss finish</td> <td>One finishing coat of white synthetic paint with high gloss finish</td> <td>One coat alkali resisting primer, one finishing coat of white synthetic paint with high gloss finish</td> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> </tr> </tbody> </table> | New surfaces | Redecoration |  | One finishing coat of white synthetic paint with high gloss finish                          | One finishing coat of white synthetic paint with high gloss finish | One coat alkali resisting primer, one finishing coat of white synthetic paint with high gloss finish | A \$ | B \$ | C \$ |  |  |
| New surfaces  | Redecoration   |  |  |              |              |  |   |  |  |      |      |      |  |  |
| One finishing coat of white synthetic paint with high gloss finish                          | One finishing coat of white synthetic paint with high gloss finish   | One coat alkali resisting primer, one finishing coat of white synthetic paint with high gloss finish |  |              |              |  |   |  |  |      |      |      |  |  |
| A \$  | B \$   | C \$   |  |              |              |  |   |  |  |      |      |      |  |  |
| 15228   | Concrete paving, kerb stones and the like.....   | 37.70  | 55.50  | 73.10        | 15228        |  |   |  |  |      |      |      |  |  |
| 15229   | Plastered or rendered vertical surfaces.....   | 39.10  | 56.50  | 75.30        | 15229        |  |   |  |  |      |      |      |  |  |
|   | <p><b>CHALKBOARD PAINT</b></p> <p>Prepare and apply chalkboard paint on the following surfaces :-</p>  |  |  |              |              |  |   |  |  |      |      |      |  |  |
|   |  |  | <table border="1"> <thead> <tr> <th>New surfaces</th> <th colspan="2">Redecoration</th> </tr> </thead> <tbody> <tr> <td>Two coats</td> <td>One coat</td> <td>Two coats</td> </tr> <tr> <td>A \$</td> <td>B \$</td> <td>C \$</td> </tr> </tbody> </table>   | New surfaces | Redecoration |  | Two coats   | One coat   | Two coats  | A \$ | B \$ | C \$ |  |  |
| New surfaces  | Redecoration   |  |  |              |              |  |   |  |  |      |      |      |  |  |
| Two coats   | One coat   | Two coats  |  |              |              |  |   |  |  |      |      |      |  |  |
| A \$  | B \$   | C \$   |  |              |              |  |   |  |  |      |      |      |  |  |
| 15230   | On surfaces of chalkboard paint.....   | 30.80  | 18.60  | 32.30        | 15230        |  |   |  |  |      |      |      |  |  |

Item

Item

**PROPRIETARY PAINTWORK SYSTEM**

(Note : - The following Items 15231 to 15255 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)

Proprietary hygienic coating system containing finely dispersed Polytetrafluoroethylene (PTFE) comprising primer, one base coat and two top coats, complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |

| Product properties  |   |
|---|---|
| Water based and ready to use surface coating                          |   |
| Easy to clean   |   |
| Fungicidal and prevention of most common bacteria and micro-organisms |   |
| Resistance to chemical and weathering / climatic attack               |   |
| Water and dust shedding abilities                                     |   |
| Inter-coat adhesion   |   |
| Environmental friendly, UV and yellowing resistance                   |   |
| Material characteristics  |   |
| Density   | 1,08 -1,18  |
| Application temperature   | (Includes substrate) 8 - 30 deg C                       |
| Maximum Relative Humidity   | 85%   |
| Volume Solids   | ca 35%  |
| Typical D.F.T.  | ca 40 microns per coat                                  |
| Theoretical Coverage  | 8-10 square metres per litre                            |
| Biocide Approvals   | EPA No's. 10466-27 and 6922-19-10466                    |
| Flash Point   | Not applicable. Waterborne.                             |
| Contains biocide  | Yes   |
| Micro-porous  | Yes   |
| Colour range  | BS4800  |
| Testing   |   |
| EEC Food Safety Regulation  | Complies to EEC 43/93 standards (CCFRA)                 |
| BS 476 Part 7 – Spread of Flame                                       | Class 1   |
| BS 148 Part 6 – Combustion  | Class 0   |
| BS 148 Part 6 – Impact Resistance                                     | Hammer test. Surface free from cracks and delamination. |
| ASTM D2486 – Abrasion Resistance                                      | Coating intact after 8,000 oscillations                 |
| BS 3900-E1 – Flexibility  | 1/4" bend test. Coating intact, free from crazing.      |
| BS 3900 – G6 – Bacterial Control                                      | Surface growth test. Surface free from growth.          |

**Per square metre**

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15231 | Proprietary hygienic coating system to tiled wall surfaces including tile filler..... | 187.80 | 212.00 | 15231 |
| 15232 | Ditto to plastered walls and soffits.....   | 163.70 | 186.80 | 15232 |

Proprietary hygienic coating system comprising water based primer using water dispersible organic polymers and water soluble amine resin blended with mix of pigments and fillers, and water-based epoxy coating of water dispersible epoxy resin combined with hydrophilic amin adducts, complying with the following properties in accordance with the manufacturer's recommendation : -

| Material characteristics and testing                 |                                     |
|--|-------------------------------------|
| Abrasion resistance ASTM D4060                       | 70 mg loss per 1000 cycles          |
| Bacteria resistance BS4618 Section 4.5               | Excellent                           |
| Dry heat resistance ASTM D248                        | 135°C (275°F)                       |
| Humidity resistance BS3900 Part F2                   | Unaffected 5,000 hours exposure     |
| Scratch resistance BS 3900 Part E2                   | No failure at 2.5 kg (5.5 lbs) load |
| Primer : Water vapour permeability ASTM D1653        | 2.767 x 10 <sup>-5</sup> perm.cm    |
| Epoxy coating : Water vapour permeability ASTM D1653 | 5.62 x 10 <sup>-6</sup> perm.cm     |

**Per square metre**

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15233 | Proprietary hygienic coating system to tiled wall surfaces including tile filler..... | 151.70 | 158.20 | 15233 |
|-------|---|--------|--------|-------|

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary acrylic coating system comprising acrylic emulsion resin sealer and acrylic resin water based topcoat, complying with the following properties in accordance with the manufacturer's recommendation : -

|   |   |
|---|---|
| <b>Product properties</b>   |   |
| Alkali resistant<br>Strong sealing and adhesion<br>Weathering resistant<br>Easy application |   |
| <b>Material characteristics and testing for acrylic emulsion resin sealer</b>               |   |
| Condition in container  | There shall be no lumps, no separation and no coagulation of the ingredients.   |
| Hardness  | H : Pencil scratch value  |
| Film appearance JIS K5400   | Little difference from samples JIS K5400.   |
| Water resistance JIS K5400  | Unchanged when immersed 96 hours in tap water   |
| Alkali proof JIS K5400  | Unchanged when immersed 48 hours in saturated solution of calcium hydroxide.  |
| Water permeability JIS A6909  | 0.3; in accordance with Water Permeability Test B Method. After still standing for 24 hours, calculated from the height of water head in the measuring pipette. |
| Adhesive strength : standard condition : JIS A 6910 5.8 1988                                | 199.9 N/cm <sup>2</sup>   |
| Adhesive strength : immersion in water JIS A 6910 5.8 1988                                  | 203.9 N/cm <sup>2</sup>   |
| Permeability JIS A 6910: 5.10 1988  | 0.05 ml   |
| <b>Material characteristics and testing for acrylic resin water based topcoat</b>           |   |
| Condition in container  | When agitated, absent of lumps and evenly mixed   |
| Graining (μ)  | 30  |
| Admixture   | Evenly mixed consistency  |
| Drying time (h)   | 1 Hour at 20°C  |
| Film appearance   | When observing the painted surface, the flatness shall be good, and there shall be no graining, wrinkles, unevenness, blisters, holes or peelings.              |
| Flexibility   | After still standing for 7 days, it shall withstand the flexure steer caused by a mandrel with 10mm diameter.   |
| Cross cut test  | It shall be 25/25   |
| Impact  | When dropping a 300 g weight from the height of 500 mm, the impact film surface shall have no cracks or peelings.   |
| Accelerated weathering  | The degree of change in colour is not so large when compared it with the standard products.   |
| Resistance to fungal growth to BS 3900  | G6 : Rating 0, no fungal growth   |
| Quantifying dirt collection ASTM D 3719-87  | Total dirt : 96.99%<br>Imbedded dirt : 94.48%   |

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 15234             | 15234         |
| 15235             | 15235         |

**Per square metre**

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15234 | Proprietary acrylic coating system to tiled wall surface including tile filler..... | 161.70 | 165.50 | 15234 |
| 15235 | Ditto to plastered walls and soffits.....   | 124.90 | 130.00 | 15235 |



Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary polyurethane resin based textured coating system comprising sealer, base coat and topcoat, complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 124.50            | 129.80        |
| 83.00             | 87.80         |

|   |  |  |
|---|--|--|
| <b>Product properties</b>                             |  |  |
| Cross-linked film with acrylic urethane resin         |  |  |
| Weather resistant                                     |  |  |
| Dirt resistant  |  |  |
| Mould, fungus, algae, etc. resistant                  |  |  |
| <b>Material characteristics</b>                       |  |  |
| Sealer  | Mixing ratio (wt %)<br>Coverage (kg/m <sup>2</sup> ) | pre-mixed<br>0.14 ~ 0.18   |
| Base coat   | Mixing ratio (wt %)                                  | 100%   |
|   | Coverage (kg/m <sup>2</sup> )                        | Water 0 ~ 5%<br>1.3 ~ 1.7  |
| Topcoat   | Mixing ratio (wt %)                                  | 100%   |
|   | Coverage (kg/m <sup>2</sup> )                        | Water 0 ~ 20%<br>0.30 ~ 0.35   |
| <b>Testing</b>  |  |  |
| Low temperature stability (-5°C) to JIS 5660          |  | No deterioration   |
| Application properties to JIS 5660                    |  | No application difficulties when applied twice.  |
| Drying Time (20°C) to JIS 5660                        |  | 2 hours or less  |
| Drying Time (5°C) to JIS 5660                         |  | 4 hours or less  |
| Appearance of film to JIS 5660                        |  | Film has normal appearance   |
| Opacity (white and tint) to JIS 5660                  |  | 0.95 or more   |
| Gloss to JIS 5660                                     |  | 70 or more   |
| Water resistance to JIS 5660                          |  | More than 80% gloss retention after 96 hour immersion; no abnormalities on film surface.   |
| Alkali resistance to JIS 5660                         |  | More than 65% gloss retention after 7 days immersion; no abnormalities on film surface.  |
| Salt water resistance to JIS 5660                     |  | 168 hours immersed in 3% sodium chloride solution.   |
| Wet scrub resistance to JIS 5660                      |  | Must pass 1,000 cycles   |
| Humidity and cool-heat cycling resistance to JIS 5660 |  | More than 80% gloss retention; no abnormalities on film surface.   |
| Fungus and mould resistance to JIS Z 2911             |  | Based on JIS Z 2911  |
| Accelerated weather resistance to JIS 5660            |  | More than 60% gloss retention after 480 hours test; degree of chalking is 8 points or more; negligible change in color when compared to sample.                      |
| Weather resistance to JIS 5660                        |  | Degree of chalking is 6 points or more under 12 months test; no cracking, swelling, holes, blistering; negligible change in color and gloss when compared to sample. |

**Per square metre**

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 15236 | Proprietary polyurethane resin based textured coating system to tiled wall surfaces including tile filler..... | 124.50 | 129.80 | 15236 |
| 15237 | Ditto to plastered walls and soffits.....  | 83.00  | 87.80  | 15237 |

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary vermiculite acoustic spray coating system of resin emulsion combined with lightweight vermiculite comprising primer coat and texture coat, complying with the following properties in accordance with the manufacturer's recommendation :-

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 118.80            | 127.90        |

|   |              |  |  |   |
|---|--------------|--|--|---|
| <b>Product properties</b>                             |              |  |  |   |
| Condensation resistant                                |              |  |  |   |
| Sound absorption                                      |              |  |  |   |
| Strong adhesion                                       |              |  |  |   |
| Alkali resistant                                      |              |  |  |   |
| Lightweight and easy workability                      |              |  |  |   |
| Performs humidity control                             |              |  |  |   |
| Non-combustible                                       |              |  |  |   |
| Fire and heat resistant                               |              |  |  |   |
| <b>Material characteristics</b>                       |              |  |  |   |
| <b>Primer coat</b>                                    |              |  |  |   |
| Texture coat  | Mixing ratio | 20 kg Colour coating and 66 litre aggregate<br>30 ~ 50% with water |  |   |
|   | Coverage     | 1.80 ~ 2.00 kg/m <sup>2</sup>                                      |  |   |
| <b>Finish</b>   |              |  |  |   |
| Matt  |              |  |  |   |
| <b>Specific gravity</b>                               |              |  |  |   |
| 1.22 ± 0.05   |              |  |  |   |
| <b>Drying time</b>                                    |              |  |  |   |
| Surface dry 6 hours                                   |              |  |  |   |
| Hard dry 24 hours                                     |              |  |  |   |
| <b>Shelf life</b>                                     |              |  |  |   |
| Up to 6 months if stored in tightly sealed containers |              |  |  |   |
| <b>Solid content</b>                                  |              |  |  |   |
| 44 ± 3%   |              |  |  |   |
| <b>Viscosity</b>                                      |              |  |  |   |
| 55 ± 5 ps / 30°C                                      |              |  |  |   |
| <b>Testing</b>  |              |  |  |   |
|   | Tested to    | Result   |  | Regulations   |
|   |              | Clear type   | Coloured type                                    |   |
| Alkali resistance Method C                            | JIS A 6906   | Passed   | Passed   | There shall be free from cracking, blister and peeling.   |
| Anti-condensation                                     | JIS A 6906   | 0.34 g   | 0.36 g   | 0.25 g minimum  |
| Humidity resistance Method B                          | JIS A 6906   | Passed   | Passed   | There shall be free from cracking, blister and peeling.   |
| Adhesive strength                                     | JIS A 6906   | 0.1 N/mm <sup>2</sup> {1.0 kgf/cm <sup>2</sup> }                   | 0.1 N/mm <sup>2</sup> {1.0 kgf/cm <sup>2</sup> } | 0.1 N/mm <sup>2</sup> {1.0 kgf/cm <sup>2</sup> } min. or no interfacial peeling (result: inside of substrate damaged) |
| Bonding property of aggregate                         | JIS A 6906   | Passed   | Passed   | Aggregate shall be free from peeling and scattering.  |
| Incombustibility                                      | JIS A 6906   | Passed   | Passed   | It shall the first grade in incombustibility of surface test.   |

*Per square metre*

15238

Proprietary vermiculite acoustic spray coating system to plastered walls and soffits.....

15238

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary elastic acrylic silicon resin colour coating system comprising sealer coat, textured base coat and textured pattern topcoat, complying with the following properties in accordance with the manufacturer's recommendation :-

| Product properties                           |  |   |                |                |
|--|--|---|----------------|----------------|
| Sealer                                       | Acrylic emulsion resin sealer<br>Alkali resistant<br>Sealing and adhesion on different substrates  |   |                |                |
| Topcoat                                      | Dust and dirt resistant<br>Fungus, Mould and algae resistant<br>Vapour permeable coating<br>Preventive of water prevention, carbonation damage and salt damage<br>Weather resistant<br>Fast drying |   |                |                |
| Material characteristics                     |  |   |                |                |
| Sealer                                       | Mixing ratio (wt %)  | 100%<br>Water 0 ~ 20%   |                |                |
|  | Coverage (kg/m <sup>2</sup> )  | 0.08 ~ 0.15   |                |                |
| Base coat                                    | Mixing ratio (wt %)  | Roller tile finish  | SP tile finish | Stipple finish |
|  |  | 100%  | 100%           | 100%           |
|  | Water 2 ~ 4%   | Water 2 ~ 4%  | Water 2 ~ 4%   |                |
| Topcoat                                      | Coverage (kg/m <sup>2</sup> )  | 0.6 ~ 0.8   | 0.5 ~ 0.7      | 0.4 ~ 0.5      |
|  | Mixing ratio (wt %)  | 100%  | 100%           | 100%           |
| Topcoat                                      | Coverage (kg/m <sup>2</sup> )  | Water 2 ~ 4%  | Water 2 ~ 4%   | Water 2 ~ 4%   |
|  |  | 0.6 ~ 0.8   | 0.5 ~ 0.7      | 0.4 ~ 0.5      |
| Testing to JIS A 6909                        |  |   |                |                |
| Stability at low temperature                 |  | There shall be no lump and separation and compacting of ingredients.                        |                |                |
| Crack resistance                             |  | No crack occurred on the surface.   |                |                |
| Adhesive strength - standard condition       |  | 275 N/cm <sup>2</sup>   |                |                |
| Adhesive strength - after immersion in water |  | 203.1 N/cm <sup>2</sup>   |                |                |
| Heating and cooling resistance               |  | There shall be no peeling off, crack, swell, remarkable discoloration, and gloss reduction. |                |                |
| Water permeability                           |  | 0.0 ml  |                |                |
| Impact resistance                            |  | There shall be no crack, peeling off and remarkable damage.                                 |                |                |
| Weather resistance                           |  | There shall be no crack, peeling off. The discoloration shall be below No. 3 of Grey Scale. |                |                |
| Elongation                                   | At 20°C  | 392 %   |                |                |
|  | At -10°C   | 25 %  |                |                |
|  | After immersion in water   | 314 %   |                |                |
|  | After heating  | 268 %   |                |                |
| Fungus and mould resistance                  |  | Compliant with JIS Z 2911   |                |                |
| Algae resistance                             |  | Using agar, there shall be no alga appearing.   |                |                |
| Vapour permeability (g/m <sup>2</sup> 24hrs) |  | 123 compliant with JIS Z 0208   |                |                |
| Following cracks                             |  | 0.6 mm based on zero expectation  |                |                |

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 105.50            | 107.30        |
| 71.20             | 76.40         |

*Per square metre*

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15239 | Proprietary elastic acrylic silicon resin colour coating system to tiled wall surfaces including tile filler..... | 105.50 | 107.30 | 15239 |
| 15240 | Ditto to plastered walls and soffits.....   | 71.20  | 76.40  | 15240 |

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary polyurethane coating system of polyurethane resin, water based and coloured finishing coating comprising sealer coat, textured base coat and textured pattern topcoat, complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 127.50            | 129.40        |
| 87.40             | 104.10        |

| Product properties                        |  |   |                |                |
|---|--|---|----------------|----------------|
| Sealer                                    | Acrylic emulsion resin sealer<br>Alkali resistant<br>Sealing and adhesion on different substrates  |   |                |                |
| Topcoat                                   | Dust and dirt resistant<br>Fungus, Mould and algae resistant<br>Vapour permeable coating<br>Preventive of water penetration carbonation damage and salt-damage<br>Weather resistant<br>Fast drying |   |                |                |
| Material characteristics                  |  |   |                |                |
| Sealer                                    | Mixing ratio (wt %)  | 100%<br>water 0 ~ 20%   |                |                |
|   | Coverage (kg/m <sup>2</sup> )  | 0.08 ~ 0.15   |                |                |
| Base coat                                 | Mixing ratio (wt %)  | Roller tile finish  | SP tile finish | Stipple finish |
|   |  | 100%  | 100%           | 100%           |
|   | Water 2 ~ 4%   | Water 2 ~ 4%  | Water 2 ~ 4%   |                |
| Coverage (kg/m <sup>2</sup> )             | 0.6 ~ 0.8  | 0.5 ~ 0.7   | 0.4 ~ 0.5      |                |
|   | Topcoat  | Mixing ratio (wt %)   | 100%           | 100%           |
| Water 2 ~ 4%                              |  | 100%  | 100%           |                |
| Coverage (kg/m <sup>2</sup> )             | 0.6 ~ 0.8  | 0.5 ~ 0.7   | 0.4 ~ 0.5      |                |
|   | Testing to JIS 5660  |   |                |                |
| Condition in container                    |  | Homogenize without any hard cake by stirring.   |                |                |
| Low temperature stability (-5°C)          |  | No change   |                |                |
| Application properties                    |  | No application difficulties when applied twice.   |                |                |
| Drying time                               |  | 58 minutes or less at 20°C  |                |                |
|   |  | 70 minutes or less at 5°C   |                |                |
| Appearance of film                        |  | No change in the appearance of paint film   |                |                |
| Opacity (white and tint)                  |  | 100 (=1)  |                |                |
| Gloss                                     |  | 87 or more  |                |                |
| Water resistance                          |  | 91.8% gloss retention after 96 hours immersion; no abnormalities on the film surface.   |                |                |
| Alkali resistance                         |  | 82.0% gloss retention after 7 days immersion; no abnormalities on the film surface.   |                |                |
| Salt water resistance                     |  | Unchanged after 3,000 hours test  |                |                |
| Wet scrub resistance                      |  | Pass 1,000 cycles   |                |                |
| Humidity and cool-heat cycling resistance |  | 82.4% gloss retention ; no abnormalities on the film surface.   |                |                |
| Fungus and mould resistance               |  | Passed based on JIS Z 2911  |                |                |
| Accelerated weather resistance            |  | 92% gloss retention after 480 hours test; degree of chalking is 8 points or more; negligible change in colour when compared to sample.                                |                |                |
| Weather resistance                        |  | Degree of chalking is 6 points or more under 12 months test; no cracking, swelling, holes, blistering; negligible change in colour and gloss when compared to sample. |                |                |

*Per square metre*

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15241 | Proprietary polyurethane coating system to tiled wall surfaces including tile filler..... | 127.50 | 129.40 | 15241 |
| 15242 | Ditto to plastered walls and soffits.....   | 87.40  | 104.10 | 15242 |

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary spray-on granite coating system comprising undercoat, mid-coat, topcoat and clear topcoat, complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 303.00            | 304.70        |
| 253.30            | 260.40        |

|                                    |                               |   |
|------------------------------------|-------------------------------|---|
| <b>Product properties</b>          |                               |   |
| Textured finish                    |                               |   |
| Water base finishing material      |                               |   |
| Weather resistant                  |                               |   |
| Dust and dirt resistant            |                               |   |
| Mildew and algae resistant         |                               |   |
| Matt / Semi-gloss finish           |                               |   |
| <b>Material characteristics</b>    |                               |   |
| Sealer                             | Dilution ratio (wt %)         | 100 %<br>Water 15% ~ 20%  |
|                                    | Coverage (kg/m <sup>2</sup> ) | 0.08 ~ 0.15   |
| Mid coat                           | Dilution ratio (wt %)         | 100 %<br>Water 3 ~ 5%   |
|                                    | Coverage (kg/m <sup>2</sup> ) | 0.4 ~ 0.5   |
| Topcoat                            | Dilution ratio (wt %)         | 100%  |
|                                    | Coverage (kg/m <sup>2</sup> ) | 0.7 ~ 0.8   |
| Clear topcoat                      | Dilution ratio (wt %)         | 100%  |
|                                    | Coverage (kg/m <sup>2</sup> ) | 0.3 ~ 0.4   |
| <b>Testing</b>                     |                               |   |
| Workability to JIS K 5660          |                               | There shall be no problem in application  |
| Drying time to JIS K 5660          |                               | 30 minutes  |
| Water resistance to JIS K 5660     |                               | No unusualness ; 82% gloss retention  |
| Alkali resistance to JIS K 5660    |                               | No unusualness ; 70% gloss retention  |
| Wet scrub resistance to JIS K 5660 |                               | Pass 1,000 cycles   |
| Weather resistance to JIS K 5660   |                               | After 12 month test degree of whitening is 4 points or more and there shall be no peeling and degree of cracking and colour change shall be not more than sample. |

*Per square metre*

|       |   |        |        |       |
|-------|---|--------|--------|-------|
| 15243 | Proprietary spray-on granite coating system to tiled wall surfaces including tile filler..... | 303.00 | 304.70 | 15243 |
| 15244 | Ditto to plastered walls and soffits.....   | 253.30 | 260.40 | 15244 |



Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary elastomeric acrylic waterproofing coating system comprising high strength primer / filler, one coat of acrylic alkali resisting primer and two coats of acrylic water resistance topcoat, complying with the following properties in accordance with the manufacturer's recommendation :-

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 141.50            | 143.90        |
| 116.30            | 121.90        |

|   |   |
|---|---|
| <b>Product properties</b>   |   |
| Good hardness and dynamic anti-crack property                             |   |
| Strong adhesion and protection  |   |
| Good hiding power   |   |
| Good light fastness   |   |
| Good water resistant  |   |
| Alkali resistant  |   |
| Fungus and algae resistant  |   |
| Quick drying  |   |
| <b>Material characteristics</b>   |   |
| Primer / filler :   | High strength primer / filler consists of silicate, curing agent, fillers and additives                     |
| Finish  | Non-flat  |
| Volume solid  | 34%   |
| Flash point   | None  |
| Primer :  | Acrylic Alkali Resisting Primer consists of acrylic copolymer emulsion additives and water                  |
| Finish  | Glossy  |
| Volume solid  | 25%   |
| Flash point   | None  |
| Topcoat :   | Acrylic Water Resistance Paint consists of acrylic copolymer emulsion, pigments, fillers and additives etc. |
| Finish  | Flat  |
| Volume solid  | 37%   |
| Theoretical spreading rate  | 11.0 m / Ltr (1 coat on flat system)  |
| Practical spreading rate  | 6.0 m / Ltr (1 coat on textured primers)  |
| Flash point   | None  |
| <b>Testing</b>  |   |
| Condition in container to JIS K5660                                       | Uniform condition without hard lumps, when mixed.   |
| Application properties to JIS K5660                                       | No application difficulties when applied twice.   |
| Low temperature stability (-5°C) to JIS K5660                             | No deterioration  |
| Drying time to BS EN ISO 9117-3   | 20° C<br>30 minutes   |
| Water resistance to BS EN ISO 2812-2                                      | After immersion tap water for 96 hours, no abnormalities on the film surface.                               |
| Alkaline resistance to JIS K5660  | After immersed in saturated calcium hydroxide solution for 48 hours, no abnormalities on the film surface.  |
| Humidity and cool-heat cycling resistance to JIS K5660                    | no abnormalities on the film surface.   |
| Contrast ratio (hiding power) to BS EN ISO 2814                           | 96  |
| Washability to SS5 : Part 5   | Pass 10000 times  |
| Quantifying dirt collection to ASTM C3719-00                              | <5%   |
| Accelerated weather resistance for 1000 hours to ASTM G154-06 & GB/T 1766 | Chalking - Class 1<br>Discoloration - Class 1   |
| Outlook status to GB/T 1766   | No blistering, no peeling off and no cracks.  |

**Per square metre**

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 15248 | Proprietary elastomeric acrylic waterproofing coating system to tiled wall surfaces including tile filler..... | 141.50 | 143.90 | 15248 |
| 15249 | Ditto to plastered walls and soffits.....  | 116.30 | 121.90 | 15249 |

Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary waterproofing coating system comprising water based acrylic co-polymer waterproof membrane with high quality pigmentation complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |
| 143.40            | 148.20        |
| 109.90            | 113.30        |

| Product properties   |   |
|--|---|
| Weathering resistant   |   |
| CO <sub>2</sub> resistant  |   |
| High opacity   |   |
| Testing  |   |
| Carbon dioxide transmission (Klopfer criterion R > 50 m)   | 222 m   |
| Water vapour diffusion resistance (Klopfer criterion SD < 4 m)   | 1.38 Sd cm  |
| Water permeability-ASTM E514-08  | Class E (Highest resistance to water penetration)                                   |
| Acoustic dampening : 500 micron sample on Lysaght "Custom Orb" 26 gauge thickness corrugated steel sheet | Effective noise reduction : 2.5 dB  |
| Chemical resistance  | Unaffected by a range of mild acids, alkalis, and is resistant to bio-deterioration |

**Per square metre**

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 15250 | Proprietary waterproofing coating system to tiled wall surfaces including tile filler..... | 143.40 | 148.20 | 15250 |
| 15251 | Ditto to plastered walls and soffits.....  | 109.90 | 113.30 | 15251 |



Item

Item

**PROPRIETARY PAINTWORK SYSTEM (CONT'D)**

Proprietary mineral silicate based coating system complying with the following properties in accordance with the manufacturer's recommendation : -

| Prepare and apply |               |
|-------------------|---------------|
| New surfaces      | Redeco-ration |
| A                 | B             |
| \$                | \$            |

| Product properties  |  |
|---|--|
| Binder : Combination of silica sol and water glass (sol-silicate)                       |  |
| Direct and multi-purpose application to existing exterior surfaces without priming coat |  |
| Multi purpose application   |  |
| UV and acid resistant, anti-static  |  |
| High weathering resistance  |  |
| Alkaline, non-flammable   |  |
| Lightfast   |  |
| Mineral matt  |  |
| Water vapour permeable, non film forming and micro-porous                               |  |
| Highly water repellent  |  |
| No solvents and plasticizers added  |  |
| Resists algal and fungal growth   |  |
| Material characteristics  |  |
| Specific Weight : approx. 1.6g/cm <sup>3</sup>  |  |
| pH value : approx. 11   |  |
| Testing according to DIN EN 1062-1, ASTM E96, ASTM G154 and ASTM E514                   |  |
| Water vapour diffusion density  | V ≥ 2000g/m <sup>2</sup> d                 |
| Diffusion-equivalent air layer thickness  | S <sub>d</sub> ≤ 0.01 m                    |
| Water permeability rate (24h)   | w < 0.1 kg/m <sup>2</sup> h <sup>0.5</sup> |
| Gloss   | At 85° : 1.5                               |

**Per square metre**

|       |  |        |        |       |
|-------|--|--------|--------|-------|
| 15252 | Proprietary mineral silicate based coating system..... | 102.60 | 108.00 | 15252 |
|-------|--|--------|--------|-------|

**Per linear metre**

|       |                                 |       |       |       |
|-------|---------------------------------|-------|-------|-------|
| 15253 | Surfaces n.e. 150 mm girth..... | 19.30 | 20.30 | 15253 |
|-------|---------------------------------|-------|-------|-------|

|       |                                   |       |       |       |
|-------|-----------------------------------|-------|-------|-------|
| 15254 | Ditto but 150 - 300 mm girth..... | 38.70 | 40.70 | 15254 |
|-------|-----------------------------------|-------|-------|-------|

**Each**

|       |   |       |       |       |
|-------|---|-------|-------|-------|
| 15255 | Small isolated article n.e. 0.01 m <sup>2</sup> ..... | 16.50 | 17.40 | 15255 |
|-------|---|-------|-------|-------|

Sundries

**Per square metre**

|       |  |  |                  |       |
|-------|--|--|------------------|-------|
| 15256 | Supply and apply 2 coats proprietary tile filler to tiled surface including cleaning all dirt, dust and efflorescence on existing surface..... |  | A<br>\$<br>62.10 | 15256 |
|-------|--|--|------------------|-------|

**Per linear metre**

|       |   |  |       |       |
|-------|---|--|-------|-------|
| 15257 | Supply and apply proprietary pattern sticker in any width to the designated pattern as stipulated by Maintenance Surveyor, including setting out, fixing and removal..... |  | 41.50 | 15257 |
|-------|---|--|-------|-------|

(Note : - The above Items 15256 to 15257 inclusive will only be paid for, if ordered by Maintenance Surveyor in writing.)



| Item              |  |        |   | Item  |                   |  |             |              |         |         |
|-------------------|--|--------|---|-------|-------------------|--|-------------|--------------|---------|---------|
|                   | <b>PROPRIETARY PROTECTIVE COATING SYSTEM TO FAIR-FACE CONCRETE</b>   |        |   |       |                   |  |             |              |         |         |
|                   | (Note : - The following Items 15264 to 15265 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)  |        |   |       |                   |  |             |              |         |         |
|                   | Proprietary colorless protective coating system (Type A) of silane-based (isobutyl-triethoxy-silane) water repellent material comprising primer coat and surface treatment, impregnation coating and top coat, on fair-face concrete surfaces; complying with BS EN 1504-2, all in accordance with the manufacturer's instructions : -   |        |   |       |                   |  |             |              |         |         |
|                   | <i>Per square metre</i>  |        | A<br>\$   |       |                   |  |             |              |         |         |
| 15264             | On walls.....  | 95.60  |   | 15264 |                   |  |             |              |         |         |
|                   | Proprietary translucent protective coating system (Type B) of mineral silicate paint (or mineral sol-silicate paint) water repellent material comprising primer coat and surface treatment, one base coat, intermediate coat and top coat, on fair-face concrete surfaces; complying with DIN 18363 and BS EN 1504-2, all in accordance with the manufacturer's instructions : - |        |   |       |                   |  |             |              |         |         |
|                   | <i>Per square metre</i>  |        | A<br>\$   |       |                   |  |             |              |         |         |
| 15265             | On walls.....  | 128.20 |   | 15265 |                   |  |             |              |         |         |
|                   | <b>PROPRIETARY PAINTWORK TO SPORT HALL FLOORING SYSTEM</b>   |        |   |       |                   |  |             |              |         |         |
|                   | Proprietary paintwork to sport hall flooring system all in accordance with the manufacturer's recommendations : -  |        |   |       |                   |  |             |              |         |         |
|                   | <i>Per square metre</i>  |        | <table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Prepare and apply</th> </tr> <tr> <th>New surface</th> <th>Redecoration</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> </tr> </tbody> </table> |       | Prepare and apply |  | New surface | Redecoration | A<br>\$ | B<br>\$ |
| Prepare and apply |  |        |   |       |                   |  |             |              |         |         |
| New surface       | Redecoration   |        |   |       |                   |  |             |              |         |         |
| A<br>\$           | B<br>\$  |        |   |       |                   |  |             |              |         |         |
| 15266             | General surface.....   | 41.00  | 51.10   | 15266 |                   |  |             |              |         |         |
|                   | Proprietary line marking to sport hall flooring system all in accordance with the manufacturer's recommendations : -   |        |   |       |                   |  |             |              |         |         |
|                   | <i>Per linear metre</i>  |        |   |       |                   |  |             |              |         |         |
| 15267             | Line not exceeding 25 mm wide.....   | 27.00  | 33.30   | 15267 |                   |  |             |              |         |         |
| 15268             | Ditto but 25 - 50 mm wide.....   | 30.30  | 39.70   | 15268 |                   |  |             |              |         |         |
| 15269             | Ditto but 50 - 75 mm wide.....   | 34.00  | 44.80   | 15269 |                   |  |             |              |         |         |

| Item      |   |  | Item      |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|-----------|---|--|-----------|------------------------|---------------------|---------|---------|---------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|           | <b>RE-ENAMEL PAINT ON SURFACE OF BATH TUB</b>   |  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | Prepare and apply re-enamel paint on the following : -  |  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | <i>Per number</i>   | A<br>\$  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15270     | Exposed surfaces of bath tub of any sizes and any type.....   | 736.80   | 15270     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | <b>WRITING</b>  |  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | Mark out and paint the following letters, etc., in one or more thick coats of synthetic paint as necessary to obtain bold and solid result, free from brush marks or obliterate existing including scraping or stripping off letter and touching up paint to match general surface (in the case of repaint over or obliterate existing writing, not measurable if surrounding surface being re-painted) : - |  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | <i>Each</i>   |  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           |   | <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:33%; text-align:center;">Paint new</th> <th style="width:33%; text-align:center;">Re-paint over existing</th> <th style="width:33%; text-align:center;">Obliterate existing</th> </tr> <tr> <th style="text-align:center;">A<br/>\$</th> <th style="text-align:center;">B<br/>\$</th> <th style="text-align:center;">C<br/>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align:right;">7.20</td> <td style="text-align:right;">8.40</td> <td style="text-align:right;">4.90</td> </tr> <tr> <td style="text-align:right;">5.60</td> <td style="text-align:right;">6.90</td> <td style="text-align:right;">7.90</td> </tr> <tr> <td style="text-align:right;">8.70</td> <td style="text-align:right;">9.50</td> <td style="text-align:right;">10.50</td> </tr> <tr> <td style="text-align:right;">11.60</td> <td style="text-align:right;">16.50</td> <td style="text-align:right;">11.30</td> </tr> <tr> <td style="text-align:right;">14.00</td> <td style="text-align:right;">17.00</td> <td style="text-align:right;">18.20</td> </tr> <tr> <td style="text-align:right;">11.20</td> <td style="text-align:right;">12.70</td> <td style="text-align:right;">12.00</td> </tr> <tr> <td style="text-align:right;">22.20</td> <td style="text-align:right;">26.30</td> <td style="text-align:right;">25.10</td> </tr> <tr> <td style="text-align:right;">34.70</td> <td style="text-align:right;">39.00</td> <td style="text-align:right;">46.60</td> </tr> </tbody> </table> | Paint new | Re-paint over existing | Obliterate existing | A<br>\$ | B<br>\$ | C<br>\$ | 7.20 | 8.40 | 4.90 | 5.60 | 6.90 | 7.90 | 8.70 | 9.50 | 10.50 | 11.60 | 16.50 | 11.30 | 14.00 | 17.00 | 18.20 | 11.20 | 12.70 | 12.00 | 22.20 | 26.30 | 25.10 | 34.70 | 39.00 | 46.60 |  |
| Paint new | Re-paint over existing  | Obliterate existing  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| A<br>\$   | B<br>\$   | C<br>\$  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 7.20      | 8.40  | 4.90   |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 5.60      | 6.90  | 7.90   |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 8.70      | 9.50  | 10.50  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 11.60     | 16.50   | 11.30  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 14.00     | 17.00   | 18.20  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 11.20     | 12.70   | 12.00  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 22.20     | 26.30   | 25.10  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 34.70     | 39.00   | 46.60  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15271     | Letter, number, Chinese character, logo, symbol and the like, n.e. 25 mm high.....  |  | 15271     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15272     | Ditto but 25 - 75 mm high.....  |  | 15272     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15273     | Ditto but 75 - 150 mm high.....   |  | 15273     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15274     | Ditto but 150 - 225 mm high.....  |  | 15274     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15275     | Ditto but 225 - 300 mm high.....  |  | 15275     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15276     | Index hand or arrow n.e. 300 mm long.....   |  | 15276     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15277     | Ditto but 300 - 600 mm long.....  |  | 15277     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 15278     | Ditto but 600 - 900 mm long.....  |  | 15278     |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|           | Extra over either of Items 15271 to 15278 inclusive for gold gilding in lieu of synthetic paint.....  | 50%  |           |                        |                     |         |         |         |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |

| Item  |   |                                 |                      | Item                    |       |
|-------|---|---------------------------------|----------------------|-------------------------|-------|
|       | <b>PAPER HANGING</b>  |                                 |                      |                         |       |
|       | Supply and fix approved wall paper : -  | Plain fabric backed vinyl cloth | Textured vinyl cloth | Vinyl with paper backed |       |
|       | <i>Per square metre</i>   | A \$                            | B \$                 | C \$                    |       |
| 15279 | Wall paper to plastered surfaces.....   | 57.70                           | 77.40                | 36.00                   | 15279 |
| 15280 | Ditto but to gypsum plasterboard surfaces.....  | 59.60                           | 76.80                | 33.70                   | 15280 |
| 15281 | Ditto but to plywood surfaces.....  | 58.70                           | 73.90                | 33.70                   | 15281 |
| 15282 | Wall paper of self-adhesive type to plastered surfaces.....   | 64.00                           | 88.20                | 33.20                   | 15282 |
| 15283 | Ditto but to gypsum plasterboard surfaces.....  | 55.90                           | 84.60                | 31.50                   | 15283 |
| 15284 | Ditto but to plywood surfaces.....  | 55.90                           | 84.60                | 31.50                   | 15284 |
| 15285 | Hang only to plastered surfaces.....  | 22.60                           | 22.60                | 22.60                   | 15285 |
| 15286 | Ditto but to gypsum plasterboard surfaces.....  | 22.30                           | 22.30                | 22.30                   | 15286 |
| 15287 | Ditto but to plywood surfaces.....  | 20.90                           | 20.90                | 20.90                   | 15287 |
| 15288 | Hang only wall paper of self-adhesive type to plastered surfaces.....   | 17.80                           | 17.80                | 17.80                   | 15288 |
| 15289 | Ditto but to gypsum plasterboard surfaces.....  | 14.90                           | 14.90                | 14.90                   | 15289 |
| 15290 | Ditto but to plywood surfaces.....  | 14.90                           | 14.90                | 14.90                   | 15290 |
|       | <b>MISCELLANEOUS ITEMS</b>  |                                 |                      |                         |       |
|       | <i>Per square metre</i>   |                                 |                      | A \$                    |       |
| 15291 | Completely strip off existing washable distemper, anti-mould washable distemper, plastic emulsion paint, anti-mould acrylic emulsion paint, textured emulsion paint, cement paint, textured cement paint, cold cure epoxy paint and polyurethane paint by scraping or other approved means .....  |                                 |                      | 16.30                   | 15291 |
| 15292 | Completely strip off existing synthetic, metallic, heat resisting, polyurethane or similar type of paint or varnish (any number of coats) or lacquer on any surface by scraping combined with burning off, or using chemical solvents if necessary, and leaving surface bare and clean, including washing down with neutralizing solution if chemical solvents have been used ..... |                                 |                      | 18.50                   | 15292 |
| 15293 | Completely strip off existing wall paper by scraping or other approved means (not measurable if backing being removed in the same operation).....   |                                 |                      | 10.60                   | 15293 |
| 15294 | Extra over painting of any description for applying first or any subsequent coat by means of electrical or petrol driven compressed spraying plant, including all masking, etc., when specifically ordered in writing .....   |                                 |                      | 1.60                    | 15294 |
|       | (This item will not be paid for, if requested by the Contractor and is permitted to execute painting by spraying.)  |                                 |                      |                         |       |
| 15295 | Stipple last coat of paint of any description on any surface when specifically ordered in writing.....  |                                 |                      | 12.80                   | 15295 |
| 15296 | Frost glass with one coat of paint to imitate ground glass (glazing bars not deducted).....   |                                 |                      | 18.40                   | 15296 |
| 15297 | Wash down new or existing surface with anti-mould liquid before decorating or re-decorating.....  |                                 |                      | 6.90                    | 15297 |
| 15298 | Prepare new or existing wall or ceiling surface and apply one liberal coat of silicone water repellent liquid.....  |                                 |                      | 22.90                   | 15298 |
| 15299 | Ditto but two coats ditto.....  |                                 |                      | 29.50                   | 15299 |

| Item   |  |         | Item  |
|--|--|---------|-------|
| <b>HIGH PRESSURE WATER JET CLEANING</b>  |  |         |       |
| (Note : - The following Items 15300 to 15303 inclusive shall only be paid for, if ordered by the Maintenance Surveyor in writing. Normal cleaning up and removal of paint stains, etc., after execution of decoration or any other work, have been allowed for in the rates throughout this Schedule.) |  |         |       |
|  |  | A<br>\$ |       |
| 15300  | Clean fair-face concrete, either bare surfaces or surfaces with protective coating, or painted surfaces, and remove stains with water applied using high pressure washer or high pressure water jet.....   | 7.60    | 15300 |
| 15301  | Add to Item 15300 for using proprietary multi-purpose cleansing agent all in accordance with the manufacturer's instructions.....  | 1.10    | 15301 |
| 15302  | Clean stonework or Shanghai plaster with approved chemical stone cleaning solution and thoroughly wash off with water applied using high pressure water jet.....   | 9.10    | 15302 |
| 15303  | Seal cleaned stonework or Shanghai plaster with approved chemical stone sealer and thoroughly wash off surplus with water applied using high pressure water jet.....   | 11.80   | 15303 |
| <b>SUNDRY CLEANING AND SEALING ITEMS</b>   |  |         |       |
| (Note : - The following Items 15304 to 15314 inclusive shall only be paid for, if ordered by the Maintenance Surveyor in writing. Normal cleaning up and removal of paint stains, etc., after execution of decoration or any other work, have been allowed for in the rates throughout this Schedule.) |  |         |       |
|  |  | A<br>\$ |       |
| 15304  | Thoroughly scrub and wash down surfaces of Shanghai plaster in any position with stiff hard bristle brushes and detergent in hot or cold water, and rinse down with fresh water and leave clean and free from dirt, stains and the like .....  | 8.90    | 15304 |
| 15305  | Scrub clean existing terrazzo or rubbed granolithic paving, covering, skirting, etc., in any position with non-caustic fine scouring powder and water, and rinse down with fresh water .....   | 13.80   | 15305 |
| 15306  | Add to Item 15305 for rubbing with carborandum blocks.....   | 18.50   | 15306 |
| 15307  | Apply one coat of wax emulsion to surfaces of terrazzo or rubbed granolithic after cleaning.....   | 9.60    | 15307 |
| 15308  | Clean surfaces of thermo-plastic, vinyl, cork and similar flooring with detergent in water including scrubbing with soft bristle brushes if necessary, and mopping over surface with damp mop afterwards .....   | 3.90    | 15308 |
| 15309  | Apply one coat of wax emulsion to surfaces of thermo-plastic, vinyl, cork and similar flooring after cleaning, and buff up.....  | 2.90    | 15309 |
| 15310  | Sweep surface of cork flooring clean and apply two coats of approved sealer.....   | 7.30    | 15310 |
| 15311  | Scrub and clean surfaces of glazed or mosaic wall or floor tiling with solution of warm water and 10% hydrochloric or oxalic acid, and rinse with fresh water.....   | 4.40    | 15311 |
| 15312  | Scrub and clean surfaces of vitreous or glass mosaic tiles in any position with approved cleaning solution, rinse down with fresh water.....   | 5.60    | 15312 |
| 15313  | Clean down synthetic painted or varnished surfaces with soft soap or suitable detergent and water, with admixture of disinfectant if required, and dry off with wash leather.....  | 5.10    | 15313 |
| 15314  | Scrub and clean surfaces of efflorescence contamination with approved organic acid detergent, remove the fixed contamination by brushing including clean by water jet and applying one coat of water-borne silicone resin glass-membrane type coating on top of the existing facing tiles..... | 108.50  | 15314 |

| Item   | Item   |
|--|--------|
| <b>SUPPLY ONLY OF MATERIALS</b>                                    |        |
| <i>Per litre</i>   |        |
| 15315  | 15315  |
| Emulsion paint.....  | 24.80  |
| 15316  | 15316  |
| Textured emulsion paint.....                                       | 37.20  |
| 15317  | 15317  |
| Cold cured epoxy paint (coloured) (Two pack type).....             | 58.20  |
| 15318  | 15318  |
| External textured paint.....                                       | 36.40  |
| 15319  | 15319  |
| Anti-mould acrylic emulsion paint.....                             | 45.20  |
| 15320  | 15320  |
| Multi-colour paint - Primer.....                                   | 52.90  |
| 15321  | 15321  |
| Ditto - binder.....  | 58.10  |
| 15322  | 15322  |
| Ditto - Finishing coat.....  | 119.40 |
| 15323  | 15323  |
| Synthetic paint - Undercoat.....                                   | 34.10  |
| 15324  | 15324  |
| Ditto - Gloss finishing coat.....                                  | 36.30  |
| 15325  | 15325  |
| Metallic paint - Aluminium bright finish.....                      | 69.10  |
| 15326  | 15326  |
| Ditto - Copper alloy bronze finish.....                            | 69.10  |
| 15327  | 15327  |
| Non-toxic paint.....   | 83.20  |
| 15328  | 15328  |
| Polyurethane paint (coloured) (Two pack type).....                 | 78.00  |
| 15329  | 15329  |
| Polyurethane paint (clear) (Ditto).....                            | 78.00  |
| <i>Per square metre</i>  |        |
| 15330  | 15330  |
| Wall paper - Vinyl with paper backed.....                          | 19.60  |
| 15331  | 15331  |
| Ditto - Vinyl with paper backed of self-adhesive type.....         | 18.40  |
| 15332  | 15332  |
| Ditto - Plain fabric backed vinyl cloth.....                       | 35.50  |
| 15333  | 15333  |
| Ditto - Plain fabric backed vinyl cloth of self-adhesive type..... | 41.10  |
| 15334  | 15334  |
| Ditto - Textured vinyl cloth.....                                  | 50.90  |
| 15335  | 15335  |
| Ditto - Textured vinyl cloth of self-adhesive type.....            | 89.30  |

**Section 16**

**REPAIRS AND ALTERATIONS TO SPECIALTY WORKS**



## SECTION 16

### REPAIRS AND ALTERATIONS TO SPECIALTY WORKS

#### SPECIAL CONDITIONS

**Measurement  
of repairs  
and alterations  
generally**

- SC16.01** This Section contains composite items for repairs and alterations to specialty works which will only be measured and paid for using rates of this Section provided that the following conditions are met : -
- (a) The Maintenance Surveyor specifically orders that the repairs and alterations to specialty works shall be executed by specialist's skilled labourers or tradesmen in the manner and method as recommended and accepted by the manufacturers;
  - (b) Submission of documentary evidence from the manufacturers of the proprietary systems / products of the specialty works to the Maintenance Surveyor demonstrating their compliance with the manufacturer's recommendations as stated in item (a) above; and
  - (c) Submission of the proprietary systems / products for the repair and alteration works, and/or the method statements of taking down, setting aside, repairs, alterations and re-fixing or re-installation of the proprietary systems / products shall be in accordance with the requirements as set out in the Specification; and in the absence of any specific requirements, then the manufacturer's recommended methods. All proprietary systems / products and/or method statements shall be approved by the Maintenance Surveyor prior to commencement of works.

No measurement and payment shall be made under this Section if the repair to the proprietary system / product is resulted from any of the cause(s) that is(are) covered under the product warranty of the said system / product during the warranty period.

- SC16.02** All repair and alteration items under this Section shall be measured as finished work in place unless specifically provided otherwise.
- All composite items in this Section shall be measured as a whole item and shall not be broken down and measured in constituent components, and rates for any constituent components in the composite items that could be found in other Sections of the Schedule shall not be permitted to apply to the valuation of the composite items, unless with the written approval of the Maintenance Surveyor.

**Measurement  
of concrete  
repair by patch  
repair**

- SC16.03** The area for concrete repair by patch repair shall be measured as net area over the cracked, spalled or bulged surface and agreed by the Maintenance Surveyor.
- Where the shortest distance between two isolated patches does not exceed 300 mm, the total area of these isolated patches shall be added together and measured as one whole patch area.
- No deduction shall be made for any voids not exceeding 0.50 m<sup>2</sup>.

**SPECIAL CONDITIONS**

|   |                         |  |
|---|-------------------------|--|
| <b>Measurement of concrete repair by patch repair (Cont'd)</b>                                  | <b>SC16.03 (Cont'd)</b> | Where specifically instructed by the Maintenance Surveyor, finishing the repaired surfaces with rendering or tiles or repainting the affected areas shall be measured and valued separately under Section 11 - Plastering and Finishes or Section 15 - Painting.   |
| <b>Measurement of concrete repair by chemical injection</b>                                     | <b>SC16.04</b>          | Injection type of concrete repair work shall be measured the net length of the crack where drillholes or injection ports are placed along the crack (crack exceeding 150 mm long) at 150 - 200 mm centres. Only crack with drillhole(s) or port(s) placed along shall be measured. The net length of crack n.e. 200 mm shall only be measured when at least one drillhole or port is placed along the crack. All continuous cracks without any drillhole or port shall deem to be covered by the measurement of the crack with drillhole(s) or port(s).  |
| <b>Measurement of patch repair of proprietary roofing system and floor waterproofing system</b> | <b>SC16.05</b>          | <p>The area for patch repair to proprietary roofing system and floor waterproofing system shall be measured net over the exposed finished top surface of the patch to be repaired.</p> <p>No deduction shall be made for any voids and openings not exceeding 0.50 m<sup>2</sup>.</p> <p>Measurement of patch repair under this Section shall not apply in the case of complete re-application of new roofing and floor waterproofing of which the measurement shall be made under Section 07 - Roofing and Waterproofing.</p>   |
| <b>Measurement of repair to proprietary solid surfacing materials</b>                           | <b>SC16.06</b>          | Repair to proprietary solid surfacing materials shall be measured as the net plane area of the damaged surfacing to be replaced, or minor cracks and scratches at surfacing to be re-finished, both inclusive of fittings. The area to be measured shall be identified using marked out photographic record and agreed by the Maintenance Surveyor. The area of any bullnose and inlay shall not be measured. No deduction shall be made for voids and openings not exceeding 0.50 m <sup>2</sup> .  |
| <b>Rates for concrete repair by patch repair</b>  | <b>SC16.07</b>          | <p>The rates for concrete repair by patch repair shall include for : -</p> <ol style="list-style-type: none"> <li>(a) Submission of method statement supported by drawings showing different phases of repair works and details of the temporary works employed.</li> <li>(b) Submission of the product information of the proposed Repair Mortar System (RMS) to be used including relevant test certificates showing compliance with the material requirements of the Contract.</li> <li>(c) Marking out of the identified areas of bulged, spalled or cracked concrete to be repaired and obtaining agreement of the Maintenance Surveyor prior to commencement of repair work.</li> <li>(d) Preparation of a sample area to be patch repaired.</li> <li>(e) Hacking back defective concrete areas and cutting back all loose or defective concrete including saw cutting into the required depth and into neat rectangular shape, to the extent as given in the Contract and as directed by the Maintenance Surveyor.</li> </ol> |

## SPECIAL CONDITIONS

**Rates for  
concrete repair  
by patch repair  
(Cont'd)**

**SC16.07  
(Cont'd)**

- (f) Preparation of concrete substrate after breaking out defective concrete, roughening surfaces to expose aggregate of concrete areas and removing loose materials, ready to receive repair mortar.
- (g) Applying admixtures for use in any type of mortar complying with B.S. 4887 Pt.2: 1987, B.S. 5075 Pt. 1: 1982, B.S. 5075 Pt.3: 1985 or other approved standards.
- (h) Applying curing compound to the repair mortar in accordance with the manufacturer's instructions.
- (i) Applying approved epoxy resin, polyesters or cementitious based material as grout to dowel bar installation.
- (j) Preparation and cleaning of exposed lengths of existing steel reinforcement using one of the cleaning methods as given in the Contract and as directed by the Maintenance Surveyor.
- (k) Applying primer and bond coat to concrete substrate and steel reinforcement.
- (l) Preparing and applying the RMS in accordance with the manufacturer's instructions.
- (m) Carrying out tests all in accordance with the Specification as adopted in the Contract by the PWL/AL and submission of test reports as General Regulations Clause GR.10(m).
- (n) Submission of repair records upon completion.
- (o) Making good repaired surfaces and affected areas to match existing or to prepare the surfaces for receiving finishes or paint works when separately instructed by the Maintenance Surveyor.

**Rates for  
concrete repair  
by chemical  
injection**

**SC16.08**

The rates for concrete repair by chemical injection shall include for : -

- (a) Provision of a competent full time site supervisor of minimum 3 years of experience of concrete repair by chemical injection.
- (b) Submission of method statement supported by a proposal of field trial testing, controlling attributes on suitability and injectability of the proposed chemical injection system, and details of the temporary works employed together with drawings and calculations.
- (c) Submission of the product information of the proposed chemical injection system to be used including relevant test certificates showing compliance with the material requirements of the Contract, material safety data sheets showing hazards of the materials and control measures and other information as required.
- (d) Marking out the locations and extent of cracks to be repaired and obtaining agreement of the Maintenance Surveyor prior to commencement of repair work.
- (e) Preparation of cracks by removing all loose debris by brushing or blowing out with clean compressed air, removing all defective concrete, and making good all reinforcing bars before injection.

## SPECIAL CONDITIONS

**Rates for  
concrete repair  
by chemical  
injection  
(Cont'd)**

**SC16.08  
(Cont'd)**

- (f) Carrying out drilling of injection holes into concrete and applying the chemical injection in accordance with the manufacturer's instructions.
- (g) Carrying out tests all in accordance with the Specification as adopted in the Contract by the PWL/AL and submission of test reports as General Regulations Clause GR.10(m).
- (h) Submission of repair records upon completion.
- (i) Making good repaired surfaces and affected areas to match existing including repairing existing finishes or repainting.

**Rates for  
patch repair to  
proprietary  
roofing system  
and floor  
waterproofing  
system**

**SC16.09**

The rates for patch repair to proprietary roofing system and floor waterproofing system shall include for : -

- (a) Carrying out the repairs in patches or isolated areas.
- (b) Roofing or waterproofing to flat, sloping or curved roofs or floors.
- (c) Inspection, preparing, cleaning and drying surfaces including removing all contaminants, dusts, loose stones, debris and the like.
- (d) Dressing to sides or ends of upstands, gutters, flashings, skirtings, edge coverings, steps and the like, including angles, junctions, turn-in edges, welded drips and the like all in accordance with the manufacturer's instructions.
- (e) Making good surfaces of substrate including filling cracks with bitumen emulsion or any other materials recommended by the manufacturer's recommendations.
- (f) Carrying out the necessary tests in accordance with the Specification and/or the manufacturer's recommendation, all to the satisfaction of the Maintenance Surveyor.
- (g) Replacement of roofing and floor waterproofing installation if failing in the non-destructive test.
- (h) Providing protective boarding in accordance with the manufacturer's instructions, if required.
- (i) Providing all reports and maintenance manuals upon completion.

**Rates for  
repair to  
proprietary  
solid surfacing  
materials**

**SC16.10**

The rates for repair to proprietary solid surfacing materials shall include for : -

- (a) Marking out the identified areas of solid surfacing materials to be replaced or refinished and obtaining agreement of the Maintenance Surveyor prior to commencement of repair work.
- (b) Carrying out the repairs in patches and isolated areas.

## SPECIAL CONDITIONS

**Rates for repair to proprietary solid surfacing materials (Cont'd)**

**SC16.10**  
**(Cont'd)**

- (c) For repair of damaged solid surfacing materials, cutting out and removing the damaged material including removal of all debris, dusts and the like, followed by cleaning the surfaces and re-filling or replacement with new compatible solid surfacing material of the same colour and pattern including bonding and jointing materials recommended by the manufacturer.
- (d) For removal of minor cracks or scratches in solid surfacing materials, using recommended agent to wash, clean and rub thoroughly until the cracks or scratches disappear, including filling cracks with materials recommended by the manufacturer as required.
- (e) Sanding and polishing the repaired surfaces including the affected areas to match existing.
- (f) Finishing and cleaning the repaired surfaces including the affected areas on completion.
- (g) Submission of repair records and site photographs upon completion.

**Rates for repairs and alterations to existing proprietary demountable partition system**

**SC16.11**

The rates for repairs and alterations to existing proprietary demountable partition system shall include for : -

- (a) Taking down, clearing away, setting aside for re-use and/or fixing existing partitions including framing, panels, covering materials, etc., as recommended by the manufacturer and the rate inclusion items as stated in General Regulations Clauses GR.15 to GR.17.
- (b) Replacement and provision of new compatible fittings and fixing accessories including additional accessories as necessary.
- (c) Modifying existing openings, finishes or covering to suit actual site conditions.
- (d) Multi-handling and delivery between the designated locations and storage area as directed.
- (e) Proper protection to the partitions, framing, fittings and accessories for storage and re-use.
- (f) Modifications on existing framing including provisions of additional framing as required.
- (g) Making good surfaces disturbed.

**Rates for "fix only" of existing fully glazed or partly glazed demountable partition**

**SC16.12**

The rates for "fix only" of existing fully glazed or partly glazed demountable partition shall include for : -

- (a) Replacement of any glazing panel if damaged when carrying out repair and alteration to the demountable partition.

**SPECIAL CONDITIONS**

**Rates for repairs and alterations to existing proprietary fume cupboards**

**SC16.13**

The rates for repairs and alterations to existing proprietary fume cupboards shall further include for : -

- (a) Taking down, clearing away, setting aside for re-use and/or fixing existing fume cupboards including all fittings, components, services connections, etc., as recommended by the manufacturer and the rate inclusion items as stated in General Regulations Clauses GR.15 to GR.17.
- (b) Replacement and provision of new compatible fittings and fixing accessories including additional accessories as necessary and provision of any ancillary works as may be required by the manufacturer.
- (c) Replacement of any glazing panel if damaged when carrying out repair and alteration to the fume cupboards.
- (d) Provision of connection to nearest power point by registered electrical workers.
- (e) Making good surfaces disturbed.
- (f) Carrying out testing and commissioning to the satisfaction of the Maintenance Surveyor.

**Rates for repairs to existing proprietary automatic swing or sliding doors**

**SC16.14**

The rates for repairs to existing proprietary automatic swing or sliding doors shall further include for : -

- (a) Taking down, clearing away, setting aside for re-use and/or fixing existing automatic swing or sliding doors including door frames, door operator, automatic mechanism, interlocking devices and all necessary accessories, ironmongeries and the like, as recommended by the manufacturer and the rate inclusion items as stated in General Regulations Clauses GR.15 to GR.17.
- (b) Replacement and provision of new compatible fittings and fixing accessories including additional accessories as necessary, provision of any ancillary works as may be required by the manufacturer.
- (c) Replacement of any glazing panel if damaged when carrying out repair to the automatic swing or sliding doors.
- (d) Provision of connection to nearest power point by registered electrical workers.
- (e) Making good surfaces disturbed.
- (f) Carrying out testing and commissioning to the satisfaction of the Maintenance Surveyor.

Item

Item

**CONCRETE REPAIR BY PATCH REPAIR**

(Note :- Items 16001 to 16005 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)

*Per square metre*

| Thickness (mm) |        |                |
|----------------|--------|----------------|
| 10mm           | 15mm   | Additional 5mm |
| A              | B      | C              |
| \$             | \$     | \$             |
| 269.50         | 336.90 | 60.60          |
| 286.30         | 353.60 | 60.60          |

16001 Prepare and apply proprietary pre-bagged or site batched Class 25 polymer modified concrete repair mortar to existing concrete substrate complying with the following specification including breaking out and preparation of surfaces, preparation and cleaning of existing steel reinforcement, both using methods as specified; applying prime coat to steel reinforcement; applying bond coat to concrete substrate and primed steel reinforcement; carrying out field trial test, works test, testing on grouted dowel bars and completed patch repairs, etc. all in accordance with the manufacturer's instructions :-

|  |                           |
|--|---------------------------|
| Compressive strength at 28 days                  | 20 - 40 MPa               |
| Minimum tensile strength at 7 days               | 1.5 MPa                   |
| Elastic modulus at 28 days                       | 9 - 15 kN/mm <sup>2</sup> |
| Minimum bond strength at 7 days                  | 1.5 MPa                   |
| Cracking during the Coutinho ring test at 7 days | 0                         |
| Minimum figg air permeability in seconds         | 150                       |

16001

16002 Prepare and apply proprietary pre-bagged or site batched Class 40 polymer modified concrete repair mortar to existing concrete substrate complying with the following specification including breaking out and preparation of surfaces, preparation and cleaning of existing steel reinforcement, both using methods as specified; applying prime coat to steel reinforcement; applying bond coat to concrete substrate and primed steel reinforcement; carrying out field trial test, works test, testing on grouted dowel bars and completed patch repairs, etc. all in accordance with the manufacturer's instructions :-

|  |                            |
|--|----------------------------|
| Compressive strength at 28 days                  | 30 - 60 MPa                |
| Minimum tensile strength at 7 days               | 2.0 MPa                    |
| Elastic modulus at 28 days                       | 15 - 25 kN/mm <sup>2</sup> |
| Minimum bond strength at 7 days                  | 2.0 MPa                    |
| Cracking during the Coutinho ring test at 7 days | 0                          |
| Minimum figg air permeability in seconds         | 200                        |

16002

| Item  |   | Thickness (mm)                          |                | Item                               |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|---|---|---|----------------|------------------------------------|----------------------------|---------------------------------|----------------------------|---|---------|--|-----------------|--|--------|--------|--------|-------|
|   |   | 40mm                                    | Additional 5mm |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|   |   | A                                       | B              |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|   |   | \$                                      | \$             |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| <b>CONCRETE REPAIR BY PATCH REPAIR (CONT'D)</b>           |   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| <i>Per square metre</i>                                   |   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| 16003   | <p>Prepare and apply proprietary pre-bagged or site batched Class 25 high-build polymer modified concrete repair mortar to existing concrete substrate complying with the following specification including breaking out and preparation of surfaces, preparation and cleaning of existing steel reinforcement, both using methods as specified; applying prime coat to steel reinforcement; applying bond coat to concrete substrate and primed steel reinforcement; carrying out field trial test, works test, testing on grouted dowel bars and completed patch repairs, etc. all in accordance with the manufacturer's instructions : -</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Compressive strength at 28 days</td> <td>20 - 40 MPa</td> </tr> <tr> <td>Minimum tensile strength at 7 days</td> <td>1.5 MPa</td> </tr> <tr> <td>Elastic modulus at 28 days</td> <td>9 - 15 kN/mm<sup>2</sup></td> </tr> <tr> <td>Minimum bond strength at 7 days</td> <td>1.5 MPa</td> </tr> <tr> <td>Cracking during the Coutinho ring test at 7 days</td> <td>0</td> </tr> <tr> <td>Minimum figg air permeability in seconds</td> <td>150</td> </tr> </table>  | Compressive strength at 28 days         | 20 - 40 MPa    | Minimum tensile strength at 7 days | 1.5 MPa                    | Elastic modulus at 28 days      | 9 - 15 kN/mm <sup>2</sup>  | Minimum bond strength at 7 days                           | 1.5 MPa | Cracking during the Coutinho ring test at 7 days | 0               | Minimum figg air permeability in seconds | 150    | 370.50 | 117.90 | 16003 |
| Compressive strength at 28 days                           | 20 - 40 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum tensile strength at 7 days                        | 1.5 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Elastic modulus at 28 days                                | 9 - 15 kN/mm <sup>2</sup>   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum bond strength at 7 days                           | 1.5 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Cracking during the Coutinho ring test at 7 days          | 0   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum figg air permeability in seconds                  | 150   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| 16004   | <p>Prepare and apply proprietary pre-bagged or site batched Class 40 high-build polymer modified concrete repair mortar to existing concrete substrate complying with the following specification including breaking out and preparation of surfaces, preparation and cleaning of existing steel reinforcement, both using methods as specified; applying prime coat to steel reinforcement; applying bond coat to concrete substrate and primed steel reinforcement; carrying out field trial test, works test, testing on grouted dowel bars and completed patch repairs, etc. all in accordance with the manufacturer's instructions : -</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Compressive strength at 28 days</td> <td>30 - 60 MPa</td> </tr> <tr> <td>Minimum tensile strength at 7 days</td> <td>2.0 MPa</td> </tr> <tr> <td>Elastic modulus at 28 days</td> <td>15 - 25 kN/mm<sup>2</sup></td> </tr> <tr> <td>Minimum bond strength at 7 days</td> <td>2.0 MPa</td> </tr> <tr> <td>Cracking during the Coutinho ring test at 7 days</td> <td>0</td> </tr> <tr> <td>Minimum figg air permeability in seconds</td> <td>200</td> </tr> </table> | Compressive strength at 28 days         | 30 - 60 MPa    | Minimum tensile strength at 7 days | 2.0 MPa                    | Elastic modulus at 28 days      | 15 - 25 kN/mm <sup>2</sup> | Minimum bond strength at 7 days                           | 2.0 MPa | Cracking during the Coutinho ring test at 7 days | 0               | Minimum figg air permeability in seconds | 200    | 404.20 | 125.40 | 16004 |
| Compressive strength at 28 days                           | 30 - 60 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum tensile strength at 7 days                        | 2.0 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Elastic modulus at 28 days                                | 15 - 25 kN/mm <sup>2</sup>  |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum bond strength at 7 days                           | 2.0 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Cracking during the Coutinho ring test at 7 days          | 0   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum figg air permeability in seconds                  | 200   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| <i>Per square metre</i>                                   |   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| 16005   | <p>Prepare and apply proprietary shrink resistant mortar consisting a mixture of cement, aggregate, water and a shrink resistant admixture, to existing concrete substrate complying with the following specification including breaking out and preparation of surfaces, preparation and cleaning of existing steel reinforcement, both using methods as specified; applying prime coat to steel reinforcement; applying bond coat to concrete substrate and primed steel reinforcement; carrying out field trial test, works test, testing on grouted dowel bars and completed patch repairs, etc. all in accordance with the manufacturer's instructions : -</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Minimum compressive strength at 28 days</td> <td>40 MPa</td> </tr> <tr> <td>Elastic modulus at 28 days</td> <td>15 - 25 kN/mm<sup>2</sup></td> </tr> <tr> <td>Minimum bond strength at 7 days</td> <td>2.5 MPa</td> </tr> <tr> <td>Range of unrestrained plastic expansion (ASTM C827-01(a))</td> <td>1 - 4 %</td> </tr> <tr> <td>Maximum drying shrinkage at 28 days</td> <td>50 micro-strain</td> </tr> </table>                            | Minimum compressive strength at 28 days | 40 MPa         | Elastic modulus at 28 days         | 15 - 25 kN/mm <sup>2</sup> | Minimum bond strength at 7 days | 2.5 MPa                    | Range of unrestrained plastic expansion (ASTM C827-01(a)) | 1 - 4 % | Maximum drying shrinkage at 28 days              | 50 micro-strain | 286.30                                   | 353.60 | 16005  |        |       |
| Minimum compressive strength at 28 days                   | 40 MPa  |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Elastic modulus at 28 days                                | 15 - 25 kN/mm <sup>2</sup>  |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Minimum bond strength at 7 days                           | 2.5 MPa   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Range of unrestrained plastic expansion (ASTM C827-01(a)) | 1 - 4 %   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
| Maximum drying shrinkage at 28 days                       | 50 micro-strain   |   |                |                                    |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|   |   | 10mm                                    | 15mm           | Additional 5mm                     |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|   |   | A                                       | B              | C                                  |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |
|   |   | \$                                      | \$             | \$                                 |                            |                                 |                            |   |         |  |                 |  |        |        |        |       |



Item

Item

**CONCRETE REPAIR BY CHEMICAL INJECTION**

(Note :- Items 16006 to 16007 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)

*Per linear metre*

16006 Prepare and apply proprietary low viscosity high-strength epoxy grout injection to cracks of any size and thickness complying with the following specification including carrying out crack preparation, filling cracks with compatible materials, field trial test, coring test, etc., all in accordance with the manufacturer's instructions :-

|  |   |
|--|---|
| Tensile strength at 7 days tested according to ASTM D638-08:<br><br>or<br>Tensile strength at 7 days tested according to BS 6319-7:  | >48.0 MPa, unless for non-load bearing or minor structural elements as to be agreed by the Maintenance Surveyor but shall not be less than 35.0 MPa.<br><br>>15.0 MPa |
| Bond strength tested according to ASTM C-882<br>at 2 days (moist cure)<br>at 14 days (moist cure)<br>or<br>Bond strength tested according to BS EN 12618-2<br>at 14 days for resin injection systems<br>at 28 days (moist cure) for cementitious injection systems | >7.0 MPa<br>>10.0 MPa<br><br>>2.0 Mpa<br>>2.0 MPa   |

| Wall surface | Ceiling surface |
|--------------|-----------------|
| A            | B               |
| \$           | \$              |
| 387.30       | 421.00          |
| 480.00       | 513.70          |

16006

16007 Prepare and apply proprietary flexible polyurethane grout injection to cracks of any size and thickness complying with the following specification including carrying out crack preparation, filling cracks with compatible materials, field trial test, coring test, etc., all in accordance with the manufacturer's instructions :-

|  |             |
|--|-------------|
| Specific gravity at 25 degree Celsius: | 1.1 @ 25 °C |
| Elongation:                            | > 34 %      |
| Bond strength @ 24 hours in MPa:       | > 0.28      |

16007

**REPAIRS TO PROPRIETARY ROOFING SYSTEM OR FLOOR WATERPROOFING SYSTEM**

*Per square metre*

16008 Carry out repair of existing roofing or floor waterproofing system in patches or isolated areas by cutting through the complete thickness of the system, preparing and applying proprietary roofing or floor waterproofing, resealing after inspection and making good disturbed surfaces, all in accordance with the manufacturer's instructions (concrete roof tiles and cement and sand screed are measured separately).....

| Sheet material       |               | Liquid applied material |               |
|----------------------|---------------|-------------------------|---------------|
| requiring protection | self finished | requiring protection    | self finished |
| A                    | B             | C                       | D             |
| \$                   | \$            | \$                      | \$            |
| 164.20               | 202.50        | 180.60                  | 218.90        |

16008

| Item  |   |          |        |        |  |  |                                    | Item  |
|-------|---|----------|--------|--------|--|--|------------------------------------|-------|
|       | <b>REPAIRS TO PROPRIETARY ROOFING SYSTEM OR FLOOR WATERPROOFING SYSTEM (CONT'D)</b>   |          |        |        |  |  |                                    |       |
|       | <i>Per square metre</i>   |          |        |        |  |  | A<br>\$                            |       |
| 16009 | Carry out repair of existing roofing or floor waterproofing system in patches or isolated areas by cutting through the complete thickness of the system, preparing and spray applying proprietary waterproofing membrane to the required thickness including all primer and top coat(s) and protection, resealing after inspection and making good disturbed surfaces, all in accordance with the manufacturer's instructions (concrete roof tiles and cement and sand screed are measured separately)..... | 681.10   |        |        |  |  |                                    | 16009 |
|       | <b>REPAIRS TO PROPRIETARY SOLID SURFACING MATERIALS</b>   |          |        |        |  |  |                                    |       |
|       | <i>Per square metre</i>   |          |        |        |  |  | A<br>\$                            |       |
| 16010 | Carry out repair of damaged proprietary solid surfacing material by cutting out the damaged surfacing of the full thickness, re-filling and replacement with new compatible material and preparing and finishing surfacing on completion, all in accordance with the manufacturer's instructions.....   | 2,776.70 |        |        |  |  |                                    | 16010 |
| 16011 | Carry out repair of proprietary solid surfacing material by removing minor cracks or scratches including washing, cleaning and rubbing, polishing and sanding to remove cracks and scratches, and preparing and finishing surfacing on completion, all in accordance with the manufacturer's instructions.....  | 639.50   |        |        |  |  |                                    | 16011 |
|       | <b>REPAIRS TO PROPRIETARY DEMOUNTABLE PARTITION SYSTEMS AND SUNDRY ITEMS</b>  |          |        |        |  |  |                                    |       |
|       | <i>Per square metre</i>   |          |        |        |  |  |                                    |       |
|       |   |          |        |        |  |  | Take down and clear away           |       |
|       |   |          |        |        |  |  | Take down and set aside for re-use |       |
|       |   |          |        |        |  |  | Fix only                           |       |
|       |   |          |        |        |  |  | A<br>\$                            |       |
|       |   |          |        |        |  |  | B<br>\$                            |       |
|       |   |          |        |        |  |  | C<br>\$                            |       |
| 16012 | Proprietary demountable partition system complete with panel covering to both sides of partition, with or without applied finishes, stud framework, infilled sound insulation, fittings and accessories, if any .....   | 84.20    | 126.50 | 193.80 |  |  |                                    | 16012 |
| 16013 | Ditto but fully glazed or partly glazed demountable partition.....  | 101.10   | 151.70 | 236.00 |  |  |                                    | 16013 |
| 16014 | Proprietary demountable partition system as security / fire resisting / fire resisting security partition complete with panel covering to both sides of partition, with or without applied finishes, stud framework, infilled sound insulation, door and accessories, if any.....   | 101.10   | 151.70 | 236.00 |  |  |                                    | 16014 |

| Item  |  |                              | Item                              |
|-------|--|------------------------------|-----------------------------------|
|       | <b>ALTERATION WORKS TO EXISTING PROPRIETARY DEMOUNTABLE PARTITION SYSTEM</b>   | Plaster-board panel covering | Plywood/ chipboard panel covering |
|       | <i>Per square metre</i>  | A<br>\$                      | B<br>\$                           |
| 16015 | Replace panel covering 12.5 mm (min.) thick to one side of existing demountable partition with panel covering finished with vinyl wall paper, fabric sheeting, timber veneer sheeting or laminated plastic sheeting.....   | 214.20                       | 250.00                            |
|       | <i>Per square metre</i>  |                              | A<br>\$                           |
| 16016 | Alter existing fully glazed or partly glazed demountable partition to double glazed demountable partition with 6 mm thick clear glass.....   |                              | 533.80                            |
| 16017 | Ditto but with 6 mm thick obscure glass.....   |                              | 552.30                            |
| 16018 | Ditto but with 6 mm thick wired glass.....   |                              | 707.60                            |
| 16019 | Ditto but with 6 mm thick clear or coloured tempered glass.....  |                              | 849.10                            |
| 16020 | Alter existing demountable partition to insert 50 mm thick fibreglass insulation layer (density not less than 16 kg/m <sup>3</sup> ).....  |                              | 35.40                             |
| 16021 | Ditto but density 48 kg/m <sup>3</sup> .....   |                              | 56.90                             |
| 16022 | Forming opening of any size through existing demountable partition including all necessary partition components.....   |                              | 157.80                            |
|       | <i>Each</i>  |                              |                                   |
| 16023 | Scribe infill up to 300 mm wide in 12 mm thick luan plywood to existing window opening for abutting demountable partition of any description and height, and finished to match abutting partition.....   |                              | 635.10                            |
|       | <b>REPAIRS TO PROPRIETARY FUME CUPBOARDS</b>   |                              | A<br>\$                           |
|       | <i>Per set</i>   |                              |                                   |
| 16024 | Take down and clear away existing proprietary fume cupboard of varying dimensions complete with air flow indicator control, safety devices, control and monitoring system, ductwork upto 3 m long, exhaust extraction system and steel support frame, extraction fan, motor and enclosure, worktop, sink, fittings and accessories, and disconnecting and capping off ductwork and nearby power, water and gas services.....   |                              | 590.80                            |
| 16025 | Take down and set aside for re-use ditto.....  |                              | 686.70                            |
| 16026 | Fix only existing proprietary fume cupboard of varying dimensions complete with air flow indicator control, safety devices, control and monitoring system, ductwork upto 3 m long, exhaust extraction system and steel support frame, extraction fan, motor and enclosure, worktop, sink, fittings and accessories, and re-connection to ductworks and nearby power, water and gas services.....   |                              | 1,181.60                          |
| 16027 | Take down and clear away existing proprietary school-type fume cupboard of varying dimensions with two-compartment base storage cupboard and glass panels complete with air flow indicator control, safety devices, control and monitoring system, ductwork upto 3 m long, exhaust extraction system and steel support frame, extraction fan, motor and enclosure, worktop, sink, fittings and accessories, and disconnecting and capping off ductwork and nearby power, water and gas services..... |                              | 590.80                            |
| 16028 | Take down and set aside for re-use ditto.....  |                              | 686.70                            |
| 16029 | Fix only existing proprietary school-type fume cupboard of varying dimensions with two-compartment base storage cupboard and glass panels complete with air flow indicator control, safety devices, control and monitoring system, ductwork upto 3 m long, exhaust extraction system and steel support frame, extraction fan, motor and enclosure, worktop, sink, fittings and accessories, and re-connection to ductworks and nearby power, water and gas services .....                            |                              | 1,181.60                          |

| Item  |  |                        | Item                   |       |
|---|--|------------------------|------------------------|-------|
| <b>REPAIRS TO EXTENSION DUCTWORK AND EXHAUST FANS TO FUME CUPBOARDS</b> |  |                        |                        |       |
|   | <i>Per linear metre</i>  | A<br>\$                |                        |       |
| 16030   | Take down and clear away existing 250 mm diameter extension ductwork connecting to exhaust system of proprietary fume cupboard complete with steel support frame and fixing accessories and connectors to exhaust outlet.....  | 72.90                  | 16030                  |       |
| 16031   | Take down and set aside for re-use ditto.....  | 111.90                 | 16031                  |       |
| 16032   | Fix only existing 250 mm diameter extension ductwork in polypropylene or similar approved materials connecting to exhaust system of proprietary fume cupboard, mounted either on internal or external wall or roof, complete with steel support frame and fixing accessories if required; connectors to exhaust outlet, all necessary builder's works as required; testing and commissioning on completion of the whole exhaust system in conjunction with the proprietary fume cupboard.....  | 145.80                 | 16032                  |       |
|   | <i>Per set</i>   |                        |                        |       |
| 16033   | Take down and clear away existing exhaust fan and motor complete with steel support frame, enclosure for fan and motor, safety devices, control and monitoring panel, connectors to the extended ductwork and exhaust system, and fixing accessories and disconnecting from ductworks.....   | 97.90                  | 16033                  |       |
| 16034   | Take down and set aside for re-use ditto.....  | 146.80                 | 16034                  |       |
| 16035   | Fix only existing exhaust fan and motor complete with steel support frame, enclosure for fan and motor, fixing accessories, and re-connection to extended ductworks, mounted either on external wall or roof, all necessary safety devices, control and monitoring panel, connectors to the extended ductwork and exhaust system, builder's works as required, including electrical wiring and all connection by a registered electrical worker, and testing and commissioning on completion in conjunction with the proprietary fume cupboard and associated ductworks..... | 348.40                 | 16035                  |       |
| <b>REPAIRS TO PROPRIETARY AUTOMATIC SWING OR SLIDING DOOR SYSTEMS</b>   |  |                        |                        |       |
|   | <i>Per set</i>   | Single<br>leaf<br>door | Double<br>leaf<br>door |       |
|   |  | A<br>\$                | B<br>\$                |       |
| 16036   | Take down and clear away proprietary automatic swing or sliding door system complete with door, frames, hood, tracks, perimeter housing, ironmongery, electrical motor, control unit and associated wiring and electrical devices.....   | 245.60                 | 368.20                 | 16036 |
| 16037   | Take down and set aside for re-use proprietary automatic swing or sliding door system complete with door and ironmongery (excluding frames), electrical motor, control unit and associated wiring and electrical devices.....  | 368.20                 | 549.70                 | 16037 |
| 16038   | Fix only proprietary automatic swing or sliding door system complete with door and ironmongery (excluding frame) including connection to electrical motor, control unit and associated wiring, and testing and commissioning on completion.....  | 790.10                 | 1,185.10               | 16038 |

**Section 17**

**LABOUR**

## SECTION 17

### LABOUR

#### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Payment for labour</b>  | <b>SC17.01</b> | Wherever possible, work executed under the Contract shall be measured and paid for as trade items. Payment for labour on an hourly basis will not be made except in special circumstances where specifically ordered in writing by the Maintenance Surveyor.  |
| <b>Measurement generally</b>   | <b>SC17.02</b> | <p>The measurement of labour shall be the aggregate time employed on the item of labour to the nearest hour for any time in a 24-hour day (from 00:00 hour to 24:00 hour on the same day) including all Sundays and General Holidays. No measurement shall be made for meal breaks, rest period and travelling time. The Contractor will be paid for those labours who are actually at work and ordered by the Maintenance Surveyor in writing.</p> <p>Allowance for overtime work and any cost/expenses incurred therein is deemed to be included in the Contract Percentage(s) applied to the Contract. Reference shall also be made to General Regulations Clauses GR.04 and GR.11.</p> <p>Any lodging and living accommodation allowance, if any, for labours is not reimbursable and shall not be measured separately.</p> |
| <b>Measurement of special attendance on Building Works and on Building Services Installation</b> | <b>SC17.03</b> | The measurement of special attendance on Building Works and on Building Services Installation shall be the time required for the general worker or electrical fitter to stand-by and to provide any attendance or services as directed by the Maintenance Surveyor in the Works Order.  |
| <b>Rates for labour generally</b>  | <b>SC17.04</b> | <p>The rates for labour shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Work being in any district.</li> <li>(b) Use and maintenance of hand tools and appliances, non-mechanical plant and equipment (such as ladders, trestles, stages, temporary track, wagons, skips and similar items).</li> <li>(c) Protective clothing and safety equipment.</li> <li>(d) Contractor's site supervision and employee insurance.</li> <li>(e) Meal breaks and rest periods.</li> <li>(f) Contractor's profit, establishment charges and overheads.</li> <li>(g) Allowance for travelling expenses and time to and from the Site.</li> <li>(h) Pager and mobile phone including payment of all charges incurred.</li> </ul>   |

**SPECIAL CONDITIONS**

**Rates for  
labour  
generally  
(Cont'd)**

**SC17.04  
(Cont'd)**

- (i) Contributions to Mandatory Provident Fund.
- (j) Paid leave allowance.
- (k) Any other allowances as required.
- (l) Submission of documentary proof of qualifications, registration, certificates and/or licenses in accordance with the Construction Workers Registration Ordinance (Cap. 583) and Construction Workers Registration (Amendment) Ordinance 2014 ("Amendment Ordinance").

**Rates for  
Registered  
Skilled Worker**

**SC17.05**

The rates for Registered Skilled Worker shall further include for : -

- (a) Workers who have registered under the Construction Workers Registration Ordinance (Cap. 583) as a registered skilled worker under designated trade division or designated trade division (master) and possess a trade test certificate issued by the Construction Industry Council (CIC) or former Construction Industry Training Authority (CITA) or Vocational Training Council (VTC), or other qualifications as specified by the Ordinance or other recognized registration, certificates or licenses acceptable to the Maintenance Surveyor.
- (b) Senior workers who have registered under the Senior Workers Registration Arrangement of the Amendment Ordinance as a registered skilled worker under designated trade division or designated trade division (master), and possesses not less than ten years of relevant experience and with experience verified by the workers' employers, trade unions or provision of statutory declaration or having passed trade tests, interviews or other means as specified by the Amendment Ordinance.
- (c) Workers who have registered under the Construction Workers Registration Ordinance (Cap. 583) as a registered skilled worker (provisional) under designated trade division and possesses not less than six years of relevant experience to personally carry out construction work of a particular trade as specified under the Ordinance.

**Rates for  
Registered Semi-  
skilled Worker**

**SC17.06**

The rates for Registered Semi-skilled Worker shall further include for : -

- (a) Workers who have registered under the Construction Workers Registration Ordinance (Cap. 583) as a registered semi-skilled worker under designated trade division or designated trade division (master), and possess an intermediate trade test certificate issued by the CIC or former CITA or VTC, or other qualifications as specified by the Ordinance or other recognized registration, certificates or licenses acceptable to the Maintenance Surveyor.
- (b) Senior workers who have registered under the Senior Workers Registration Arrangement of the Amendment Ordinance as a registered semi-skilled worker under designated trade division or designated trade division (master), and possesses not less than ten years of relevant experience and with experience verified by the workers' employers, trade unions or provision of statutory declaration or having passed trade tests, interviews or other means as specified by the Amendment Ordinance.

**SPECIAL CONDITIONS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for Registered Semi-skilled Worker (Cont'd)</b> | <b>SC17.06 (Cont'd)</b> | (c) Workers who have registered under the Construction Workers Registration Ordinance (Cap. 583) as a registered semi-skilled worker (provisional) under designated trade division and possesses not less than two years of relevant experience to personally carry out construction work of a particular trade as specified under the Ordinance. |
| <b>Rates for Woodworker</b>                              | <b>SC17.07</b>          | The rates for Woodworker shall include for carpenter (fender), carpenter (formwork) and carpenter (formwork)(striking) for civil and building construction, joiner generally and joiner (assembling).   |
| <b>Rates for Waterproofing Worker</b>                    | <b>SC17.08</b>          | The rates for Waterproofing Worker shall include for waterproofing worker for liquid membrane, burn-type felt and adhesive-type felt.   |
| <b>Rates for Drain and Pipe Layer</b>                    | <b>SC17.09</b>          | The rates for Drain and Pipe Layer shall include for plumber, drainlayer and pipelayer.   |
| <b>Rates for Cement Sand Mortar Worker</b>               | <b>SC17.10</b>          | The rates for Cement Sand Mortar Worker shall include for plasterer generally, plasterer (floor), mason, bricklayer, tiler generally, tiler (mosaic) and tiler (tile).  |
| <b>Rates for Demolition Worker</b>                       | <b>SC17.11</b>          | The rates for Demolition Worker shall include for demolition worker for building and unauthorized building works.   |
| <b>Rates for Metal-steel Worker</b>                      | <b>SC17.12</b>          | The rates for Metal-steel Worker shall include for metal worker and structural steel erector.   |
| <b>Rates for Construction Goods Vehicle Driver</b>       | <b>SC17.13</b>          | The rates for Construction Goods Vehicle Driver shall include for truck driver for medium goods vehicles, heavy goods vehicles, special purpose vehicles and articulated vehicles.  |
| <b>Rates for Welder</b>                                  | <b>SC17.14</b>          | The rates for Welder shall include for general welder and structural steel welder.  |
| <b>Rates for Concrete and Grouting Worker</b>            | <b>SC17.15</b>          | The rates for Concrete and Grouting Worker shall include for concretor, concretor repairer (spalling concrete), shotconcretor and grouting worker.  |



**SPECIAL CONDITIONS**

|  |                |   |
|--|----------------|---|
| <b>Rates for Marble Worker</b>   | <b>SC17.16</b> | The rates for Marble Worker shall include for marble worker for polishing, dry fixing and wet fixing.   |
| <b>Rates for Scaffolder</b>  | <b>SC17.17</b> | The rates for Scaffolder shall include for bamboo scaffolder and metal scaffolder.  |
| <b>Rates for Curtain Wall and Glass Panes Installer</b>                  | <b>SC17.18</b> | The rates for Curtain Wall and Glass Panes Installer shall include for glazier and curtain wall installer.  |
| <b>Rates for Floor Layer</b>   | <b>SC17.19</b> | The rates for Floor Layer shall include for floor layer for timber and PVC flooring.  |
| <b>Rates for Plant and Equipment Operator</b>                            | <b>SC17.20</b> | The rates for Plant and Equipment Operator shall include for ground investigation operator / driller / borer and plant and equipment operators for fork-lift truck, mini-loader, mini-loader (with attachments), grader, piling generally, percussive pile, bored pile, suspended working platform, demolition, excavator, builder's lift operator, plant and equipment operator for bulldozer, truck-mounted crane, dumper, loader, tower crane, crawler-mounted mobile crane, wheeled telescopic mobile crane, locomotive, gantry crane, compactor and scraper. |
| <b>Rates for Painter and Decorator</b>                                   | <b>SC17.21</b> | The rates for Painter and Decorator shall include for painter and decorator for roller painting, surface filling, emulsion painting, brushing lacquering, synthetic painting, clear lacquering, texture-spray, metal paint spray, paperhanging and sign writing.  |
| <b>Rates for Blasting Worker</b>   | <b>SC17.22</b> | The rates for Blasting Worker shall include for shotfirer and rock breaking driller.  |
| <b>Rates for Lift and Escalator Mechanic</b>                             | <b>SC17.23</b> | The rates for Lift and Escalator Mechanic shall include for lift mechanic and escalator mechanic.   |
| <b>Rates for Refrigeration / Air-conditioning / Ventilation Mechanic</b> | <b>SC17.24</b> | The rates for Refrigeration / Air-conditioning / Ventilation Mechanic shall include for refrigeration / air-conditioning / ventilation mechanics for water system, air system, thermal insulation, electrical control and unitary system.   |

**SPECIAL CONDITIONS**

|  |                |   |
|--|----------------|---|
| <b>Rates for Fire Service Mechanic</b>                             | <b>SC17.25</b> | The rates for Fire Service Mechanic shall include for fire service portable equipment fitter, fire service electrical fitter and fire service mechanical fitter.                      |
| <b>Rates for Electrician</b>                                       | <b>SC17.26</b> | The rates for Electrician shall include for overhead linesman, control panel assembler, cable jointer (power), cable jointer (low voltage), electrical wireman and electrical fitter. |
| <b>Rates for Electronic Equipment Mechanic (Construction Work)</b> | <b>SC17.27</b> | The rates for Electronic Equipment Mechanic (Construction Work) shall include for building security system mechanic and communication system mechanic.                                |
| <b>Rates for Plant and Equipment Mechanic (Construction Work)</b>  | <b>SC17.28</b> | The rates for plant and equipment mechanic (construction work) shall include for construction plant mechanic and mechanical fitter.   |
| <b>Rates for Registered General Worker</b>                         | <b>SC17.29</b> | The rates for Registered General Worker shall further include for : -<br><br>(a) General worker and labourer who hold a valid Green Card.   |

| Item  | LABOUR<br>BUILDING WORKS                    | Registered Worker under designated trade division |                     | Registered Worker under designated trade division (master) |                     | Item  |
|-------|---|---|---------------------|--|---------------------|-------|
|       |   | Skilled Worker                                    | Semi-skilled Worker | Skilled Worker   | Semi-skilled Worker |       |
|       |   | A   | B                   | C  | D                   |       |
|       |   | \$  | \$                  | \$   | \$                  |       |
|       | <i>Per hour</i>                             |   |                     |  |                     |       |
| 17001 | Woodworker.....                             | 221.90  | 155.30              | 255.20   | 178.60              | 17001 |
| 17002 | Leveller.....                               | 197.60  | 138.30              | -  | -                   | 17002 |
| 17003 | Waterproofing Worker .....                  | 189.10  | 132.40              | 217.50   | -                   | 17003 |
| 17004 | Drain and Pipe Layer.....                   | 160.40  | 112.30              | 184.50   | -                   | 17004 |
| 17005 | Paving Block Layer.....                     | 163.90  | -                   | -  | -                   | 17005 |
| 17006 | Cement Sand Mortar Worker.....              | 170.00  | 119.00              | 195.50   | 136.90              | 17006 |
| 17007 | Demolition Worker.....                      | 169.10  | -                   | 194.50   | -                   | 17007 |
| 17008 | Metal-steel Worker.....                     | 171.20  | 119.80              | 196.90   | 137.80              | 17008 |
| 17009 | Construction Goods Vehicle Driver.....      | 116.00  | -                   | 133.40   | -                   | 17009 |
| 17010 | Rigger / Metal Formwork Erector.....        | 229.20  | 160.50              | -  | -                   | 17010 |
| 17011 | Asbestos Abatement Worker.....              | 195.10  | -                   | -  | -                   | 17011 |
| 17012 | Welder.....                                 | 203.00  | 142.20              | -  | -                   | 17012 |
| 17013 | Concrete and Grouting Worker.....           | 268.70  | 188.10              | 309.00   | -                   | 17013 |
| 17014 | Marble Worker.....                          | 172.30  | 120.60              | 198.10   | 138.70              | 17014 |
| 17015 | Window Frame Installer.....                 | 167.80  | 117.40              | -  | -                   | 17015 |
| 17016 | Scaffolder.....                             | 207.10  | 144.90              | 238.10   | 166.70              | 17016 |
| 17017 | Curtain Wall and Glass Panes Installer..... | 177.40  | 124.20              | 204.00   | 142.80              | 17017 |
| 17018 | Floor Layer.....                            | 170.20  | 119.20              | 195.80   | 137.00              | 17018 |
| 17019 | Plant and Equipment Operator .....          | 163.40  | 114.40              | 187.90   | 131.50              | 17019 |
| 17020 | Bar Bender and Fixer.....                   | 252.60  | 176.80              | -  | -                   | 17020 |
| 17021 | Painter and Decorator.....                  | 142.00  | -                   | 163.30   | 114.30              | 17021 |
| 17022 | Asphalter (Road Construction).....          | 126.60  | 88.60               | -  | -                   | 17022 |
| 17023 | Blasting Worker.....                        | 199.40  | -                   | -  | -                   | 17023 |

| Item  |  |   |                            |   | Item                       |       |
|---|--|---|----------------------------|---|----------------------------|-------|
| <b>LABOUR (CONT'D)</b>  |  |   |                            |   |                            |       |
| <b>BUILDING SERVICES INSTALLATION</b>   |  |   |                            |   |                            |       |
|   |  |   |                            |   |                            |       |
| <i>Per hour</i>   |  |   |                            |   |                            |       |
|   |  | Registered Worker<br>under designated<br>trade division |                            | Registered Worker<br>under designated<br>trade division<br>(master) |                            |       |
|   |  | Skilled<br>Worker                                       | Semi-<br>skilled<br>Worker | Skilled<br>Worker   | Semi-<br>skilled<br>Worker |       |
|   |  | A<br>\$   | B<br>\$                    | C<br>\$   | D<br>\$                    |       |
| 17024   | Lift and Escalator Mechanic.....   | 108.90  | -                          | 125.20  | -                          | 17024 |
| 17025   | Refrigeration / Air-conditioning / Ventilation Mechanic.....                   | 116.00  | 81.20                      | 133.40  | -                          | 17025 |
| 17026   | Fire Service Mechanic.....   | 136.80  | 95.80                      | 157.40  | -                          | 17026 |
| 17027   | Gas Installer.....   | 107.50  | -                          | -   | -                          | 17027 |
| 17028   | Electrician.....   | 151.00  | 105.70                     | -   | -                          | 17028 |
| 17029   | Electronic Equipment Mechanic (Construction Work).....                         | 117.00  | 81.90                      | 134.50  | 94.20                      | 17029 |
| 17030   | Plant and Equipment Mechanic (Construction Work).....                          | 149.10  | 104.30                     | 171.40  | 120.00                     | 17030 |
| <b>GENERAL</b>  |  |   |                            |   |                            |       |
| <i>Per hour</i>   |  |   |                            |   |                            |       |
| 17031   | Registered General Worker.....   |   |                            |   | 130.10                     | 17031 |
| 17032   | Security Guard.....  |   |                            |   | 51.00                      | 17032 |
| <b>SPECIAL ATTENDANCE ON BUILDING WORKS AND ON BUILDING SERVICES INSTALLATION</b> |  |   |                            |   |                            |       |
| <i>Per hour</i>   |  |   |                            |   |                            |       |
| 17033   | Registered General Worker for attending Building Works.....                    |   |                            |   | 130.10                     | 17033 |
| 17034   | Registered Electrical Fitter for attending Building Services Installation..... |   |                            |   | 104.00                     | 17034 |

**Section 18**

**TEMPORARY PLANT AND FACILITIES**

## SECTION 18

### TEMPORARY PLANT AND FACILITIES

#### SPECIAL CONDITIONS

##### TEMPORARY PLANT

**Measurement of temporary plant**

**SC18.01**

Temporary plant shall include the provision of plant and machineries like air compressors, vans, lorries, excavator, skid steer loaders, cranes, mobile access platforms, generator sets, pumps, etc. measured in this Section of the Schedule.

Wherever possible, work executed under the Contract shall be measured and paid for at the rates of the appropriate Section in this Schedule. No measurement shall be made for temporary plant unless specifically ordered by the Maintenance Surveyor in writing.

The measurement of temporary plant shall be the aggregate time hired on the item of plant to the nearest hour for any time in a 24-hour day (from 00:00 hour to 24:00 hour on the same day) including all Sundays and General Holidays. No measurement shall be made for standing time, mobilization and demobilization time. The minimum order for temporary plant shall be calculated based on a minimum period of 8 hours in any one Works Order which is to be confirmed by the Maintenance Surveyor in writing. The hiring of the temporary plant shall be measured and valued based on the actual time of deployment of the plant or based on a period of 8 hours, whichever is the higher.

Allowance for overtime work and any cost / expenses incurred therein is deemed to be included in the Contract Percentage(s) applied to the Contract. Reference shall also be made to General Regulations Clauses GR.04 and GR.11.

All temporary plant brought onto the Site shall be maintained in good operation condition. Should the temporary plant provided to the Government break down or be found unserviceable, no payment shall be made for replacement of the same.

**Rates generally**

**SC18.02**

The rates shall generally include for :-

- (a) Mobilization and demobilization of all temporary plant to and from the Site.
- (b) Plant operator (for excavator, skid steer loader, crane and access platform), driver and attendant.
- (c) Fuel, lubricants, consumable stores, maintenance and repair.
- (d) Contractor's profit, establishment charges and overheads.
- (e) Insurances, license fees, patent rights and royalties, where applicable.
- (f) Moving from the designated location to new position as directed by the Maintenance Surveyor.
- (g) Lowering and hoisting including taking from or to any floor or roof of an existing building or structure.

**SPECIAL CONDITIONS**

**TEMPORARY PLANT**

**Rates generally (Cont'd)**

**SC18.02 (Cont'd)**

- (h) Loading and unloading.
- (i) Repairing and making good or replacing at the Maintenance Surveyor's discretion any articles or materials damaged during moving, loading, transit, unloading, and moving to new position, store or stack.
- (j) All tunnel or bridge tolls.

**TEMPORARY ACCOMMODATION**

**Measurement of temporary accommodation**

**SC18.03**

Temporary accommodation shall include the provision of temporary container office and portable toilets which are for the exclusive use by the Employer and his staff.

Throughout this Schedule, rates for all trades shall include for providing temporary offices and portable toilets as in G.S. Item 1.28 for the period of uses throughout the Works Order period. No payment will be made for providing and maintenance of container office and portable toilets under any circumstances, except for the following ordered by the Maintenance Surveyor specifically in writing : -

- (a) Temporary container office and portable toilets for the exclusive use by the Employer and his staff.

**Rates for temporary container office**

**SC18.04**

The rates for temporary container office shall include for : -

- (a) Mobilization and demobilization of temporary container office.
- (b) Fitting out with internal finishes complete with door, windows, lighting, power socket and room cooler (power supply measured separately).

Internal finishes shall be as follows : -

- (i) Walls - painted or plastic veneered plywood including insulation.
- (ii) Ceiling - painted or acoustic tiles with insulation.
- (iii) Floors - PVC floor tiles or sheeting.
- (c) Provision of adequate lighting, air-conditioning and ventilation including payment of all charges.
- (d) Forming and levelling ground for resting of container office.
- (e) Providing MCB board for electricity supply connection.

### SPECIAL CONDITIONS

#### TEMPORARY ACCOMMODATION

**Rates for portable toilet**

**SC18.05**

The rates for portable toilet shall include for : -

- (a) Mobilization and demobilization of portable toilet.
- (b) Regularly pumping, desludging and clearing away soil and waste.
- (c) Cleaning and sanitizing the interior and exterior of the portable toilet to ensure that the portable toilet is always kept clean, tidy and hygienic including cleaning and sanitizing as directed by the Maintenance Surveyor.
- (d) Filling and regularly re-filling flushing water, fresh water and toilet paper and maintaining water and toilet paper available at all times.
- (e) Re-charging deodorizer when required.
- (f) Replacement of portable toilet which is not serviceable.
- (g) Forming and levelling ground for resting of portable toilets.
- (h) Reinstatement and making good surfaces disturbed at demobilization.
- (i) Government dumping charges.

#### CONVEYANCE BY LAND VEHICLE

**Measurement of conveyance of articles or materials by land vehicle**

**SC18.06**

Conveyance of articles or materials by land vehicle shall only be measured where such conveyance is not included under any items in other Sections of this Schedule and is specifically ordered in writing by the Maintenance Surveyor.

One trip is defined as the door-to-door conveyance of articles or materials from the starting location to the last designated location which may include one or more interim and/or designated stops.

**Rates for conveyance of articles or materials by land vehicle**

**SC18.07**

The rates for conveyance of articles or materials by land vehicle shall include for : -

- (a) Conveyance of articles or materials inside and outside the Contract areas.
- (b) Moving from the designated location to new position as directed by the Maintenance Surveyor.
- (c) Lowering and hoisting including taking from or to any floor or roof of an existing building or structure.
- (d) Loading and unloading.
- (e) Transporting to and return journey of packing and personnel as required.
- (f) Neatly stacking, storing or leaving in the required new position.



### SPECIAL CONDITIONS

#### CONVEYANCE BY LAND VEHICLE

**Rates for conveyance of articles or materials by land vehicle (Cont'd)**

**SC18.07  
(Cont'd)**

- (g) Provision of driver and all labour, tools and plant necessary including levers, ropes, planks, rollers, wheelbarrows, trucks, lorries and the like.
- (h) Provision of any necessary temporary packing, securing ropes and the like, and properly securing and keeping the articles or materials secured during transit.
- (i) Repairing and making good or replacing at the Maintenance Surveyor's discretion any articles or materials damaged during moving, loading, transit, unloading, and moving to new position, store or stack.
- (j) All tunnel or bridge tolls.
- (k) All costs in respect of loading, unloading and delivery of articles or materials from and to remote area where no vehicular access is available.
- (l) Dismantling and reassembling composite articles, if required.
- (m) Obtaining access licenses and permits.
- (n) Insurance of all materials or articles being conveyed and supervising staff on board.

#### CONVEYANCE BY HELICOPTER

**Measurement of conveyance of articles or materials by helicopter**

**SC18.08**

Conveyance of articles or materials by helicopter shall only be measured where such conveyance is not included under any items in other Sections of this Schedule and is specifically ordered in writing by the Maintenance Surveyor.

One trip is defined as the conveyance of articles and materials from the time when the helicopter leaves the flying base to the time when it lands at the flying base. The helicopter shall be fuelled adequately for any flights over 90 minutes before it flies. No measurement shall be made for any time required for first fuelling. However, when a flight exceeds 90 minutes and where no access can be provided for the re-fuelling vehicle to the designated locations for loading or unloading, the time for re-fuelling to and from the flying base shall also be measured.

Conveyance by helicopter for the first 30 minutes shall be measured per trip. Conveyance after the first 30 minutes shall be measured to the nearest 5 minutes.

#### CONVEYANCE BY HELICOPTER

**Rates for conveyance of articles or materials by helicopter**

**SC18.09**

The rates for conveyance of articles or materials by helicopter shall include for :-

- (a) Lowering to and hoisting from the designated locations for loading or unloading.
- (b) Provision of pilot and lifting equipment certified by an independent specialist.
- (c) Provision of any necessary temporary packing, securing ropes and the like, and properly securing and keeping the articles or materials secured during transit.
- (d) Insurance of all materials or articles being conveyed and supervising staff on board.

### SPECIAL CONDITIONS

#### CONVEYANCE BY HELICOPTER

**Rates for conveyance of articles or materials by helicopter (Cont'd)**

**SC18.09  
(Cont'd)**

- (e) Training course at the flying base for the Employer's ground crew for loading and unloading.
- (f) A loadmaster at the designated location for loading where the helicopter can land nearby.
- (g) Radio communication between the loadmaster and the pilot where load master is provided.
- (h) Any advance payment made to the specialist helicopter conveyance company.

#### SCAFFOLDING, SCREENS AND STAGING

**Scaffolding, screens and staging generally**

**SC18.10**

Throughout this Schedule, rates for all trades shall include for use and waste of all types of scaffolding and staging for the execution of the Works. No payment will be made for scaffolding and staging under any circumstances except for the following : -

- (a) Scaffolding and staging are specifically ordered by the Maintenance Surveyor in writing and stating that the scaffolding and staging are for the exclusive use of the Maintenance Surveyor for carrying out design inspections or the exclusive use of the Employer and other contractor employed by the Employer within the Works Order period.

In the event where the scaffolding and staging mentioned in sub-clause (a) above are subsequently used by the Contractor himself, no payment will be made.

Similarly, rates for all trades shall include for screens or safety nets covering up and protecting works from damage caused by dust, sun, rain and similar hazards, and protecting the public from dust, nuisance, falling rubbish and the like.

No payment will be made for screens or safety nets under any circumstance except where specifically ordered by the Maintenance Surveyor in writing and stating that they are for the exclusive use of the Employer.

**Measurement of scaffolding**

**SC18.11**

Scaffolding shall be measured net face area as erected between the two outmost uprights of the scaffolding. The height of the scaffolding shall be measured from the average founding levels to the top continuous effective horizontal rails. No deduction for opening shall be made.

**Measurement of screens or safety nets**

**SC18.12**

Screens or safety nets shall be measured net to the areas as fixed. No deduction shall be made for opening not exceeding 2.00 m<sup>2</sup>.

**Measurement of tower scaffolding**

**SC18.13**

Tower scaffolding of any form shall be measured net volume based on net plan area as erected between the outmost supporting members of the scaffolding and the height of the top member of the scaffolding.

### SPECIAL CONDITIONS

#### SCAFFOLDING, SCREENS AND STAGING

|   |                |   |
|---|----------------|---|
| <b>Measurement of staging</b>           | <b>SC18.14</b> | Staging to soffits of building or structure shall be measured net plan area as erected between the outmost supporting members of the staging. The height of the staging shall be measured from the working platform to the average founding level where it is erected. No deduction shall be made for opening not exceeding 1.00 m <sup>2</sup> .   |
| <b>Rates for scaffolding generally</b>  | <b>SC18.15</b> | <p>The rates for scaffolding shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision and erection on Site of all materials including poles, uprights, rails, bracings, etc., timber, lashings, struts, wedges, boarding, toe boards, spikes, screws, bolts, straps, brackets, clamps and the like and any safety nettings, safety fans, sloping catch fans, protective canopy all as specified in the Specification in the Contract.</li> <li>(b) Making good any damage caused to walls and other surfaces during use, erection and taking down.</li> <li>(c) Repairing and maintaining throughout the period of use in first or subsequent positions. Providing all necessary inspection report(s) as required by the Construction Site (Safety) Regulations.</li> <li>(d) Complying with codes and standards of G.S. Items 1.34 and 1.39.1 to 1.39.8.</li> <li>(e) Certification by Authorized Persons or Registered Structural Engineers.</li> </ul> |
| <b>Rates for metal scaffolding</b>      | <b>SC18.16</b> | <p>The rates for metal scaffolding shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Delivery to and erection on Site, repairing and maintaining throughout the period of use in first or subsequent positions and taking down and setting aside for re-erection or removing from Site.</li> <li>(b) Proprietary or non-proprietary type.</li> <li>(c) Providing and assembling all materials including poles, rails, supports, struts, ladders, bracings, working platform and any other accessories in accordance with the recommendations of the system.</li> </ul>   |
| <b>Rates for screens or safety nets</b> | <b>SC18.17</b> | <p>The rates for screens or safety nets shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Providing and fixing screens or safety nets to scaffoldings, slopes or other surfaces, repairing and maintaining throughout the period of use in first or subsequent positions and taking down and setting aside for re-erection or removing from Site.</li> <li>(b) All fixing accessories.</li> <li>(c) Sealing up joints, forming opening and finishing any portion as doors or flaps.</li> <li>(d) Allowing for laps.</li> <li>(e) Making good any damage caused during use, erection and taking down.</li> </ul>  |

**SPECIAL CONDITIONS****SCAFFOLDING, SCREENS AND STAGING****Rates for staging****SC18.18**

The rates for staging shall include for : -

- (a) Delivery to and erection on Site, repairing and maintaining throughout the period of use in first or subsequent positions, and taking down and setting aside for re-erection or removing from Site.
- (b) Providing and assembling all materials including poles, rails, supports, struts, ladders, bracings, working platform, swivel casters with brake, jack base and any other accessories to support any imposed loads in accordance with the recommendations of the staging.
- (c) Proprietary or non-proprietary type.
- (d) Making good any damage during use including replacement if required.
- (e) Allowance for ensuring no overloading the staging.

| Item  |  | A<br>\$  | Item  |
|-------|--|----------|-------|
|       | <b>TEMPORARY PLANT</b>   |          |       |
|       | <i>Per hour</i>  |          |       |
| 18001 | Air compressor, silenced machine (3.0 m <sup>3</sup> /min. at 7 kg/cm <sup>2</sup> ) with two 15 m hoses and two breakers including one operator for compressor..... | 302.00   | 18001 |
| 18002 | Ditto, (6.0 m <sup>3</sup> /min. at 7 kg/cm <sup>2</sup> ) with four 15 m hoses and four breakers including one operator for compressor.....                         | 353.00   | 18002 |
| 18003 | Excavator, full circle slew crawler or wheel mounted with backacter, 6 tonnes.....   | 467.00   | 18003 |
| 18004 | Skid steer loader, rated operating capacity up to 620 kg.....  | 347.00   | 18004 |
| 18005 | Crane, lorry mounted or all terrain, n.e. 12 tonnes.....   | 784.00   | 18005 |
| 18006 | Ditto but up to 20 tonnes.....   | 931.00   | 18006 |
| 18007 | Ditto but up to 30 tonnes.....   | 1,116.00 | 18007 |
| 18008 | Access platform, scissor lift self propelled, yard travel, capacity up to 400 kg.....  | 273.00   | 18008 |
| 18009 | Ditto but up to 800 kg.....  | 326.00   | 18009 |
| 18010 | Ditto but exceeding 800 kg.....  | 349.00   | 18010 |
| 18011 | Access platform, telescopic self propelled, yard travel, capacity up to 400 kg and platform height up to 10.0 metre.....   | 675.00   | 18011 |
| 18012 | Ditto, capacity up to 400 kg and platform height exceeding 10.0 metre.....   | 909.00   | 18012 |
| 18013 | Access platform, vehicle mounted, telescopic/articulated in any capacity and platform height up to 20.0 metre.....   | 747.00   | 18013 |
| 18014 | Ditto but up to 30.0 metre.....  | 781.00   | 18014 |
| 18015 | Ditto but exceeding 30.0 metre.....  | 2,255.00 | 18015 |
| 18016 | Generator set, 330.0 kVA.....  | 700.00   | 18016 |
| 18017 | Pumps, portable, double diaphragm, discharge branch up to 51 mm diameter including hoses n.e. 100 metre long.....  | 83.00    | 18017 |
| 18018 | Ditto but up to 102 mm diameter.....   | 111.00   | 18018 |
| 18019 | Pumps, portable, sludge and sewage, discharge branch up to 102 mm diameter including hoses n.e. 100 metre long.....  | 128.00   | 18019 |
| 18020 | Pumps, portable, electric submersible, discharge branch up to 51 mm diameter including hoses n.e. 100 metre long.....  | 78.00    | 18020 |
| 18021 | Ditto but up to 102 mm diameter.....   | 104.00   | 18021 |

| Item                              |  | Item            |
|-----------------------------------|--|-----------------|
| <b>TEMPORARY ACCOMMODATION</b>    |  |                 |
| Temporary container office : -    |  |                 |
| <i>Per month</i>                  |  | A<br>\$         |
| 18022                             | Container office, 20 feet long.....  | 1,435.00 18022  |
| Portable toilet : -               |  |                 |
| <i>Per month</i>                  |  |                 |
| 18023                             | Portable toilet equipped with open waste tank.....   | 2,260.00 18023  |
| 18024                             | Ditto but of handicapped type.....   | 2,858.00 18024  |
| 18025                             | Portable toilet equipped with flushing system.....   | 3,373.00 18025  |
| 18026                             | Portable toilet equipped with flushing system and wash hand basin.....   | 3,761.00 18026  |
| <b>CONVEYANCE BY LAND VEHICLE</b> |  |                 |
| <i>Per trip</i>                   |  | A<br>\$         |
| 18027                             | Van, pick up or similar utility vehicle, capacity up to 1.30 tonnes.....   | 221.00 18027    |
| 18028                             | Ditto but up to 2.60 tonnes.....   | 258.00 18028    |
| 18029                             | Lorry (highway use) n.e. 6.50 tonnes.....  | 334.00 18029    |
| 18030                             | Ditto but 12.00 tonnes.....  | 367.00 18030    |
| 18031                             | Ditto but 24.50 tonnes.....  | 458.00 18031    |
| 18032                             | Extra over either of Items 18029 to 18031 inclusive for lorry fitted with crane (jib arm) attachment, maximum load n.e. 3.50 tonnes..... | 45.00 18032     |
| 18033                             | Ditto but exceeding 3.50 tonnes.....   | 63.00 18033     |
| 18034                             | Lorry with tipper (highway use) n.e. 11.0 tonnes.....  | 422.00 18034    |
| <b>CONVEYANCE BY HELICOPTER</b>   |  |                 |
| <i>Per trip</i>                   |  | A<br>\$         |
| 18035                             | Helicopter, carrying capacity up to 800 kilogrammes, for the first 30 minutes.....   | 19,775.00 18035 |
| <i>Each</i>                       |  |                 |
| 18036                             | Add to Item 18035 for each subsequent 5 minutes (measured to the nearest 5 minutes).....   | 3,296.00 18036  |

| Item  |   |         | Item  |
|-------|---|---------|-------|
|       | <b>SCAFFOLDINGS</b>   |         |       |
|       | Erect, maintain, take down and clear away :-  |         |       |
|       | <i>Per square metre</i>   | A<br>\$ |       |
| 18037 | Scaffolding (other than metal scaffolding) comprising a single layer of framework of uprights and horizontal rails.....   | 38.40   | 18037 |
| 18038 | Scaffolding (other than metal scaffolding) comprising double layers of framework of uprights and horizontal rails of free standing scaffolding.....   | 49.40   | 18038 |
| 18039 | Metal scaffolding comprising a single layer of framework of uprights and horizontal rails.....  | 116.00  | 18039 |
| 18040 | Metal scaffolding comprising double layers of framework of uprights and horizontal rails of free standing scaffolding.....  | 154.60  | 18040 |
|       | <i>Per cubic metre</i>  |         |       |
| 18041 | Tower scaffolding (other than metal tower scaffolding).....   | 130.40  | 18041 |
| 18042 | Metal tower scaffolding.....  | 574.50  | 18042 |
|       | <b>SCREENS</b>  |         |       |
|       | Erect, maintain, take down and clear away :-  |         |       |
|       | <i>Per square metre</i>   | A<br>\$ |       |
| 18043 | One layer of safety net to scaffoldings, slopes or other surfaces including stakes, pegs, supports, etc. as necessary.....  | 15.50   | 18043 |
| 18044 | Screens in woven polyethylene sheet (nei lung tso pao), tarpaulin or other suitable covering to scaffoldings, slopes or other surfaces as protection including stakes, pegs, supports, etc. as necessary.....   | 23.50   | 18044 |
| 18045 | Blast or landslip protection screen constructed of steel framings closely erected, and braced and strutted at not more than 1.20 m centres, or other approved construction covered with expanded metal or chain link mesh and fixed screen including concrete footings or movable concrete blocks and make good after completion..... | 354.30  | 18045 |
|       | <b>STAGING</b>  |         |       |
|       | Erect, maintain, take down and clear away :-  |         |       |
|       | <i>Per square metre</i>   | A<br>\$ |       |
| 18046 | Metal staging n.e. 4.00 m high.....   | 170.30  | 18046 |
| 18047 | Ditto but 4.00 - 8.00 m high.....   | 194.60  | 18047 |
| 18048 | Ditto but 8.00 - 11.00 m high.....  | 275.80  | 18048 |
| 18049 | Ditto but 11.00 - 15.00 m high.....   | 356.90  | 18049 |
| 18050 | Ditto but 15.00 - 19.00 m high.....   | 438.00  | 18050 |

**Section 19**

**RECREATIONAL / SPORTS SURFACING AND  
PROTECTIVE PADDING**



## SECTION 19

### RECREATIONAL / SPORTS SURFACING AND PROTECTIVE PADDING

#### SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Particular Specification for various recreational / sports surfacing systems</b> | <b>SC19.01</b> | <p>The works relating to various recreational / sports surfacing systems shall generally be read and used in conjunction, where applicable, with Particular Specification for All Weather Athletic Surfaces, Particular Specification for Impact Absorbing Surfacing Material, Particular Specification for Synthetic Surfaces for Tennis and Multi-sports (other than tennis) and Particular Specification for Recreational Surface Coating System for Tennis and Multi-sports (other than tennis) adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages for complying with all requirements as stipulated in the Specification and Employer's Requirements adopted in the Contract for recreational / sports surfacing and protective padding.</p> |
| <b>Abbreviations</b>  | <b>SC19.02</b> | <p>"IAAF" shall mean International Association of Athletics Federations.</p> <p>"ITF" shall mean International Tennis Federation.</p> <p>"EPDM" shall mean ethylene propylene diene monomer.</p>   |
| <b>Measurement</b>  | <b>SC19.03</b> | <p>All items of surfacing / flooring systems shall be measured over the net area covered including additional girth of curbs, channels and the like. No deduction shall be made for voids not exceeding 0.50 m<sup>2</sup>.</p> <p>Items for construction of new sub-base, base courses and substrate to receive all weather athletic surfaces, tennis and multi-sport surfacing, impact absorbing surfacing material and recreational surface coating system shall be measured and valued separately under Section 12 - Roadwork and Cable Duct of this Schedule.</p> <p>All protective padding shall be measured the net covered area as fixed.</p>  |
| <b>Rates generally</b>  | <b>SC19.04</b> | <p>Unless otherwise stated, the rates shall generally include for supply and installation complete with and including all necessary fixing accessories all in accordance with manufacturer's instructions.</p> <p>The rates shall also generally include for installation for proprietary systems to be executed by specialist contractors or applicators accredited or endorsed by the manufacturer of the proprietary system and approved by the Maintenance Surveyor.</p>   |

**SPECIAL CONDITIONS**

**Rates for all weather athletic surfacing, tennis and multi-sport surfacing, impact absorbing surfacing material and recreational surface coating system**

**SC19.05**

The rates for all weather athletic surfacing, tennis and multi-sport surfacing, impact absorbing surfacing material and recreational surface coating system shall further include for : -

- (a) All works to flat or sloping surfaces.
- (b) Laying to falls and currents.
- (c) All works to curve, circular and any shape required by the Maintenance Surveyor.
- (d) All necessary cleaning of new substrate as recommended by manufacturers prior to laying including application of sealer and on completion.
- (e) Working along perimeter or around obstructions.
- (f) Laying to pattern or incorporation of graphic designs and colour transitions, if required.
- (g) Provision of aluminium curbing with rounded edges, curb markers and drainage pads at appropriate intervals, for all weather athletic surfacing.
- (h) Making good and matching existing athletic / sports surfacing where new surfacing is applied.
- (i) Provision of literature, test certificates, reports, maintenance manuals, manufacturer's guarantee and supplier's / applicator's warranty.
- (j) Provision of site samples and testing including testing according to the "IAAF Track Synthetic Surface Testing Specifications" for IAAF certified systems where required.
- (k) Providing all shop drawings associated with builder's work requirements.
- (l) Provision of a written assurance from the manufacturer that the surfacing does not contain in its finished state any substance which is known to be toxic or carcinogenic when in contact with skin, and that no such substances will be released as a vapour or dust during normal use.

**Rates for taking up and preparing existing surfaces to receive new all weather athletic surfacing, tennis and multi-sport surfacing, and recreational surface coating system**

**SC19.06**

The rates for taking up and preparing existing surfaces to receive new all weather athletic surfacing, tennis and multi-sport surfacing, and recreational surface coating system shall further include for : -

- (a) Complete stripping off existing surfacing or coating to expose base course including clear away.
- (b) Cleaning and scrubbing of base course, and filling up voids to the substrate with approved materials.
- (c) Raking out of cracks and priming and repairing cracks using proprietary crack filler.
- (d) Provision of flood test to identify any ponding and patching with levelling material, if required.
- (e) Removing existing and replacing with new expansion joints including repairing existing substrata.

### SPECIAL CONDITIONS

**Rates for line marking for all weather athletic surfacing, tennis and multi-sport surfacing and recreational surface coating system**

**SC19.07**

The rates for line marking for all weather athletic surfacing, tennis and multi-sport surfacing, and recreational surface coating system shall further include for : -

- (a) All preparation work to existing surfaces as recommended by the manufacturer.
- (b) Keeping adjacent surfaces clean and free from dust as G.S. Item 21.44 and painting surfaces disturbed.
- (c) Removing all articles of hardware and the like before painting and re-fixing after painting has been completed.
- (d) Painting samples as required.
- (e) Setting out and paint all courts to the required standards.
- (f) Touching up coated surfaces on completion as required.
- (g) Repainting one month prior to the expiry of the Maintenance Period.
- (h) Protecting and cleaning as G.S. Item 21.43.
- (i) Provision of literature, test certificates, reports, maintenance manuals, manufacturer's guarantee and supplier's / applicator's warranty.
- (j) Checking by and provision of a Surveyor's Certificate by a qualified surveyor for IAAF certified systems.

**Rates for provision of IAAF Certificate and report of measurement**

**SC19.08**

The rates for provision of IAAF's Certificate and report of measurement shall further include for : -

- (a) Carrying out examination and survey by an approved independent specialist including labour, supervisory staff and equipment required.
- (b) Provision of examination certificate and IAAF Certification System - Report of Measurement.

**Rates for proprietary self-levelling and smoothing screed (recreational surface coating system)**

**SC19.09**

The rates for self-levelling and smoothing screed under the recreational surface coating system shall further include for : -

- (a) Supply and laying screed compatible to the proprietary recreational surface coating system to be applied and in accordance with manufacturer's instruction.
- (b) Preparing the existing surfaces prior to the application of the self-levelling and smoothing screed as recommended by the manufacturer.
- (c) Working into channels and recessed covers and working around pipes, metal sections and the like.
- (d) Laying or executing work in bays or between strips, circular or pattern.

**SPECIAL CONDITIONS**

|   |                         |   |
|---|-------------------------|---|
| <b>Rates for proprietary self-levelling and smoothing screed (recreational surface coating system) (Cont'd)</b> | <b>SC19.09 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(e) All temporary formwork or rules.</li> <li>(f) All joints between different types of materials and joints between new and existing surfaces including wire netting as G.S. Item 18.14.</li> <li>(g) Covering up and protecting where necessary.</li> </ul>  |
| <b>Rates for recreational surfaces coating system</b>   | <b>SC19.10</b>          | <p>The rates for recreational surface coating system shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All preparation work to existing surfaces including applying floor bonding / binding agent as recommended by the manufacturer.</li> <li>(b) Multi-coloured work and cutting to line.</li> <li>(c) Keeping adjacent surfaces clean and free from dust as G.S. Item 21.44 and painting surfaces disturbed.</li> <li>(d) Removing all articles of hardware and the like before painting and re-fixing after painting has been completed.</li> <li>(e) Painting sample panels as required.</li> <li>(f) Touching up coated surfaces on completion as required.</li> <li>(g) Protecting and cleaning as G.S. Item 21.43.</li> <li>(h) Removing painted sample panels.</li> <li>(i) Provision of literature, test certificates, reports, maintenance manuals, manufacturer's guarantee and supplier's / applicator's warranty.</li> </ul> |
| <b>Rates for protective padding</b>   | <b>SC19.11</b>          | <p>The rates for protective padding shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision of samples.</li> <li>(b) Covering material of outdoor usage which is capable to resist ultraviolet degradation within the warranty period.</li> <li>(c) Provision of literature, test certificates, reports, maintenance manuals, manufacturer's guarantee and supplier's warranty.</li> </ul>   |

| Item  |  |                | Item                                 |
|-------|--|----------------|--------------------------------------|
|       | <b>ALL WEATHER ATHLETIC SURFACING</b>  |                |                                      |
|       | Proprietary cast in-situ resilient synthetic all weather athletic surfacing system with high quality, stable and environmental acceptable surfacing materials suitable for athletic tracks or field facilities, approved and certified by IAAF and comply with BS EN 14877 / DIN 18035 Part 6, and install all in accordance with the manufacturer's instructions :- | Supply and fix | Take up and prepare existing surface |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$                              |
| 19001 | Proprietary cast in-situ resilient synthetic athletic surfacing of sandwich system with primer, base layer made of recycled granules mixed with high quality polyurethane binder and top layer made of polyurethane coating using EPDM granules, overall finished thickness not less than 13 mm.....   | 395.90         | 55.30                                |
| 19002 | Ditto but not less than 20 mm .....  | 435.50         | 58.50                                |
| 19003 | Proprietary cast in-situ resilient synthetic athletic surfacing of triple layer top performance full PUR system with a foamed polyurethane interlayer with primer, two base layers made of recycled granules and top layer made of EPDM granules, overall finished thickness not less than 13 mm.....  | 600.10         | 57.90                                |
| 19004 | Ditto but not less than 20 mm .....  | 660.10         | 60.90                                |
|       | Prepare and apply proprietary all weather athletic surfacing line marking paint of any colour and thickness including marking out, preparing surface, cleaning and making good in accordance with the manufacturer's instructions :-   |                |                                      |
|       | <i>Per linear metre</i>  |                | A<br>\$                              |
| 19005 | Line n.e. 100 mm wide .....  |                | 27.20                                |
|       | <i>Each</i>  |                |                                      |
| 19006 | Hurdle and relay position .....  |                | 68.50                                |
| 19007 | Letters, characters, logos, signs, etc. and the like n.e. 300 mm high .....  |                | 83.30                                |
| 19008 | Apply and obtain IAAF Certificate (except Class 1 Certificate) including examination certificate and report of measurement for Certified Athletics Facilities.....   |                | 44,000.00                            |
| 19009 | Apply and obtain IAAF Class 1 Certificate including examination certificate and report of measurement for Certified Athletics Facilities.....<br>(The actual rate should be : \$236,000.00 for Item 19009A)  |                | 23,600.00                            |
|       | (Note :- The above Items 19001 to 19009 inclusive will only be paid for if ordered in writing by the Maintenance Surveyor.)  |                |                                      |

| Item  |  |                |                                      | Item  |
|-------|--|----------------|--------------------------------------|-------|
|       | <b>TENNIS AND MULTI-SPORT SURFACING</b>  |                |                                      |       |
|       | Proprietary cast in-situ resilient synthetic multi-sports surfacing system with high quality, stable and environmental acceptable surfacing materials suitable for outdoor facilities such as multi-purpose fields, school playgrounds, athletic tracks and the like and comply with BS EN 14877 / DIN 18035 Part 6, and install all in accordance with the manufacturer's instructions : -  | Supply and fix | Take up and prepare existing surface |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$                              |       |
| 19010 | Proprietary cast in-situ resilient synthetic multi-sports surfacing of single layer permeable EPDM system with primer and EPDM layer made of EPDM granules, overall finished thickness not less than 9 mm.....   | 296.70         | 48.00                                | 19010 |
| 19011 | Ditto but not less than 13 mm .....  | 338.60         | 49.90                                | 19011 |
|       | Prepare and apply proprietary multi-sports surfacing line marking paint of any colour and thickness including marking out, preparing surface, cleaning and making good in accordance with the manufacturer's instructions : -  |                |                                      |       |
|       | <i>Per linear metre</i>  |                | A<br>\$                              |       |
| 19012 | Line n.e. 100 mm wide .....  |                | 20.40                                | 19012 |
|       | <i>Each</i>  |                |                                      |       |
| 19013 | Letters, characters, logos, signs, etc. and the like n.e. 300 mm high .....  |                | 62.40                                | 19013 |
|       | Proprietary prefabricated resilient synthetic multi-sports surfacing system with high quality, stable and environmental acceptable surfacing materials suitable for outdoor facilities such as multi-purpose fields, school playgrounds, athletic tracks and the like and comply with BS EN 14877 / DIN 18035 Part 6, and install all in accordance with the manufacturer's instructions : - | Supply and fix | Take up and prepare existing surface |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$                              |       |
| 19014 | Proprietary prefabricated resilient synthetic multi-sports surfacing system to floor, overall finished thickness not less than 9 mm.....   | 389.90         | 35.30                                | 19014 |
| 19015 | Ditto but not less than 13 mm .....  | 437.80         | 43.90                                | 19015 |
|       | <i>Per linear metre</i>  |                | Supply and fix<br>A<br>\$            |       |
| 19016 | In-laid line marking on proprietary prefabricated resilient synthetic multi-sports surfacing, n.e. 100 mm wide .....   |                | 26.80                                | 19016 |
|       | <i>Each</i>  |                |                                      |       |
| 19017 | In-laid number on proprietary prefabricated resilient synthetic multi-sports surfacing, size : 800 x 800 mm .....  |                | 292.00                               | 19017 |
| 19018 | Ditto logo, size : 1200 x 1200 mm .....  |                | 525.00                               | 19018 |



| Item  |  | Overall thickness of system (mm) |        |        | Item  |
|---|--|----------------------------------|--------|--------|-------|
|   |  | 6                                | 8      | 10     |       |
|   |  | A                                | B      | C      |       |
|   |  | \$                               | \$     | \$     |       |
| <b>TENNIS AND MULTI-SPORT SURFACING (CONT'D)</b>  |  |                                  |        |        |       |
| Proprietary rubber sport surfacing system with high quality, stable and environmental acceptable surfacing materials in interlocking tiles for indoor facilities such as fitness centre and the like and comply with BS EN 14877 / DIN 18035 Part 6, and install all in accordance with the manufacturer's instructions :-                                      |  |                                  |        |        |       |
|   |  | <i>Per square metre</i>          |        |        |       |
| 19029   | Proprietary rubber sport surfacing system to floor or wall.....  | 315.30                           | 330.50 | 356.00 | 19029 |
| 19030   | Take up and prepare existing surface of proprietary rubber sport surfacing system .....  | 26.00                            | 28.60  | 31.20  | 19030 |
|   |  | <i>Per linear metre</i>          |        |        |       |
|   |  | <b>Supply and fix</b>            |        |        |       |
|   |  | <b>A</b>                         |        |        |       |
|   |  | <b>\$</b>                        |        |        |       |
| 19031   | In-laid line marking on proprietary rubber sport surfacing system, n.e. 100 mm wide .....  | 21.70                            |        |        | 19031 |
|   |  | <b>Each</b>                      |        |        |       |
| 19032   | In-laid number on proprietary rubber sport surfacing system, size : 800 x 800 mm .....   | 236.00                           |        |        | 19032 |
| 19033   | Ditto logo, size : 1200 x 1200 mm .....  | 425.00                           |        |        | 19033 |
| <b>IMPACT ABSORBING SURFACING MATERIAL</b>  |  |                                  |        |        |       |
| Proprietary impact absorbing surfacing material for play areas with high quality, stable and environmental acceptable surfacing materials complying with B.S. 7188 or equivalent international standard with thickness complying with assessment of critical fall height of B.S. EN 1177, and install all in accordance with the manufacturer's instructions :- |  |                                  |        |        |       |
|   |  | <i>Per square metre</i>          |        |        |       |
|   |  | <b>Supply and fix</b>            |        |        |       |
|   |  | <b>A</b>                         |        |        |       |
|   |  | <b>\$</b>                        |        |        |       |
| 19034   | Impact absorbing surfacing material of any colour and size with surface impact attenuation of critical fall height up to 1.50 m maximum fixed with any approved adhesive ..... | 349.70                           |        |        | 19034 |
| 19035   | Ditto but with critical fall height up to 3.00 m maximum .....   | 576.70                           |        |        | 19035 |
| 19036   | Take down and clear away impact absorbing surfacing material for either of Items 19034 and 19035.....  | 16.90                            |        |        | 19036 |
| 19037   | Take down and set aside for reuse impact absorbing surfacing material ditto .....  | 19.50                            |        |        | 19037 |
| 19038   | Fix only impact absorbing surfacing material ditto .....   | 73.30                            |        |        | 19038 |



| Item  |   |                      | Item  |
|-------|---|----------------------|-------|
|       | <b>IMPACT ABSORBING SURFACING MATERIAL (CONT'D)</b>   |                      |       |
|       | Proprietary impact absorbing surfacing material for play areas with high quality, stable and environmental acceptable surfacing materials complying with B.S. 7188 or equivalent international standard with thickness complying with assessment of critical fall height of B.S. EN 1177, and install all in accordance with the manufacturer's instructions : - (Cont'd) | Supply<br>and<br>fix |       |
|       | <i>Per linear metre</i>   | A<br>\$              |       |
| 19039 | Triangular kerb margin for critical fall height up to 1.50 m maximum .....  | 171.10               | 19039 |
| 19040 | Ditto but with critical fall height up to 3.00 m maximum .....  | 302.20               | 19040 |
| 19041 | Take down and clear away triangular kerb margin surface for either of Items 19039 and 19040.....  | 7.40                 | 19041 |
| 19042 | Take down and set aside for reuse triangular kerb margin ditto .....  | 18.40                | 19042 |
| 19043 | Fix only triangular kerb margin ditto .....   | 28.50                | 19043 |
|       | <i>Per set</i>  |                      |       |
| 19044 | Extra over either of Items 19034 and 19035 for impact absorbing surfacing material for stepping block 300 x 300 x 600 mm high .....   | 1,018.90             | 19044 |
|       | <b>TREATMENT TO EXISTING / NEW SUBSTRATES FOR RECREATIONAL SURFACE COATING SYSTEM</b>   |                      |       |
|       |   | Supply<br>and<br>fix |       |
|       | <i>Per square metre</i>   | A<br>\$              |       |
| 19045 | Proprietary self-levelling and smoothing screed applied on existing / new concrete or asphalt substrate to receive recreational surface coating all in accordance with manufacturer's instructions.....   | 158.20               | 19045 |

| Item  |   |                |                                      | Item  |
|-------|---|----------------|--------------------------------------|-------|
|       | <b>RECREATIONAL SURFACE COATING SYSTEM</b>  |                |                                      |       |
|       | Proprietary recreational surface coating system with high quality, stable and environmental acceptable surfacing material suitable for outdoor tennis and multi-sports facilities like handball, basketball, volleyball, etc. and other outdoor sporting activities, and install all in accordance with the manufacturer's instructions : - | Supply and fix | Take up and prepare existing surface |       |
|       | <i>Per square metre</i>   | A \$           | B \$                                 |       |
| 19046 | Proprietary acrylic recreational surface coating system suitable for multi-sports facilities like handball, basketball, volleyball, and the like to floor and including provision of a warranty not less than 2 years.....  | 67.80          | 19.50                                | 19046 |
| 19047 | Ditto but suitable for outdoor tennis facilities, included under ITF classified surfaces, to floor and including provision of a warranty not less than 2 years.....   | 81.40          | 19.50                                | 19047 |
| 19048 | Add to either of Items 19046 and 19047 for including proprietary cushion resilient layer.....   | 22.60          | 2.60                                 | 19048 |
|       | <i>Per linear metre</i>   |                | Supply and fix                       |       |
|       |   |                | A \$                                 |       |
| 19049 | Two coats of proprietary line marking on proprietary acrylic recreational surface coating system, n.e. 50 mm wide.....  |                | 8.40                                 | 19049 |
| 19050 | Ditto but circular-on-plan, n.e. 10.0 m radius.....   |                | 10.10                                | 19050 |
|       | <i>Per square metre</i>   | Supply and fix | Take up and prepare existing surface |       |
|       |   | A \$           | B \$                                 |       |
| 19051 | Proprietary inorganic recreational surface coating system with silica binder suitable for track facilities like jogging track, cycling track, and the like and including provision of a warranty not less than 2 years.....   | 101.30         | 19.50                                | 19051 |
| 19052 | Ditto suitable for multi-sports facilities like handball, basketball, volleyball, and the like and including provision of a warranty not less than 2 years.....   | 130.00         | 19.50                                | 19052 |
|       | <i>Per linear metre</i>   |                | Supply and fix                       |       |
|       |   |                | A \$                                 |       |
| 19053 | Two coats of proprietary line marking on proprietary inorganic recreational surface coating system, n.e. 50 mm wide.....  |                | 12.40                                | 19053 |
| 19054 | Ditto but circular-on-plan, n.e. 10.0 m radius.....   |                | 14.20                                | 19054 |

Item

Item

**PROTECTIVE WALL PADDING**

Protective padding for indoor or outdoor use comprising PVC coated fabric vinyl cover in any colour and minimum 30 mm thick foam complying with the following :-

|                           |                         |
|---------------------------|-------------------------|
| Indentation hardness test | BS EN ISO 2439          |
| Fire resistance test      | BS 7176 : Medium hazard |
| Flammability test         | BS EN 71-2              |
| Non-toxicity Test         | BS EN 71-3              |

| Supply and fix | Fix only |
|----------------|----------|
|----------------|----------|

*Per square metre*

19055 Protective padding to wall and column with 12 mm thick plywood backing board..... 566.00 41.60 19055

*Per linear metre*

19056 Post padding (without backing board)..... 492.20 34.10 19056

Proprietary protective wall padding complying with relevant British Standards, DIN Standards or other equivalent standards all in accordance with manufacturer's instructions, fixing by any means to walls, columns, posts and the like :-

Proprietary rubber protective padding resistant to abrasion, UV light and ozone attack for outdoor use and complying with the following :-

|                          |  |
|--------------------------|--|
| Polymer type             | ≥ 95% natural rubber, resistant to abrasion, UV light and ozone attack |
| Hardness/Durometer       | 40 IRHD  |
| Tensile strength         | ≥ 21MPa or 3103 psi  |
| Elongation at break      | ≥ 750%   |
| Tension set              | ≥ 10%  |
| Tear strength            | ≥ 45 N/mm  |
| Resilience               | ≥ 83%  |
| Specific gravity         | ≤ 0.98   |
| Temperature range        | -40°C to +70°C (-40°F to +158°F)                                       |
| Abrasion resistant index | 105 at DIN 53516   |

| Supply and fix | Fix only |
|----------------|----------|
|----------------|----------|

*Per square metre*

19057 Rubber protective padding up to 30 mm thick to wall, column or post..... 1,549.20 77.90 19057

Item

Item

**PROTECTIVE WALL PADDING (CONT'D)**

Proprietary protective wall padding complying with relevant British Standards, DIN Standards or other equivalent standards all in accordance with manufacturer's instructions, fixing by any means to walls, columns, posts and the like : - (Cont'd)

Proprietary protective padding for indoor use comprising PVC coated fabric vinyl cover in any colour and 60 mm thick foam complying with the following : -

|                            |   |
|----------------------------|---|
| Vinyl or PVC coated fabric | Matt finish<br>Flame retardant to DIN 4102  |
| Foam                       | Density minimum 58 kg/m <sup>3</sup>  |
|                            | Meet fire test B.S. 5852 : Part 2   |
|                            | Contains no Class I or II Ozone Depleting Chemicals (ODC) as listed under the Clean Air Act Amendments 1990 |

| Supply and fix | Fix only |       |
|----------------|----------|-------|
|                | A        | B     |
| \$             | \$       | \$    |
| 932.50         | 47.60    | 19058 |
| 795.10         | 38.50    | 19059 |

*Per square metre*

19058 Protective padding to wall and column with 12 mm thick plywood backing board.....

*Per linear metre*

19059 Post padding (without backing board).....

**REPAIRS TO PROTECTIVE WALL PADDING**

*Per square metre*

19060 Take down and clear away protective wall padding of any thickness including backing .....

19061 Take down and set aside for re-use protective wall padding of any thickness including backing .....

| A     |
|-------|
| \$    |
| 29.50 |
| 32.50 |

**Section 20**

**FIXTURES AND FITTINGS**

## SECTION 20

### FIXTURES AND FITTINGS

#### SPECIAL CONDITIONS

**Measurement  
of joinery  
fittings**

**SC20.01**

This Section of the Schedule contains composite units of which the whole or majority of the whole units are fabricated off-Site, delivered and assembled on Site.

All composite units shall be measured as finished work in place.

Unless otherwise stated, all sizes stated are finished sizes.

The rates appearing in this Section shall solely be applied to the valuation of fixtures and fittings as composite units. Unless with the written approval of the Maintenance Surveyor, composite units shall be measured as a whole unit and shall not be broken down and measured as constituent components.

Rates for constituent components of the composite units in other Sections in the Schedule of Rates shall not be permitted to apply to the valuation of the same, and vice versa.

Unless otherwise stated, ironmongeries, hardware and all fixing accessories for joinery fittings are deemed to be included in the rates of the joinery fittings and shall not be measured separately.

No deduction shall be made for openings not exceeding 0.50 m<sup>2</sup>.

**Measurement  
of cabinets,  
cupboards,  
wardrobes,  
sink cabinets  
and the like**

**SC20.02**

Drawer units, solid timber doors or sliding doors, shelving units and the like forming part of the cabinets, cupboards, wardrobes, sink cabinets and the like shall not be measured separately but shall be deemed included as part of the whole joinery fittings.

Glazed doors or glazed sliding doors are measured separately.

**Measurement  
of book shelves,  
storage shelves,  
rack units and  
the like**

**SC20.03**

Book shelves, storage shelves, rack units and the like, complete with side and back panels, are composite units and are measured using rates in this Section of the Schedule.

Shelving boards to open shelves without side and back panels shall not be measured using rates in this Section, but shall be measured using rates in Section 08 - Carpentry and Joinery of the Schedule.

**Measurement  
of sunblinds,  
curtains,  
awnings and  
canvas generally**

**SC20.04**

Sunblinds shall generally be measured to the exact dimensions of the windows to be blinded.

Curtains shall generally be measured the area to be curtained.

Awnings shall be measured to the plane areas as finished. Vertical edges and sides of awnings shall not be measured separately but shall be deemed included as part of the awnings. Portion operating individually is considered as one individual size.

## SPECIAL CONDITIONS

|  |                         |  |
|--|-------------------------|--|
| <b>Measurement of sunblinds, curtains, awnings and canvas generally (Cont'd)</b> | <b>SC20.04 (Cont'd)</b> | <p>Canvas shall be measured to the net area as finished with no allowance made for seams and pleats.</p> <p>Take down existing fixtures and power supply installation shall be measured separately.</p>  |
| <b>Measurement of halyard, pulleys, etc. for aluminium flag poles</b>            | <b>SC20.05</b>          | Halyard, pulleys, etc. for aluminium flag poles shall be measured the height of the flag pole.   |
| <b>Rates for joinery fittings generally</b>                                      | <b>SC20.06</b>          | <p>The rates for joinery fittings shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of design and shop drawings to be approved by the Maintenance Surveyor.</li> <li>(b) Submission of samples of components, colour samples, colour charts and the like, for selection and consideration by the Maintenance Surveyor.</li> <li>(c) Provision of prototypes for repetitive fittings, as required, to be approved by the Maintenance Surveyor prior to fabrication.</li> <li>(d) All fabrication, assembling and erection work either carried out on Site or off-Site.</li> <li>(e) Installation and fixing work at any positions or heights and irrespective of whether to existing or new surface.</li> <li>(f) Materials used for framing construction shall include hardwood, softwood, composite board or tropical hardwood substitute.</li> <li>(g) All necessary treatment to all timber works.</li> <li>(h) Any number of drawer units, shelving units and/or divisional panels as required.</li> <li>(i) All surface finishes such as wax polished and/or painting with low VOC paint, and/or laminated plastic veneer, unless otherwise specified.</li> <li>(j) Where hardwood or timber veneer is specified as the surface finishes, the veneer shall include the use of oak, maple, teak, beech, mahogany, cherry, walnut, ash, anigre, citron, sapele or sycamore veneer.</li> <li>(k) Lipping on all edges with selected hardwood.</li> <li>(l) Forming tongued angles, chamfers, rebates, grooves and the like.</li> <li>(m) Forming all types of framed joints including ship-lap, mitred, tenons, housed dovetailed and the like.</li> </ul> |

**SPECIAL CONDITIONS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for joinery fittings generally (Cont'd)</b>                           | <b>SC20.06 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(n) All ancillary materials for jointing and fixing accessories like metal brackets, framing, bolts, nuts, etc. for installation and fixing in position.</li> <li>(o) Ironmongery and hardware like hinges, catches, drawer runners, pull handles, stud pins, locks and keys and the like.</li> <li>(p) Pointing, jointing and sealing all edges.</li> <li>(q) Forming holes and recesses for toilet fittings, light fittings, sockets, accessories, etc. and/or pipework.</li> <li>(r) Providing and maintaining suitable protective covering during progress of work and removal of the same and leaving the joinery fittings clean upon completion of works.</li> <li>(s) Making good all existing surfaces.</li> </ul>                   |
| <b>Rates for cabinets, cupboards, hanging cupboards wardrobes and the like</b> | <b>SC20.07</b>          | <p>The rates for cabinets, cupboards, hanging cupboards, wardrobes and the like, shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Solid timber doors or sliding doors.</li> <li>(b) Where glazed doors or sliding glazed doors are specified, the panels shall be constructed either in laminated glass or polycarbonate sheet complete with glazing beads.</li> <li>(c) Where sliding doors are specified, they should be fitted with tracks and rollers.</li> <li>(d) Drawer units and shelving units forming part of the cabinets, cupboards, hanging cupboards, wardrobes and the like.</li> <li>(e) Hanging rods within wardrobes.</li> <li>(f) Fixing to wall and ceiling including anchor bolts and stainless steel support brackets.</li> </ul> |
| <b>Rates for sink cabinets</b>   | <b>SC20.08</b>          | <p>The rates for sink cabinets shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Under-sink cabinet either with fixed panels, door or sliding door panels.</li> <li>(b) Drawer units and shelving units forming part of the sink cabinets.</li> <li>(c) Forming or cutting opening to accommodate sink (measured separately).</li> <li>(d) Fitting and installing sink (measured separately) and making all necessary adjustment to suit.</li> <li>(e) Pointing edges of the sink and tap with waterproof sealant.</li> </ul>  |
| <b>Rates for pigeon hole racks</b>   | <b>SC20.09</b>          | <p>The rates for pigeon hole racks shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Any number of pigeon holes as required.</li> </ul>  |



### SPECIAL CONDITIONS

**Rates for  
proprietary  
fume cupboards**

**SC20.10**

The rates for proprietary fume cupboards shall include for : -

- (a) Design, supply, fabrication and installation of the complete system all in accordance with the manufacturer's instructions.
- (b) Assembling and erection work either carried out on Site or off-Site.
- (c) Installation and fixing work at any positions or heights and irrespective of whether to existing or new surface.
- (d) All protection of appropriate means prior to and upon completion until the works are handed over.
- (e) Worktop to be constructed in suitable chemical resistant laboratory-grade materials to be approved by the Maintenance Surveyor.
- (f) Either static or mobile units; in the case of mobile units, the units shall be fitted with lockable castors.
- (g) Provision of connections to the necessary plumbing, drainage and building services installations including electricity connectors, jointing materials and accessories. Connection to nearest power point shall be carried out by registered electrical workers.
- (h) Testing and commissioning on completion.
- (i) Submission of catalogues, technical literature and shop drawings for the Maintenance Surveyor's approval.
- (j) Submission of the supplier's warranty.
- (k) Submission of operation and maintenance manuals.

**Rates for  
lockers**

**SC20.11**

The rates for lockers shall further include for : -

- (a) Submission of catalogues, technical literature and shop drawings to be approved by the Maintenance Surveyor.
- (b) Submission of samples of components, colour samples, colour charts and other document demonstrating the properties of moisture and impact resistance, for selection and consideration by the Maintenance Surveyor.
- (c) Provision of prototypes for repetitive fittings, as required, to be approved by the Maintenance Surveyor prior to fabrication.
- (d) All fabrication, assembling and erection work either carried out on Site or off-Site.
- (e) Installation and fixing work at any positions and irrespective of whether to existing or new surface.
- (f) All protection of appropriate means prior to and upon completion until the works are handed over.

**SPECIAL CONDITIONS**

|   |                         |   |
|---|-------------------------|---|
| <b>Rates for lockers (Cont'd)</b>                                     | <b>SC20.11 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(g) Any number of shelving units as required.</li> <li>(h) Ironmongery and hardware like concealed hinges, cam or latch locks, hanging rods, hooks and the like and integrated rubber strips.</li> </ul>   |
| <b>Rates for proprietary recycled plastic seating benches</b>         | <b>SC20.12</b>          | <p>The rates for proprietary recycled plastic seating benches shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Design, supply, fabrication and installation of the complete system all in accordance with the manufacturer's instructions.</li> <li>(b) Recycled plastic materials which do not contain in its finished state any substance which is known to be toxic or carcinogenic when in contact with skin, and that no such substances will be released as a vapour or dust during normal use.</li> <li>(c) Assembling and installation work either carried out on Site or off-Site.</li> <li>(d) Arm rests at ends of seating benches.</li> <li>(e) All protection of appropriate means prior to and upon completion until the works are handed over.</li> <li>(f) Submission of catalogues, technical literature and shop drawings for the Maintenance Surveyor's approval.</li> <li>(g) Submission of the supplier's warranty of not less than two (2) years.</li> </ul>  |
| <b>Rates for proprietary recycled plastic chess tables and chairs</b> | <b>SC20.13</b>          | <p>The rates for proprietary recycled plastic chess tables and chairs shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Design, supply, fabrication and installation of the complete system all in accordance with the manufacturer's instructions.</li> <li>(b) Recycled plastic materials which do not contain in its finished state any substance which is known to be toxic or carcinogenic when in contact with skin, and that no such substances will be released as a vapour or dust during normal use.</li> <li>(c) Assembling and installation work either carried out on Site or off-Site.</li> <li>(d) Chess tables in either square, rectangular or round shape complete with stainless steel chess board.</li> <li>(e) All protection of appropriate means prior to and upon completion until the works are handed over.</li> <li>(f) Submission of catalogues, technical literature and shop drawings for the Maintenance Surveyor's approval.</li> <li>(g) Submission of the supplier's warranty of not less than two (2) years.</li> </ul> |

### SPECIAL CONDITIONS

**Rates for recycled plastic litter bins**

**SC20.14**

The rates for recycled plastic litter bins shall include for :-

- (a) Submission of catalogues, technical literature and shop drawings to be approved by the Maintenance Surveyor.
- (b) Recycled plastic materials which do not contain in its finished state any substance which is known to be toxic or carcinogenic when in contact with skin, and that no such substances will be released as a vapour or dust during normal use.
- (c) All fabrication and assembling work either carried out on Site or off-Site.
- (d) Installation and fixing work at any positions and irrespective of whether to existing or new surface including fixing accessories and anchorage.
- (e) Hinged doors, sign plates and ash trays integrated with the litter bins as required.
- (f) All protection of appropriate means prior to and upon completion until the works are handed over.
- (g) Submission of the supplier's warranty of not less than two (2) years.

**Rates for venetian blinds**

**SC20.15**

The rates for venetian blinds shall include for :-

- (a) Supplying and fixing of single or multi-coloured slats, rise and fall control mechanism, locking cord control mechanism, tilt control mechanism, ladder tape, child safety cleat and all necessary accessories all in accordance with the manufacturer's instructions.
- (b) Supplying and fixing of enamel coated galvanized steel or enamel coated, powder coated or anodized aluminium head and bottom rails.
- (c) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.
- (d) Making good area disturbed, touching up plasterwork and paintwork where required.
- (e) Submission of technical pamphlets and samples of venetian blinds.
- (f) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

**Rates for vertical blinds**

**SC20.16**

The rates for vertical blinds shall include for :-

- (a) Supplying and fixing of single or multi-coloured blades, base weights, drag and base connector cords, glider rail, open and close control, and stop control at any position and all necessary accessories all in accordance with the manufacturer's instructions.
- (b) Supplying and fixing of enamel coated galvanized steel or anodized aluminium head rail.
- (c) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.

### SPECIAL CONDITIONS

**Rates for  
vertical blinds  
(Cont'd)**

**SC20.16  
(Cont'd)**

- (d) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
- (e) Making good area disturbed, touching up plasterwork and paintwork where required.
- (f) Submission of technical pamphlets and samples of vertical blinds.
- (g) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

**Rates for  
chic sunblinds**

**SC20.17**

The rates for chic sunblinds shall include for : -

- (a) Supplying and fixing of single or multi-coloured split bamboo laths, well laced with best quality waterproof line at 125 mm centres, fixing cord, pulley cleats, screw hanging eyes and all necessary accessories.
- (b) Supplying and fixing 65 mm wide stout fabric bands at both edges.
- (c) Supplying and fixing of stout whole bamboo top and bottom.
- (d) Plugging and fixing to plastered surfaces or screwing to wooden pelmet.
- (e) Spraying fire retardant paint on blinds.
- (f) Making good area disturbed, touching up plasterwork and paintwork where required.
- (g) Submission of a sample of chic sunblinds.
- (h) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

**Rates for  
roller blinds**

**SC20.18**

The rates for roller blinds shall include for : -

- (a) Supplying and fixing of single or multi-coloured curtains with or without linings.
- (b) Supplying and installation of switch control, motor and all necessary accessories for electrically operated roller blinds.
- (c) Supplying and installation of rise, fall and stop control mechanism including all necessary accessories.
- (d) Provision of fixing framings or brackets to existing building or structure.
- (e) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
- (f) Making good areas disturbed, touching up plasterwork and paintwork where required.
- (g) Submission of technical pamphlets and samples of roller blinds.
- (h) Moving and replacing in position all movable furniture as necessary at the time of execution of works.

**SPECIAL CONDITIONS**

**Rates for awnings**

**SC20.19**

The rates for awnings shall include for : -

- (a) Supplying and fixing of single or multi-coloured awnings manually or electrically operated.
- (b) Supplying and installation of switch control, motor and all necessary accessories as required.
- (c) Provision for vertical edge and sides of awnings.
- (d) Provision of fixing framings or brackets to existing building or structure.
- (e) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
- (f) Making good areas disturbed, touching up plasterwork and paintwork where required.
- (g) Submission of technical pamphlets and samples of awnings.

**Rates for blackout curtains and**

**SC20.20**

The rates for blackout curtains and stage curtains shall include for : -

- (a) Supplying and fixing of single or multi-coloured curtains with or without linings.
- (b) All pleats and folding.
- (c) Hooks and hangers.
- (d) Moving and replacing in position all movable furniture as necessary at the time of execution of works.
- (e) Preparing and applying flame-proof finish to all surfaces of the fabric covering.
- (f) Making good areas disturbed, touching up plasterwork and paintwork where required.
- (g) Submission of samples of curtains and linings.

**Rates for alterations and repairs generally**

**SC20.21**

The rates for alterations and repairs items shall generally include for : -

- (a) Taking down and clearing away of old / defective articles or fittings.
- (b) Preparing to receive replacement articles or fittings.
- (c) Supplying and fixing new articles or fittings.
- (d) All matching screws, spacers, tape, rails and the like.
- (e) All labour and material in mortising, fitting, plugging, cutting and pinning.
- (f) Making good areas disturbed, touching up plasterwork and paintwork where required.

**SPECIAL CONDITIONS**

**Ironmongery  
for curtains**

**SC20.22**

Ironmongery for curtains can be found and measured in Section 09 - Ironmongery of this Schedule.

**Rates for  
sanitary  
fittings and  
parts of  
sanitary fittings  
generally**

**SC20.23**

The rates for sanitary fittings and parts of sanitary fittings shall generally include for : -

- (a) Supply and installation of the sanitary fittings in any size (unless specifically stated otherwise) and in white or any standard colours, all in accordance with the manufacturer's recommendations and by licensed plumber when required.
- (b) Providing and fixing all necessary accessories, fittings and the like as recommended by the manufacturer.
- (c) Providing all necessary jointing compound, mortar, lead plugs and other ancillary materials including cutting and pinning or plugging and screwing brackets.
- (d) Applying white or coloured non-acidic and anti-mould silicone sealant after de-greasing and drying of fittings.
- (e) Providing and making all necessary connections to water supply services, overflow, waste and ventilating pipes.
- (f) Providing temporary sealing off of water supply services, waste and ventilating pipes in case when the installation work cannot be completed on time.
- (g) Providing and maintaining protective coverings during the progress of work and subsequently removal of the same, cleaning off when required and upon completion of works.
- (h) Supply and installation of the sanitary fittings that have been registered with and certified by WSD under the Water Efficiency Labelling Scheme (WELS) as having the specified water efficiency grade (either Grade 1, 2, 3 or 4) as and when required.
- (i) Submission of the WSD's Certificate of Registration of the sanitary fittings to the Maintenance Surveyor.
- (j) Conformance with the nominal flow rates as specified in the WSD's guidelines of the relevant water efficiency grades for WELS.

**Rates for taps,  
cocks, mixers  
including shower  
mixers, and  
urinal / W.C.  
flush valves**

**SC20.24**

The rates for taps, cocks, mixers including shower mixers and urinal / W.C. flush valves shall further include for:-

- (a) Supply and installation of fittings in brass, chromium plated brass and other materials of the like.
- (b) Different diameter of fittings, unless otherwise specifically stated.

**SPECIAL CONDITIONS**

**Rates for fix  
only of taps,  
cocks and mixers**

**SC20.25**

The rates for fix only of taps, cocks and mixers shall further include for : -

- (a) Provisions of connectors, fittings and jointing materials.

**Rates for  
toilet fittings  
and accessories**

**SC20.26**

The rates for toilet fittings and accessories shall include for : -

- (a) Provisions of all fixing accessories and fittings as recommended by the manufacturer.
- (b) Providing all necessary jointing compound, mortar, plugs, screws and the like including cutting and pinning.
- (c) Applying non-acidic and anti-mould silicone sealant around toilet fittings and accessories after de-greasing and drying.
- (d) Submission of catalogues, technical literature and shop drawings.
- (e) Providing and maintaining suitable protective covering during progress of work and removal of the same and leaving the toilet fittings and accessories clean upon completion of works.

**Rates for  
braille and  
tactile maps**

**SC20.27**

The rates for braille and tactile maps shall include for : -

- (a) Design, supply and installation of the braille and tactile maps, all in accordance with the manufacturer's instructions.
- (b) Design, translation and proof reading of Braille message of tactile maps by a recognized certifying body which shall be a Non-Government (Voluntary) Organization and is a member of the Hong Kong Joint Council for People with Disabilities, as accepted by the Maintenance Surveyor.
- (c) Finishing all surfaces as required.
- (d) All protection of appropriate means prior to and upon completion until the works are handed over.
- (e) Submission of design and shop drawings for the Maintenance Surveyor's approval.
- (f) Making good all disturbed surfaces.

**SPECIAL CONDITIONS****Rates for projector screens****SC20.28**

The rates for projector screens shall include for : -

- (a) Design, supply and installation of the complete system all in accordance with the manufacturer's instructions.
- (b) Assembling and erection work carried out on Site.
- (c) All protection of appropriate means prior to and upon completion until the works are handed over.
- (d) Provision of connection to nearest power point which shall be carried out by registered electrical workers.
- (e) Testing and commissioning on completion.
- (f) Submission of catalogues, technical literature and shop drawings.
- (g) Submission of the supplier's warranty.
- (h) Submission of operating and maintenance manuals.

**Rates for traffic barrier system****SC20.29**

The rates for traffic barrier system shall include for : -

- (a) Design, supply and installation of the complete system all in accordance with the manufacturer's instructions.
- (b) Assembling and erection work carried out on Site.
- (c) All protection of appropriate means prior to and upon completion until the works are handed over.
- (d) Provision of connection to nearest power point which shall be carried out by registered electrical workers.
- (e) Testing and commissioning on completion.
- (f) Submission of catalogues, technical literature and shop drawings.
- (g) Submission of the supplier's warranty.
- (h) Submission of operating and maintenance manuals.



| Item   |   |          | Item                  |       |
|--|---|----------|-----------------------|-------|
| <b>JOINERY FITTINGS</b>                                      |   |          |                       |       |
| Base cabinets, cupboards, hanging cupboards and the like : - |   |          |                       |       |
|  |   | Plywood  | Particle board or MDF |       |
|  |   | A        | B                     |       |
|  |   | \$       | \$                    |       |
|  | <i>Per linear metre</i>   |          |                       |       |
| 20001  | Base cabinet, cupboard, hanging cupboard and the like, n.e. 0.40 m deep and n.e. 0.60 m high.....                                       | 2,440.00 | 2,105.00              | 20001 |
| 20002  | Ditto but 0.60 - 0.90 m high.....   | 3,142.00 | 2,959.00              | 20002 |
| 20003  | Ditto but 0.90 - 1.10 m high.....   | 3,905.00 | 3,661.00              | 20003 |
| 20004  | Extra over either of Items 20001 to 20003 inclusive for exposed surfaces finished with natural hardwood veneer.....                     | 271.00   | 271.00                | 20004 |
|  | <i>Each</i>   |          |                       |       |
| 20005  | Extra over either of Items 20001 to 20003 inclusive for glazed door or glazed sliding door n.e. 0.40 m wide and n.e. 1.10 m high.....   | 72.00    | 72.00                 | 20005 |
|  | <i>Per linear metre</i>   |          |                       |       |
| 20006  | Base cabinet, cupboard, hanging cupboard and the like, 0.40 - 0.60 m deep and n.e. 0.60 m high.....                                     | 2,562.00 | 2,196.00              | 20006 |
| 20007  | Ditto but 0.60 - 0.90 m high.....   | 3,234.00 | 3,051.00              | 20007 |
| 20008  | Ditto but 0.90 - 1.10 m high.....   | 3,996.00 | 3,722.00              | 20008 |
| 20009  | Extra over either of Items 20006 to 20008 inclusive for exposed surfaces finished with natural hardwood veneer .....                    | 325.00   | 325.00                | 20009 |
|  | <i>Each</i>   |          |                       |       |
| 20010  | Extra over either of Items 20006 to 20008 inclusive for glazed door or glazed sliding door 0.40 - 0.60 m wide and n.e. 1.10 m high..... | 95.00    | 95.00                 | 20010 |

| Item  |   |          |                       | Item  |
|-------|---|----------|-----------------------|-------|
|       | <b>JOINERY FITTINGS (CONT'D)</b>  |          |                       |       |
|       | Tall cabinets, wardrobes and the like : -   |          |                       |       |
|       | (Note : - Cabinets exceeding 1.10 m high are classified as tall cabinets.)  |          |                       |       |
|       | <i>Per linear metre</i>   |          |                       |       |
|       |   | Plywood  | Particle board or MDF |       |
|       |   | A        | B                     |       |
|       |   | \$       | \$                    |       |
| 20011 | Tall cabinet, wardrobe and the like, n.e. 0.40 m deep and n.e. 1.80 m high.....   | 3,868.00 | 3,257.00              | 20011 |
| 20012 | Ditto but 1.80 - 2.40 m high.....   | 4,973.00 | 4,187.00              | 20012 |
| 20013 | Extra over either of Items 20011 to 20012 inclusive for exposed surfaces finished with natural hardwood veneer .....                    | 437.00   | 437.00                | 20013 |
|       | <i>Each</i>   |          |                       |       |
| 20014 | Extra over either of Items 20011 to 20012 inclusive for glazed door or glazed sliding door n.e. 0.40 m wide and n.e. 2.40 m high.....   | 117.00   | 117.00                | 20014 |
|       | <i>Per linear metre</i>   |          |                       |       |
| 20015 | Tall cabinet, wardrobe and the like, 0.40 - 0.60 m deep and n.e. 1.80 m high.....   | 4,071.00 | 3,460.00              | 20015 |
| 20016 | Ditto but 1.80 - 2.40 m high.....   | 5,234.00 | 4,449.00              | 20016 |
| 20017 | Extra over either of Items 20015 to 20016 inclusive for exposed surfaces finished with natural hardwood veneer .....                    | 459.00   | 459.00                | 20017 |
|       | <i>Each</i>   |          |                       |       |
| 20018 | Extra over either of Items 20015 to 20016 inclusive for glazed door or glazed sliding door 0.40 - 0.60 m wide and n.e. 2.40 m high..... | 177.00   | 177.00                | 20018 |
|       | Sink cabinets : -   |          |                       |       |
|       | (Note : - Granite or solid surfacing material or material other than timber to sink top is measured separately.)                        |          |                       |       |
|       | <i>Per linear metre</i>   |          |                       |       |
|       |   | Plywood  | Particle board or MDF |       |
|       |   | A        | B                     |       |
|       |   | \$       | \$                    |       |
| 20019 | Sink unit n.e. 0.40 m deep and n.e. 0.90 m high.....  | 2,851.00 | 2,340.00              | 20019 |
| 20020 | Sink unit 0.40 - 0.60 m deep and n.e. 0.90 m high.....  | 3,001.00 | 2,486.00              | 20020 |
| 20021 | Extra over either of Items 20019 to 20020 inclusive for exposed surfaces finished with natural hardwood veneer.....                     | 288.00   | 288.00                | 20021 |

| Item  |  |          | Item                  |       |
|-------|--|----------|-----------------------|-------|
|       | <b>JOINERY FITTINGS (CONT'D)</b>   |          |                       |       |
|       | Book shelves, storage shelves, rack units and the like : -   |          |                       |       |
|       |  | Plywood  | Particle board or MDF |       |
|       |  | A        | B                     |       |
|       |  | \$       | \$                    |       |
|       | <i>Per linear metre</i>  |          |                       |       |
| 20022 | Book shelf, storage shelf, rack unit and the like, n.e. 0.40 m deep and n.e. 0.90 m high.....  | 2,101.00 | 1,806.00              | 20022 |
| 20023 | Ditto but 0.90 - 1.10 m high.....  | 2,580.00 | 2,211.00              | 20023 |
| 20024 | Ditto but 1.10 - 1.80 m high.....  | 3,686.00 | 3,133.00              | 20024 |
| 20025 | Ditto but 1.80 - 2.40 m high.....  | 4,313.00 | 3,679.00              | 20025 |
| 20026 | Extra over either of Items 20022 to 20025 inclusive for exposed surfaces finished with natural hardwood veneer.....                                | 258.00   | 258.00                | 20026 |
| 20027 | Book shelf, storage shelf, rack unit and the like, 0.40 - 0.60 m deep and n.e. 0.90 m high.....  | 2,211.00 | 1,880.00              | 20027 |
| 20028 | Ditto but 0.90 - 1.10 m high.....  | 2,728.00 | 2,322.00              | 20028 |
| 20029 | Ditto but 1.10 - 1.80 m high.....  | 3,870.00 | 3,280.00              | 20029 |
| 20030 | Ditto but 1.80 - 2.40 m high.....  | 4,534.00 | 3,870.00              | 20030 |
| 20031 | Extra over either of Items 20027 to 20030 inclusive for exposed surfaces finished with natural hardwood veneer.....                                | 272.00   | 272.00                | 20031 |
|       | Reception counters and writing benches with or without under-counter drawers : -   |          |                       |       |
|       | <i>Per linear metre</i>  |          |                       |       |
| 20032 | Reception counter n.e. 0.90 m deep and n.e. 0.90 m high complete with under-counter drawer<br>0.15 m high, sliding tray and/or key board tray..... | 6,049.00 | 4,973.00              | 20032 |
| 20033 | Extra over Item 20032 for exposed surfaces finished with natural hardwood veneer .....   | 303.00   | 303.00                | 20033 |
| 20034 | Base cabinet n.e. 0.60 m deep and n.e. 0.90 m high underneath reception counter.....   | 2,675.00 | 2,188.00              | 20034 |
| 20035 | Drawer cabinet n.e. 0.60 m deep and n.e. 0.90 m high underneath reception counter.....   | 2,675.00 | 2,188.00              | 20035 |
| 20036 | Shelving rack n.e. 0.30 m deep above reception counter top.....  | 2,152.00 | 1,765.00              | 20036 |
| 20037 | Extra over either of Items 20034 to 20036 inclusive for exposed surfaces finished with natural hardwood veneer .....                               | 241.00   | 241.00                | 20037 |

| Item  |   |                          |                                    | Item     |       |
|-------|---|--------------------------|------------------------------------|----------|-------|
|       | <b>JOINERY FITTINGS (CONT'D)</b>  |                          |                                    |          |       |
|       | Reception counters and writing benches with or without under-counter drawers : - (Cont'd)   |                          |                                    |          |       |
|       |   | Plywood                  | Particle board or MDF              |          |       |
|       |   | A<br>\$                  | B<br>\$                            |          |       |
|       | <i>Per linear metre</i>   |                          |                                    |          |       |
| 20038 | L-shaped reception counter unit, 700 mm deep and n.e. 0.90 m high overall, comprising of screen partition 1,100 mm high with quadrant panel at corner and return panel at bottom ends, all covered with fabric on both sides, together with cantilevered work top and counter top along the girth, both tops having pressure laminated surfaces trimmed with T moulding and complete with support brackets..... | 6,638.00                 | 5,367.00                           | 20038    |       |
| 20039 | Writing bench n.e. 0.60 m deep fixed to wall complete with metal brackets .....   | 3,024.00                 | 2,648.00                           | 20039    |       |
| 20040 | Ditto but supported on vertical stand n.e. 0.90 m high.....   | 3,373.00                 | 2,879.00                           | 20040    |       |
| 20041 | Extra over either of Items 20039 to 20040 inclusive for exposed surfaces finished with natural hardwood veneer .....  | 248.00                   | 248.00                             | 20041    |       |
| 20042 | Writing bench n.e. 0.90 m deep fixed to wall complete with metal brackets .....   | 3,373.00                 | 2,879.00                           | 20042    |       |
| 20043 | Ditto but supported on vertical stand n.e. 0.90 m high.....   | 3,711.00                 | 3,167.00                           | 20043    |       |
| 20044 | Extra over either of Items 20042 to 20043 inclusive for exposed surfaces finished with natural hardwood veneer .....  | 218.00                   | 218.00                             | 20044    |       |
|       | Pigeon hole racks : -   |                          |                                    |          |       |
|       | <i>Per linear metre</i>   |                          |                                    |          |       |
| 20045 | Pigeon hole rack n.e. 0.30 m deep and n.e. 0.90 m high.....   | 2,312.00                 | 1,988.00                           | 20045    |       |
| 20046 | Ditto but 0.90 - 1.10 m high.....   | 2,839.00                 | 2,434.00                           | 20046    |       |
| 20047 | Ditto but 1.10 - 1.80 m high.....   | 4,055.00                 | 3,397.00                           | 20047    |       |
| 20048 | Pigeon hole rack 0.30 - 0.60 m deep and n.e. 0.90 m high.....   | 2,434.00                 | 2,068.00                           | 20048    |       |
| 20049 | Ditto but 0.90 - 1.10 m high.....   | 3,001.00                 | 2,554.00                           | 20049    |       |
| 20050 | Ditto but 1.10 - 1.80 m high.....   | 4,259.00                 | 3,610.00                           | 20050    |       |
|       | Sundries : -  |                          |                                    |          |       |
|       | <i>Per linear metre</i>   |                          |                                    |          |       |
|       |   | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |   | A<br>\$                  | B<br>\$                            | C<br>\$  |       |
| 20051 | Base cabinet, cupboard, hanging cupboard and the like, of any sizes.....  | 210.00                   | 264.00                             | 360.00   | 20051 |
| 20052 | Tall cabinet and wardrobe, of any sizes.....  | 316.00                   | 400.00                             | 541.00   | 20052 |
| 20053 | Sink cabinet, book shelves, storage shelves and rack units of any sizes.....  | 210.00                   | 264.00                             | 360.00   | 20053 |
| 20054 | Reception counter or writing bench with or without under-counter drawers, of any sizes.....   | 316.00                   | 400.00                             | 541.00   | 20054 |
| 20055 | Pigeon hole rack of any sizes.....  | 210.00                   | 264.00                             | 360.00   | 20055 |

| Item  |  | Item      |
|-------|--|-----------|
|       | <b>PROPRIETARY FUME CUPBOARDS</b>  |           |
|       | Proprietary fire resistant double wall type fume cupboard with interior cabin body made of electro-galvanized steel and exterior body cabin constructed of cold-laminated steel with an organic coating of epoxy polyester resin or other similar finish; complete with airflow indicator control, safety devices, all control and monitoring system, 250 mm diameter polypropylene ductwork upto 3 m long, exhaust extraction system including steel support frame, extraction fan and motor and enclosure, worktop and sink, accessories like oval drip cup, water tap, gas outlet, electricity outlet and the like; all connection and testing and commissioning works on completion, all in accordance with the manufacturer's instructions and conformance to EN 14175 and BS 7258 :-<br>(associated power, water and gas supply measured separately)   |           |
|       | <i>Per set</i>   | A<br>\$   |
| 20056 | Proprietary fume cupboard overall size : 1200 x 2300 x 810 mm.....   | 47,700.00 |
| 20057 | Ditto; overall size 1500 x 2300 x 810 mm.....  | 50,800.00 |
|       | Proprietary school type fume cupboard constructed of 4-sides of toughened glass sash, side panels and baffles, with front fascia constructed of aluminium panel with epoxy powder coated or other similar finish, complete with two-compartment base storage cupboard for acid and inflammable liquids, cast epoxy resin worktop and sink; airflow indicator control, safety devices, all control and monitoring system, 250 mm diameter polypropylene ductwork upto 3 m long, exhaust extraction system including steel support frame, extraction fan and motor and enclosure, accessories like oval drip cup, water tap, gas outlet, electricity outlet and the like; all connection and testing and commissioning works on completion, all in accordance with the manufacturer's instructions and conformance to EN 14175 and BS 7258 :- (associated power, water and gas supply measured separately) |           |
|       | <i>Per set</i>   | A<br>\$   |
| 20058 | Proprietary fume cupboard overall size : 1200 x 2400 x 800 mm.....   | 45,300.00 |
| 20059 | Ditto overall size : 1500 x 2400 x 800 mm.....   | 48,000.00 |
|       | <b>EXTENSION TO DUCTWORK AND EXHAUST FANS TO FUME CUPBOARDS</b>  |           |
|       | <i>Per linear metre</i>  | A<br>\$   |
| 20060 | Add to either of Items 20056 to 20059 inclusive for extension of 250 mm diameter polypropylene ductwork connecting to exhaust system of fume cupboard, mounted either on internal or external wall or roof, complete with steel support frame and fixing accessories, connectors to exhaust outlet; all necessary builder's works as required; all connection and testing and commissioning works on completion of the whole exhaust system in conjunction with the proprietary fume cupboard, and all in accordance with the manufacturer's instructions and conformance to EN 14175 and BS 7258 (fume cupboard, fan, motor and power supply measured separately).....  | 1,263.10  |
|       | <i>Per set</i>   | A<br>\$   |
| 20061 | Add to either of Items 20056 to 20059 inclusive for exhaust fan and motor complete with steel support frame, enclosure for fan and motor, fixing accessories; connecting to extended ductwork; mounted either on external wall or roof; all necessary safety devices, control and monitoring panel, connectors to the extended ductwork and exhaust system; builder's works as required; all connection and testing and commissioning on completion of the whole exhaust system in conjunction with the proprietary fume cupboard, and all in accordance with the manufacturer's instructions and conformance to EN 14175 and BS 7258 (fume cupboard, ductwork and power supply measured separately).....  | 14,300.00 |

| Item  |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|---|--|----------------|--------------------------|------------------------------------|----------|-------|
|   |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| <b>LABORATORY BENCHES AND FITTINGS</b>  |  |                |                          |                                    |          |       |
| Laboratory benches comprising heavy duty steel framework complete with worktop of compact laminate or epoxy resin panels with chemical resistant properties, with or without central spine units, shelving units, hanging cabinets, under bench cabinets, sink units, laboratory valves, nozzles, swivel spout fittings, in high gauge brass free from impurity coated with chemically resistant polyester powder coating; accessories like oval drip cup, water taps, gas outlets, electricity outlets and the like; all connection and testing and commissioning works on completion, in accordance with the manufacturer's instructions : - (associated power, water and gas supply measured separately) |  |                |                          |                                    |          |       |
| <i>Per linear metre</i>   |  |                |                          |                                    |          |       |
| 20062   | Laboratory side bench, 0.60 - 0.70 m deep and n.e. 0.90 m high, complete with under bench cabinets but without spine unit.....   | 2,733.70       | 221.40                   | 295.20                             | 427.40   | 20062 |
| 20063   | Laboratory island bench, 1.20 - 1.50 m deep and n.e. 0.90 m high, complete with under bench cabinets but without spine unit.....   | 5,062.40       | 369.00                   | 442.90                             | 679.40   | 20063 |
| 20064   | Ditto but with central spine unit, shelving unit and/or hanging cupboards.....   | 17,523.10      | 590.40                   | 738.10                             | 1,106.60 | 20064 |
| <i>Each</i>   |  |                |                          |                                    |          |       |
| 20065   | Extra over either of Items 20062 to 20064 inclusive for chemical resistant fireclay sink with laboratory stop tap with swivel outlet, acid resistant dilution trap and overflow..... | 1,236.00       | 77.50                    | 80.40                              | 152.00   | 20065 |
| Laboratory fittings in high gauge brass free from impurity coated with chemically resistant polyester powder coating complying with EN 200/DIN 17660 with nitrite seat for leak prove and approved by W.W.O. with international code colour index to DIN EN 13792-2002 : -  |  |                |                          |                                    |          |       |
| <i>Each</i>   |  |                |                          |                                    |          |       |
| 20066   | Water fitting, wall mounted straight valve with removable nozzle .....   | 467.00         | 9.60                     | 11.10                              | 102.00   | 20066 |
| 20067   | Water fitting with bib cock, wall mounted straight valve with removable nozzle .....   | 467.00         | 9.60                     | 11.10                              | 102.00   | 20067 |
| 20068   | Bench mounted swivel swan neck water fitting with removable nozzle .....   | 889.00         | 11.80                    | 13.30                              | 123.00   | 20068 |
| 20069   | Bench mounted swivel swan neck water fitting with bore anti-splash nozzle .....  | 897.00         | 11.80                    | 13.30                              | 123.00   | 20069 |
| 20070   | Bench mounted swivel swan neck water fitting with two way side arm angle valve with removal nozzle .....   | 1,877.00       | 11.80                    | 13.30                              | 123.00   | 20070 |
| 20071   | Bench mounted two way swivel swan neck water fitting with removal nozzle .....   | 1,573.00       | 11.80                    | 13.30                              | 123.00   | 20071 |

| Item   |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|--|----------------|--------------------------|------------------------------------|----------|-------|
|  |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| <b>LOCKERS</b>   |  |                |                          |                                    |          |       |
| Locker with panels made of impact and moisture resistant compact laminate or solid phenolic core panel conforming to BS EN 438 and metal framework including hinges, cam lock or latch lock and keys, with master keying system, locker numbering labels and rubber strip :- |  |                |                          |                                    |          |       |
| <i>Per set</i>   |  |                |                          |                                    |          |       |
| 20072  | Locker, one tier, 300 mm wide x 300 - 500 mm deep x 1800 - 2000 mm high.....                                 | 2,283.00       | 73.80                    | 148.00                             | 220.00   | 20072 |
| 20073  | Ditto but two tiers .....  | 2,719.00       | 73.80                    | 148.00                             | 220.00   | 20073 |
| 20074  | Ditto but three tiers.....   | 3,040.00       | 73.80                    | 148.00                             | 220.00   | 20074 |
| 20075  | Ditto but four tiers.....  | 3,467.00       | 73.80                    | 148.00                             | 220.00   | 20075 |
| 20076  | Ditto but five tiers.....  | 3,875.00       | 73.80                    | 148.00                             | 220.00   | 20076 |
| 20077  | Ditto but six tiers.....   | 4,373.00       | 73.80                    | 148.00                             | 220.00   | 20077 |
| 20078  | Extra over either of Items 20072 to 20077 inclusive for each locker door for coin-return locking device..... | 339.00         | -                        | -                                  | -        | 20078 |
| 20079  | Extra over either of Items 20072 to 20077 inclusive for each locker door for pad lock device.....            | 102.00         | -                        | -                                  | -        | 20079 |
| Locker with panels made of mild cold rolled steel with powder coated or baked enamel finish and metal framework including hinges, cam lock or latch lock and keys, with master keying system, locker numbering labels and rubber strip :-                                    |  |                |                          |                                    |          |       |
| <i>Per set</i>   |  |                |                          |                                    |          |       |
| 20080  | Locker, one tier, 300 mm wide x 300 - 500 mm deep x 1800 - 2000 mm high.....                                 | 1,695.00       | 73.80                    | 148.00                             | 171.00   | 20080 |
| 20081  | Ditto but two tiers .....  | 1,921.00       | 73.80                    | 148.00                             | 171.00   | 20081 |
| 20082  | Ditto but three tiers.....   | 2,147.00       | 73.80                    | 148.00                             | 171.00   | 20082 |
| 20083  | Ditto but four tiers.....  | 2,373.00       | 73.80                    | 148.00                             | 171.00   | 20083 |
| 20084  | Ditto but five tiers.....  | 2,598.00       | 73.80                    | 148.00                             | 171.00   | 20084 |
| 20085  | Ditto but six tiers.....   | 2,825.00       | 73.80                    | 148.00                             | 171.00   | 20085 |
| 20086  | Extra over either of Items 20080 to 20085 inclusive for each locker door for coin-return locking device..... | 339.00         | -                        | -                                  | -        | 20086 |
| 20087  | Extra over either of Items 20080 to 20085 inclusive for each locker door for pad lock device.....            | 102.00         | -                        | -                                  | -        | 20087 |
| Replacement parts only :-  |  |                |                          |                                    |          |       |
| <i>Each</i>  |  |                |                          |                                    |          |       |
| 20088  | Supply only additional key and plastic key plate.....  | 11.70          | -                        | -                                  | -        | 20088 |
| 20089  | Door hinge.....  | 64.00          | 3.00                     | 5.90                               | 12.70    | 20089 |
| 20090  | Cam lock .....   | 168.00         | 3.70                     | 11.10                              | 32.30    | 20090 |

| Item   |   |                |                          |                                    | Item     |       |
|--|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>PROPRIETARY RECYCLED PLASTIC SEATING BENCHES</b>  |   |                |                          |                                    |          |       |
| Proprietary recycled plastic seating benches of outdoor quality including back and arm rests with intermediate and end supports with slats in recycled plastic and polyester powder coated finish, UV, moss, algae and impact resistant; rot, splinter and crack proof; and supports in cast iron with zinc rich epoxy coating; complete with anchorage and fixing accessories; all in accordance with the manufacturer's instructions and as approved by the Maintenance Surveyor : - |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
| <i>Each</i>  |   | A \$           | B \$                     | C \$                               | D \$     |       |
| 20091  | Seating bench, 1200 - 1500 mm long x 600 - 750 mm wide.....   | 5,607.00       | 148.00                   | 221.00                             | 257.00   | 20091 |
| 20092  | Ditto but 1500 - 1800 mm long x 600 - 750 mm wide.....  | 6,449.00       | 177.00                   | 266.00                             | 309.00   | 20092 |
| 20093  | Ditto but 1800 - 2000 mm long x 600 - 750 mm wide.....  | 7,695.00       | 221.00                   | 340.00                             | 394.00   | 20093 |
| 20094  | Ditto but 2000 - 2500 mm long x 600 - 750 mm wide.....  | 9,400.00       | 295.00                   | 443.00                             | 515.00   | 20094 |
| <i>Each</i>  |   |                |                          |                                    | A \$     |       |
| 20095  | Add to either of Items 20091 to 20094 inclusive for intermediate arm rest to seating bench.....   |                |                          |                                    | 253.00   | 20095 |
| <b>PROPRIETARY RECYCLED PLASTIC CHESS TABLES AND CHAIRS</b>  |   |                |                          |                                    |          |       |
| Proprietary recycled plastic chess tables of outdoor quality including chairs with or without backs and with slats in recycled plastic and polyester powder coated finish; UV, moss, algae and impact resistant; rot, splinter and crack proof; and supports in galvanized mild steel; complete with anchorage and fixing accessories; all in accordance with the manufacturer's instructions and as approved by the Maintenance Surveyor : -  |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
| <i>Each</i>  |   | A \$           | B \$                     | C \$                               | D \$     |       |
| 20096  | Chess table, 600 - 900 mm x 600 - 900 mm on plan x 750 - 900 mm high; and complete with 2 no. chairs, each 450 mm long x 500 mm wide x 800 mm high..... | 13,600.00      | 260.00                   | 390.00                             | 441.00   | 20096 |
| 20097  | Add to Item 20096 for each additional chair.....  | 1,695.00       | 65.10                    | 78.10                              | 147.00   | 20097 |
| <b>PROPRIETARY RECYCLED PLASTIC BINS</b>   |   |                |                          |                                    |          |       |
| Approved recycled plastic litter bins of outdoor quality and in all shapes and varying heights; comprising metal supports and frames with finish, removable buckets and recycled plastic slats resistant to UV, moss, algae, corrosion, vandal, impact and fire; and rots, splinter and crack proof; complete with anchorage and fixing accessories; all in accordance with the manufacturer's instructions and as approved by the Maintenance Surveyor : -                            |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
| <i>Each</i>  |   | A \$           | B \$                     | C \$                               | D \$     |       |
| 20098  | Litter bin n.e. 0.25 m <sup>2</sup> plan area .....   | 4,779.00       | 104.00                   | 156.00                             | 206.00   | 20098 |
| 20099  | Ditto but 0.25 - 0.50 m <sup>2</sup> plan area.....   | 5,520.00       | 130.00                   | 195.00                             | 235.00   | 20099 |



| Item  |   |                              |                          |                                    |                          | Item                               |          |       |
|---|---|------------------------------|--------------------------|------------------------------------|--------------------------|------------------------------------|----------|-------|
| <b>CHANGING ROOM SEATING BENCHES</b>                |   |                              |                          |                                    |                          |                                    |          |       |
|   | Changing room seating benches comprising compact laminated seat made of impact and moisture resistant compact laminate conforming to BS EN 438, including back rest, coat hook rail and coat hooks, stainless steel or powder coated aluminium framing and all necessary accessories, all in accordance with the manufacturer's instructions : -  | Supply and fix               | Take down and clear away | Take down and set aside for re-use | Fix only                 |                                    |          |       |
|   | <i>Per linear metre</i>   | A \$                         | B \$                     | C \$                               | D \$                     |                                    |          |       |
| 20100   | Changing seating bench, 900 mm deep x 450 mm high.....  | 3,353.20                     | 73.80                    | 147.70                             | 175.30                   | 20100                              |          |       |
| 20101   | Changing seating bench, single side, 450 mm deep x 450 mm high with 1650 mm high coat hook rail.....  | 3,100.10                     | 73.80                    | 147.70                             | 175.30                   | 20101                              |          |       |
| 20102   | Changing seating bench, double side, 900 mm deep x 450 mm high with 1650 mm high coat hook rail.....  | 5,024.10                     | 147.70                   | 295.20                             | 350.50                   | 20102                              |          |       |
| <b>WRITING BOARDS / NOTICE BOARDS / CHALKBOARDS</b> |   |                              |                          |                                    |                          |                                    |          |       |
|   | Proprietary writing or notice boards in any colour with or without magnetic effect including aluminium frame, bottom rail, all necessary accessories and fixing all in accordance with the manufacturer's recommendations : -   | Supply and fix               |                          |                                    | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|   | <i>Per square metre</i>   | Board size (m <sup>2</sup> ) |                          |                                    |                          |                                    |          |       |
|   |   | n.e. 1.0                     | 1.0 - 2.0                | exc. 2.0                           |                          |                                    |          |       |
|   |   | A \$                         | B \$                     | C \$                               | D \$                     | E \$                               | F \$     |       |
| 20103   | Proprietary writing or notice board in either ceramic or painted-surface board with writing surface in silica polyester compound, with or without magnetic effect including aluminium frame, bottom rail, complete with all necessary accessories and fixing.....   | 744.40                       | 742.90                   | 710.20                             | 18.50                    | 29.60                              | 51.50    | 20103 |
| 20104   | Proprietary triple coated writing board with acrylic resin top-coat over a galvanized steel base sheet, rust proof, surface hardness to 8H, smooth, magnetic, no discoloration; optional green chalk board with grid pattern; notice board to have 10 mm insulation board core with plywood backing, Hessian fabric cover and extruded anodized aluminium frame, including bottom rail, complete with all necessary accessories and fixing..... | 413.90                       | 391.50                   | 369.30                             | 14.80                    | 25.90                              | 42.70    | 20104 |
|   | Proprietary chalkboard stands on floor or fixed to wall all as recommended by the manufacturer : -  | Supply and fix               | Take down and clear away | Take down and set aside for re-use | Fix only                 |                                    |          |       |
|   | <i>Per square metre</i>   | A \$                         | B \$                     | C \$                               | D \$                     |                                    |          |       |
| 20105   | Proprietary chalkboard comprising 4 mm thick high pressure laminated (HPL) based boards of standard green colour, stain resistant and to NEMA LD3 standard, properties on resistance to wear, impact, scratch, on flatness dimensional stability and reaction to immersion in boiling water to meet BS EN 458 (framework and backing measured separately).....  | 553.60                       | 12.50                    | 24.40                              | 39.10                    | 20105                              |          |       |
| 20106   | Proprietary revolving surface writing board, with fixing plates, chalk writing surface to be magnetic, in black or green, standard framework for roller boards in top quality timber, aluminium or medium density fibreboard.....   | 1,695.00                     | 84.20                    | 104.60                             | 84.20                    | 20106                              |          |       |
| 20107   | Proprietary magnetic green / white board, 1.20 m wide, facing sheet to be vitreous porcelain enamel with base metal, plywood core, perimeter trim in extruded anodized aluminium channel with rounded rubber corner, complete with aluminium tube chalk trough installed with concealed bracket fastener.....   | 1,101.80                     | 43.30                    | 60.40                              | 70.40                    | 20107                              |          |       |

| Item  |  |                                  |                          |                                    | Item     |
|-------|--|----------------------------------|--------------------------|------------------------------------|----------|
|       | <b>BAIZE OR NOTICE BOARD FELT</b>  |                                  |                          |                                    |          |
|       | <i>Per square metre</i>  |                                  |                          | A<br>\$                            |          |
| 20108 | Good quality red, green, blue or black baize or fine felt, fixed to doors, notice and directory boards and the like with adhesive or brass nails as required.....  |                                  |                          | 297.20                             | 20108    |
| 20109 | Ditto but fixed to grooved plastic name plates and notice boards (measured separately) including working into grooves (measured flat overall grooves).....   |                                  |                          | 303.10                             | 20109    |
| 20110 | Ditto but fixed to grooved plywood or timber name and directory boards (measured separately) including cutting grooves in plywood or timber and working the baize or felt into the same (measured flat overall grooves)..... |                                  |                          | 309.30                             | 20110    |
|       | <b>CLOTHES DRYING RACKS</b>  |                                  |                          |                                    |          |
|       | Side-way type pulley operated clothes drying rack, with aluminium self-retractable roller system and nylon pulley system, wall mounted with stainless steel supporting brackets and complete with gear box accessories : -   |                                  |                          |                                    |          |
|       | <i>Each</i>  |                                  |                          |                                    |          |
|       |  | Supply and fix                   | Take down and clear away | Take down and set aside for re-use | Fix only |
|       |  | A<br>\$                          | B<br>\$                  | C<br>\$                            | D<br>\$  |
| 20111 | Clothes drying rack, 1500 mm long x 600 - 750 mm wide.....   | 705.00                           | 36.90                    | 44.30                              | 48.80    |
| 20112 | Clothes drying rack with canvas, 1500 mm long x 600 - 750 mm wide.....   | 804.00                           | 50.70                    | 60.40                              | 69.30    |
|       | <b>VENETIAN BLINDS</b>   |                                  |                          |                                    |          |
|       | <i>Per square metre</i>  |                                  |                          |                                    |          |
|       |  | Area of blinds (m <sup>2</sup> ) |                          |                                    |          |
|       |  | n.e. 1.0                         | 1.0 - 1.5                | 1.5 - 2.0                          | Exc. 2.0 |
|       |  | A<br>\$                          | B<br>\$                  | C<br>\$                            | D<br>\$  |
| 20113 | Blinds in individual size.....   | 225.00                           | 187.50                   | 162.70                             | 147.20   |
|       | <i>Per square metre</i>  |                                  |                          |                                    | A<br>\$  |
| 20114 | Extra over Item 20113 for forming graphics and the like on one side.....   |                                  |                          |                                    | 58.10    |
| 20115 | Ditto but on both sides.....   |                                  |                          |                                    | 101.70   |
|       | <i>Each</i>  |                                  |                          |                                    |          |
| 20116 | Extra over Item 20113 for forming opening of any size.....   |                                  |                          |                                    | 46.50    |

| Item                             |   |   | Item  |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|----------------------------------|---|---|-------|----------------------------------|--|----------|----------|---|---|----|----|--------|--------|-------|-------|-------|-------|-------|-------|
|                                  | <b>VENETIAN BLINDS (CONT'D)</b>   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | Alteration and repairs :-   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | Take down and clear away the following old or defective articles or fittings, and supply and fix new articles or fittings :-  |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | <i>Per linear metre</i>   | A<br>\$   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20117                            | Slat.....   | 17.40   | 20117 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20118                            | Head rail.....  | 81.50   | 20118 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20119                            | Bottom rail.....  | 72.20   | 20119 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20120                            | Lift cord.....  | 12.30   | 20120 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20121                            | Ladder cord.....  | 17.40   | 20121 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20122                            | U rod.....  | 23.40   | 20122 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | <i>Each</i>   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20123                            | Tassel.....   | 7.80  | 20123 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20124                            | Tilter.....   | 34.60   | 20124 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20125                            | Cord lock.....  | 40.70   | 20125 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20126                            | Fixing bracket.....   | 28.50   | 20126 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20127                            | Tape roll and tape holder.....  | 28.50   | 20127 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20128                            | 750 mm Long solid core wand with hook.....  | 41.10   | 20128 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20129                            | 1,000 mm Long ditto.....  | 64.50   | 20129 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20130                            | 1,300 mm Long ditto.....  | 77.20   | 20130 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20131                            | 1,500 mm Long ditto.....  | 88.20   | 20131 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20132                            | 2,300 mm Long ditto.....  | 159.00  | 20132 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20133                            | End cap to head or bottom rails.....  | 8.00  | 20133 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20134                            | Slat clip.....  | 6.50  | 20134 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | Sundries :-   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  | <i>Each</i>   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
|                                  |   | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Area of blinds (m<sup>2</sup>)</th> </tr> <tr> <th style="width: 50%;">N.e. 3.0</th> <th style="width: 50%;">Exc. 3.0</th> </tr> <tr> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> </tr> <tr> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">163.00</td> <td style="text-align: right;">183.00</td> </tr> <tr> <td style="text-align: right;">29.40</td> <td style="text-align: right;">33.40</td> </tr> <tr> <td style="text-align: right;">33.40</td> <td style="text-align: right;">39.70</td> </tr> <tr> <td style="text-align: right;">76.10</td> <td style="text-align: right;">88.30</td> </tr> </tbody> </table> |       | Area of blinds (m <sup>2</sup> ) |  | N.e. 3.0 | Exc. 3.0 | A | B | \$ | \$ | 163.00 | 183.00 | 29.40 | 33.40 | 33.40 | 39.70 | 76.10 | 88.30 |
| Area of blinds (m <sup>2</sup> ) |   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| N.e. 3.0                         | Exc. 3.0  |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| A                                | B   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| \$                               | \$  |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 163.00                           | 183.00  |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 29.40                            | 33.40   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 33.40                            | 39.70   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 76.10                            | 88.30   |   |       |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20135                            | Take down venetian blinds and fittings, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured)..... | 163.00  | 20135 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20136                            | Take down existing venetian blinds and set aside for re-fix.....  | 29.40   | 20136 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20137                            | Ditto but clear away from Site.....   | 33.40   | 20137 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |
| 20138                            | Fix only venetian blinds.....   | 76.10   | 20138 |                                  |  |          |          |   |   |    |    |        |        |       |       |       |       |       |       |

| Item                             |   | Item   |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|----------------------------------|---|--|----------------------------------|----|----------|----------|-----------|----------|------|-------|--------|--------|-------|-------|--------|--------|--------|-------|
|                                  | <b>VERTICAL BLINDS</b>  |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | <i>Per square metre</i>   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Area of blinds (m<sup>2</sup>)</th> </tr> <tr> <th>N.e. 1.0</th> <th>1.0 - 1.5</th> <th>Exc. 1.5</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">226.10</td> <td style="text-align: center;">193.80</td> <td style="text-align: center;">170.70</td> </tr> </tbody> </table>  | Area of blinds (m <sup>2</sup> ) |    |          | N.e. 1.0 | 1.0 - 1.5 | Exc. 1.5 | A    | B     | C      | \$     | \$    | \$    | 226.10 | 193.80 | 170.70 |       |
| Area of blinds (m <sup>2</sup> ) |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| N.e. 1.0                         | 1.0 - 1.5   | Exc. 1.5   |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| A                                | B   | C  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| \$                               | \$  | \$   |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 226.10                           | 193.80  | 170.70   |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20139                            | Blinds in individual size.....  | 20139  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | <i>Each</i>   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>A</th> </tr> <tr> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">65.30</td> </tr> </tbody> </table>  | A                                | \$ | 65.30    |          |           |          |      |       |        |        |       |       |        |        |        |       |
| A                                |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| \$                               |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 65.30                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20140                            | Extra over Item 20139 for forming opening of any size.....  | 20140  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | Alteration and repairs :-   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | Take down and clear away the following old or defective articles or fittings, and supply and fix new articles or fittings :-  |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | <i>Per linear metre</i>   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>A</th> </tr> <tr> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">11.80</td> </tr> <tr> <td style="text-align: center;">40.60</td> </tr> <tr> <td style="text-align: center;">22.30</td> </tr> <tr> <td style="text-align: center;">20.40</td> </tr> <tr> <td style="text-align: center;">8.80</td> </tr> <tr> <td style="text-align: center;">14.20</td> </tr> <tr> <td style="text-align: center;">98.60</td> </tr> <tr> <td style="text-align: center;">10.80</td> </tr> </tbody> </table>   | A                                | \$ | 11.80    | 40.60    | 22.30     | 20.40    | 8.80 | 14.20 | 98.60  | 10.80  |       |       |        |        |        |       |
| A                                |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| \$                               |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 11.80                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 40.60                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 22.30                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20.40                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 8.80                             |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 14.20                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 98.60                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 10.80                            |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20141                            | Fabric louvre.....  | 20141  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20142                            | Drawing cord.....   | 20142  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20143                            | Bead chain.....   | 20143  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | <i>Each</i>   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20144                            | Base weight.....  | 20144  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20145                            | End cap.....  | 20145  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20146                            | Hanger.....   | 20146  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20147                            | Set of Runner.....  | 20147  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20148                            | Spacer.....   | 20148  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  |   | <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2">Area of blinds (m<sup>2</sup>)</th> </tr> <tr> <th>N.e. 3.0</th> <th>Exc. 3.0</th> </tr> <tr> <th>A</th> <th>B</th> </tr> <tr> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">138.00</td> <td style="text-align: center;">158.00</td> </tr> <tr> <td style="text-align: center;">16.20</td> <td style="text-align: center;">19.30</td> </tr> <tr> <td style="text-align: center;">24.40</td> <td style="text-align: center;">28.80</td> </tr> <tr> <td style="text-align: center;">76.10</td> <td style="text-align: center;">90.30</td> </tr> </tbody> </table> | Area of blinds (m <sup>2</sup> ) |    | N.e. 3.0 | Exc. 3.0 | A         | B        | \$   | \$    | 138.00 | 158.00 | 16.20 | 19.30 | 24.40  | 28.80  | 76.10  | 90.30 |
| Area of blinds (m <sup>2</sup> ) |   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| N.e. 3.0                         | Exc. 3.0  |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| A                                | B   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| \$                               | \$  |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 138.00                           | 158.00  |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 16.20                            | 19.30   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 24.40                            | 28.80   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 76.10                            | 90.30   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
|                                  | <i>Each</i>   |  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20149                            | Take down vertical blinds and fittings, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured)..... | 20149  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20150                            | Take down existing vertical blinds and set aside for re-fix.....  | 20150  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20151                            | Ditto but clear away from Site.....   | 20151  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |
| 20152                            | Fix only vertical blinds.....   | 20152  |                                  |    |          |          |           |          |      |       |        |        |       |       |        |        |        |       |

| Item  |  |                                  |           |                                  | Item     |       |
|-------|--|----------------------------------|-----------|----------------------------------|----------|-------|
|       | <b>CHIC SUNBLINDS</b>  | Area of blinds (m <sup>2</sup> ) |           |                                  |          |       |
|       |  | N.e. 1.0                         | 1.0 - 1.5 | 1.5 - 2.0                        | Exc. 2.0 |       |
|       | <i>Per square metre</i>  | A<br>\$                          | B<br>\$   | C<br>\$                          | D<br>\$  |       |
| 20153 | Chic sunblinds in individual size.....   | 345.80                           | 339.20    | 332.80                           | 193.60   | 20153 |
|       | <i>Each</i>  |                                  |           |                                  | A<br>\$  |       |
| 20154 | Extra over Item 20153 for forming opening of any size.....   |                                  |           |                                  | 55.30    | 20154 |
|       | Alterations and repairs :-   |                                  |           | Area of blinds (m <sup>2</sup> ) |          |       |
|       |  |                                  |           | N.e. 3.0                         | Exc. 3.0 |       |
|       | <i>Each</i>  |                                  |           | A<br>\$                          | B<br>\$  |       |
| 20155 | Take down chic sunblinds and fittings, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured)..... |                                  |           | 150.00                           | 171.00   | 20155 |
| 20156 | Take down, set aside for re-use chic sunblinds and associated cord and fittings.....   |                                  |           | 25.00                            | 28.90    | 20156 |
| 20157 | Ditto but clear away from Site.....  |                                  |           | 27.70                            | 38.00    | 20157 |
| 20158 | Fix only chic sunblinds complete with cord and fittings.....   |                                  |           | 66.30                            | 74.60    | 20158 |
|       | <b>ROLLER BLINDS</b>   | Height (m)                       |           |                                  |          |       |
|       |  | N.e 1.0                          | 1.0-2.0   | Exc. 2.0                         |          |       |
|       | <i>Per square metre</i>  | A<br>\$                          | B<br>\$   | C<br>\$                          |          |       |
| 20159 | Blinds in individual size, manually operated.....  | 214.70                           | 182.40    | 174.40                           |          | 20159 |
| 20160 | Blinds in individual size, electrically operated.....  | 672.10                           | 641.60    | 557.90                           |          | 20160 |
| 20161 | Extra over either of Items 20159 to 20160 inclusive for additional blackout blinds.....  | 119.10                           | 119.10    | 119.10                           |          | 20161 |
|       | <i>Each</i>  |                                  |           | A<br>\$                          |          |       |
| 20162 | Extra over either of Items 20159 to 20160 inclusive for forming opening of any size.....   |                                  |           | 116.00                           |          | 20162 |
|       | Alterations and repairs :-   |                                  |           | A<br>\$                          |          |       |
|       | <i>Each</i>  |                                  |           | A<br>\$                          |          |       |
| 20163 | Take down roller blinds and fittings, reduce to smaller size (any area), ease, adjust and re-fix in original or other position, including replacement of parts (take down area measured).....  |                                  |           | 164.00                           |          | 20163 |
| 20164 | Take down existing roller blinds and set aside for re-fix.....   |                                  |           | 12.20                            |          | 20164 |
| 20165 | Ditto but clear away from Site.....  |                                  |           | 18.10                            |          | 20165 |
| 20166 | Fix only roller blinds.....  |                                  |           | 98.50                            |          | 20166 |

| Item  |  | Awning in<br>plane area<br>(m <sup>2</sup> ) |                                      | Item   |             |
|-------|--|--|--------------------------------------|--|-------------|
|       | <b>AWNINGS</b>   |  |                                      |  |             |
|       | Awnings complete with all necessary accessories.   |  |                                      |  |             |
|       | <i>Per square metre</i>  |  |                                      |  |             |
|       |  | N.e.<br>14.50                                | 14.50 -<br>29.00                     |  |             |
|       |  | A<br>\$                                      | B<br>\$                              |  |             |
| 20167 | Awnings in individual size, manually operated.....   | 643.20                                       | 578.80                               | 20167  |             |
| 20168 | Ditto, electrically operated .....   | 795.10                                       | 674.40                               | 20168  |             |
| 20169 | Awning fabric to existing awning frame.....  | 347.90                                       | 312.80                               | 20169  |             |
|       | Sundries : -   |  |                                      |  |             |
|       | <i>Per square metre</i>  |  | A<br>\$                              |  |             |
| 20170 | Take down existing manually operated awnings and set aside for re-fix.....   |  | 18.10                                | 20170  |             |
| 20171 | Ditto but clear away from Site.....  |  | 22.60                                | 20171  |             |
| 20172 | Take down existing electrically operated awnings and set aside for re-fix.....   |  | 27.10                                | 20172  |             |
| 20173 | Ditto but clear away from Site.....  |  | 30.40                                | 20173  |             |
| 20174 | Fix only manually operated awnings, including plugging, cutting and pinning etc., and making good and leaving in good order.....   |  | 181.60                               | 20174  |             |
| 20175 | Ditto, but electrically operated.....  |  | 193.90                               | 20175  |             |
|       | <b>CANVAS</b>  |  |                                      |  |             |
|       |  | Supply<br>and<br>fix                         | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |
|       | <i>Per square metre</i>  | A<br>\$                                      | B<br>\$                              | C<br>\$  | D<br>\$     |
| 20176 | Best stripped drill canvas made up, including all seaming, scalloped edges and similar labours, providing and fixing any tying tape or cord, and fixing complete in sunshades and similar positions (rollers and framework measured separately)..... | 75.90  | 7.90                                 | 9.00   | 12.40       |

| Item  |   |                   |                 | Item  |
|-------|---|-------------------|-----------------|-------|
|       | <b>BLACKOUT CURTAINS</b>  | Blackout curtains |                 |       |
|       |   | with linings      | without linings |       |
|       |   | A<br>\$           | B<br>\$         |       |
| 20177 | Blackout curtains of twill, polyester or velvet, fixed to curtain rails and tracks (measured separately)..... | 314.50            | 214.70          | 20177 |
|       | <i>Per square metre</i>   |                   |                 |       |
|       |   |                   | A<br>\$         |       |
| 20178 | Extra over Item 20177 for forming opening of any size.....  |                   | 111.00          | 20178 |
|       | <i>Each</i>   |                   |                 |       |
|       | Sundries : -  |                   |                 |       |
|       | <i>Per square metre</i>   |                   | A<br>\$         |       |
| 20179 | Take down and clear away blackout curtains and associated cord and fittings.....                              |                   | 7.90            | 20179 |
| 20180 | Take down, set aside for re-use blackout curtains and associated cord and fittings.....                       |                   | 9.00            | 20180 |
| 20181 | Fix only blackout curtains completed with cord and fittings.....  |                   | 19.20           | 20181 |
|       | <b>STAGE CURTAINS</b>   | Stage curtains    |                 |       |
|       |   | with linings      | without linings |       |
|       |   | A<br>\$           | B<br>\$         |       |
| 20182 | Cotton velveteen stage curtain with valance fixed on curtain rails and tracks (measured separately).....      | 188.30            | 159.30          | 20182 |
|       | <i>Per square metre</i>   |                   |                 |       |
|       | Sundries : -  |                   |                 |       |
|       | <i>Per square metre</i>   |                   | A<br>\$         |       |
| 20183 | Take down and clear away stage curtains and associated cord and fittings.....                                 | 10.50             | 9.00            | 20183 |
| 20184 | Take down, set aside for re-use stage curtains and associated cord and fittings.....                          | 11.00             | 9.50            | 20184 |
| 20185 | Fix only stage curtains complete with cord and fittings.....  | 23.70             | 21.40           | 20185 |

| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>SANITARY FITTINGS</b>   |                |                          |                                    |          |       |
|       | <b>LAVATORY BASINS</b>   |                |                          |                                    |          |       |
|       | Vitreous china wash basins complete with waste fittings, plug and chain, trap fittings, tap hole with overflow and fixing brackets and accessories.  |                |                          |                                    |          |       |
|       | (Note :- All taps, cocks and mixers are measured separately.)  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20186 | Wall hung wash basin .....   | 508.00         | 86.30                    | 88.50                              | 204.00   | 20186 |
| 20187 | Counter top wash basin .....   | 606.00         | 86.30                    | 88.50                              | 204.00   | 20187 |
| 20188 | Under-counter wash basin .....   | 734.00         | 77.50                    | 80.40                              | 204.00   | 20188 |
|       | <b>SINKS</b>   |                |                          |                                    |          |       |
|       | (Note :- All sink mixers or faucets are measured separately.)  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20189 | Fireclay cleaner's sink (any size) complete with drainer, overflow, waste fitting, plug and chain, trap and brackets.....  | 717.00         | 89.30                    | 91.50                              | 265.00   | 20189 |
| 20190 | Stainless steel Grade 304 single bowl sink complete with waste fitting, plug and chain, trap fitting, tap hole with overflow and fixing brackets and accessories.....  | 933.00         | 77.50                    | 80.40                              | 286.00   | 20190 |
| 20191 | Stainless steel Grade 304 double bowl sink complete with waste fitting, plug and chain, trap, tap hole with overflow and fixing brackets and accessories.....  | 1,333.00       | 77.50                    | 80.40                              | 307.00   | 20191 |
| 20192 | Extra over either of Items 20190 to 20191 inclusive for drain board n.e. 1.00 m long.....  | 339.00         | 50.20                    | 52.40                              | 184.00   | 20192 |
| 20193 | Extra over either of Items 20190 to 20191 inclusive for drain board 1.00 - 1.60 m long.....  | 565.00         | 51.70                    | 53.10                              | 204.00   | 20193 |
|       | Add to either of Items 20190 to 20193 inclusive for stainless steel Grade 316 in lieu of Grade 304.....  | 10%            | -                        | -                                  | -        |       |
|       | (Note :- Item 20194 will only be paid for if ordered by the Maintenance Surveyor in writing.)  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20194 | Approved hospital sluice fitting comprising combined bed-pan and wash up sink complete with loose or fixed trap, brackets, urinal bottle and bed-pan jets, high level cistern with brackets and flush pipe, waste fitting, plug and chain, drainer, shower head and including all necessary supply fittings..... | 16,376.00      | 260.00                   | 264.00                             | 830.00   | 20194 |



| Item                              |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|-----------------------------------|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>SANITARY FITTINGS (CONT'D)</b> |   |                |                          |                                    |          |       |
| <b>WATER CLOSETS (W.C.)</b>       |   |                |                          |                                    |          |       |
|                                   | Vitreous china water closet suites complete with seat and cover, cistern with flushing devices, traps, flush bend and pipes, syphon fittings, ball valves, inlet and outlet connectors and fixing accessories : -   | A              | B                        | C                                  | D        |       |
|                                   | <i>Each</i>   | \$             | \$                       | \$                                 | \$       |       |
| 20195                             | Close-coupled W.C. suite complete with low or high level cistern with lever flush or push button, 6 litre single flush or 6 / 4 litre dual flush and "P" or "S"-trap.....   | 1,045.00       | 88.50                    | 91.50                              | 261.00   | 20195 |
| 20196                             | Wash down wall-hung W.C. pan complete with bottom or top inlet concealed cistern with push button, 6 litre single flush or 6 / 4 litre dual flush and "P" or "S"-trap.....  | 1,426.00       | 88.50                    | 91.50                              | 261.00   | 20196 |
| 20197                             | Accessible W.C. suite complete with low or high level cistern with lever flush, 6 litre single flush or 6 / 4 litre dual flush and "P" or "S"-traps.....  | 1,433.00       | 90.00                    | 96.70                              | 282.00   | 20197 |
| 20198                             | Approved stainless steel Grade 304 floor mounted pedestal W.C. pan complete with low, medium or high level cistern and fittings, single or dual flushing device and "P" or "S"-trap .....   | 4,020.00       | 130.00                   | 228.00                             | 420.00   | 20198 |
|                                   | Add to Item 20198 for stainless steel Grade 316 in lieu of Grade 304.....   | 10%            | -                        | -                                  | -        |       |
| 20199                             | Children W.C. suite complete with low or high level cistern with lever flush, 6 litre single flush or 6 / 4 litre dual flush and "P" or "S"-traps.....  | 1,016.00       | 84.60                    | 88.00                              | 248.00   | 20199 |
|                                   | Squatting type water closet pans complete with cistern and flushing device, traps, flush bend and pipes, syphon fittings, ball valves, angle valves, inlet and outlet connector and fixing accessories including bedding pan in cement mortar (concrete surround measured separately) : - |                |                          |                                    |          |       |
|                                   | <i>Each</i>   |                |                          |                                    |          |       |
| 20200                             | Fireclay plate floor mounted squatting W.C. wash-down pan complete with integral foot treads, low level cistern and fittings, flushing device and "S"-trap.....   | 800.00         | 36.90                    | 37.60                              | 123.00   | 20200 |
| 20201                             | Vitreous china squatting W.C. pan complete with high or medium level cistern with lever flush, 6 litre single flush device or 6 / 4 litre dual flush and "P" or "S"-trap.....   | 1,274.00       | 90.00                    | 96.70                              | 285.00   | 20201 |
| 20202                             | Approved stainless steel Grade 304 floor mounted squatting W.C. pan complete with high or medium level cistern and fittings, single or dual flushing device and "P" or "S"-trap.....  | 1,796.00       | 79.70                    | 84.10                              | 261.00   | 20202 |
| 20203                             | Approved stainless steel Grade 304 floor mounted squatting W.C. pan complete with low level cistern and fittings, single or dual flushing device, foot control and "P" or "S"-trap.....   | 2,150.00       | 111.00                   | 129.00                             | 373.00   | 20203 |
|                                   | Add to either of Items 20202 to 20203 inclusive for stainless steel Grade 316 in lieu of Grade 304.....   | 10%            | -                        | -                                  | -        |       |

| Item  |   |                      |                                      |  | Item        |       |
|---|---|----------------------|--------------------------------------|--|-------------|-------|
| <b>SANITARY FITTINGS (CONT'D)</b>   |   |                      |                                      |  |             |       |
| <b>URINALS</b>  |   |                      |                                      |  |             |       |
| Urinals complete with grating, traps, flush bend and pipes, fittings, valves, inlet and outlet connectors and fixing accessories :- |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
|   |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 20204   | Vitreous china wall urinal bowl complete with outlet grating, trap and concealed brackets or hanger (cistern, spreader, etc., measured separately) .....  | 711.00               | 35.40                                | 44.30  | 92.00       | 20204 |
| 20205   | Stainless steel Grade 304 wall urinal bowl complete with outlet grating, trap and concealed brackets or hanger (cistern, spreader, etc., measured separately) .....   | 1,044.00             | 39.00                                | 49.50  | 115.00      | 20205 |
| 20206   | Single stall pattern floor mounted vitreous china urinal complete with two return ends, floor channel, outlet grating and trap including bedding in cement mortar and pointing in white cement (cistern, spreader, etc., measured separately) .....               | 867.00               | 70.10                                | 73.80  | 159.00      | 20206 |
| 20207   | Single stall pattern floor mounted urinal in stainless steel Grade 304 complete with two return ends, floor channel, outlet grating and trap including bedding in cement mortar and pointing in white cement (cistern, spreader, etc., measured separately) ..... | 1,275.00             | 78.10                                | 84.60  | 177.00      | 20207 |
| 20208   | Approved slab pattern urinal in stainless steel Grade 304, 1.20 m wide complete with two return ends, floor channel, outlet grating and trap including bedding in cement mortar and pointing in white cement (cistern, spreader, etc., measured separately) ..... | 5,089.00             | 129.00                               | 140.00   | 434.00      | 20208 |
| 20209   | Add to Item 20208 for each additional 610 mm wide back section and length of floor channel in the same range .....  | 1,990.00             | 70.80                                | 74.50  | 307.00      | 20209 |
|   | Add to either of Items 20205, 20207 to 20209 inclusive for stainless steel Grade 316 in lieu of Grade 304.....  | 10%                  | -                                    | -  | -           |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
| 20210   | Division slab between wall urinal bowls complete with concealed hanger .....  | 514.00               | 13.30                                | 16.20  | 51.10       | 20210 |
| 20211   | Automatic flushing cistern (any size) complete with brackets or hanger, pet cock, and flush pipe and spreader for single urinal stall or bowl, or flush and sparge pipe n.e. 1.0 m long for single section slab urinal .....                                      | 529.00               | 73.80                                | 81.20  | 153.00      | 20211 |
| 20212   | Add to Item 20211 for each additional stall or bowl or 610 mm width of stall urinal served from the same cistern .....  | 434.00               | 11.80                                | 13.30  | 49.10       | 20212 |

| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>SANITARY FITTINGS (CONT'D)</b>  |                |                          |                                    |          |       |
|       | <b>SHOWER TRAYS AND BATH TUBS</b>  |                |                          |                                    |          |       |
|       | (Note : - All shower and bath fittings, mixers or faucets are measured separately.)  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20213 | Shower tray (any size) complete with waste fitting, plug and chain, and trap including bedding in cement mortar and pointing in white or coloured cement (concrete surround or benching measured separately) .....                 | 1,981.00       | 134.00                   | 136.00                             | 419.00   | 20213 |
| 20214 | Vitreous enamelled cast iron bath n.e. 2.0 m long complete with combined overflow and waste fitting, plug and chain and trap.....  | 3,059.00       | 176.00                   | 179.00                             | 562.00   | 20214 |
|       | <b>TAPS, COCKS AND MIXERS</b>  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
|       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20215 | Bib cock, bib tap and stop cock.....   | 131.00         | 14.80                    | 18.50                              | 74.30    | 20215 |
| 20216 | Pillar cock and pillar tap with lever action.....  | 139.00         | 14.80                    | 18.50                              | 74.30    | 20216 |
| 20217 | Basin mixer .....  | 453.00         | 14.80                    | 18.50                              | 79.70    | 20217 |
| 20218 | Sink mixer with swivel nozzle.....   | 433.00         | 14.80                    | 18.50                              | 94.00    | 20218 |
| 20219 | Shower fitting comprising tap, cock or shower mixer, flexible hose, clamp bracket assembly, slide bar, shower head and spray handset.....  | 582.00         | 34.70                    | 35.40                              | 112.00   | 20219 |
| 20220 | Shower fitting for disabled comprising hand held shower including wall brackets, with 15 mm diameter chromium plated brass flexible hose mounted on vertical bar minimum 500 mm long capable to carry a static load of 150 kg..... | 1,567.00       | 36.90                    | 44.30                              | 128.00   | 20220 |
| 20221 | Shower mixer with pillar taps or corks, shower head including anti-suicide fittings and accessories .....  | 2,160.00       | 26.00                    | 32.50                              | 265.00   | 20221 |
| 20222 | Shower fitting comprising thermo-static shower mixer, flexible hose, clamp bracket assembly, slide bar, shower head and spray handset.....   | 3,574.00       | 40.60                    | 42.10                              | 164.00   | 20222 |
| 20223 | Bath mixer fitting with fixed nozzle.....  | 362.00         | 14.80                    | 18.50                              | 154.00   | 20223 |
| 20224 | Ditto with diverter automatic fitting.....   | 398.00         | 14.80                    | 18.50                              | 256.00   | 20224 |
| 20225 | Add to either of Items 20215 to 20224 inclusive if fitted with "Compression type" connector for copper tubing (per one end) .....  | 38.40          | -                        | -                                  | 26.50    | 20225 |
| 20226 | Ditto if fitted with "Capillary type" connector for copper tubing (per one end) .....  | 30.10          | -                        | -                                  | 17.70    | 20226 |
| 20227 | Ditto if fitted with "Press end type" connector for copper tubing (per one end) .....  | 49.50          | -                        | -                                  | 35.40    | 20227 |

| Item  |   |                |                          |                                    | Item     |       |
|-------|---|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>SANITARY FITTINGS (CONT'D)</b>   |                |                          |                                    |          |       |
|       | <b>SELF-CLOSING TAPS, COCKS AND MIXERS WITH TIME-DELAY CLOSING ACTION</b>   |                |                          |                                    |          |       |
|       | Vandal proof self closing taps or stop cocks with time delay closing action devices complete with fittings and fixing accessories :-  |                |                          |                                    |          |       |
|       | <i>Each</i>   |                |                          |                                    |          |       |
|       |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20228 | Self closing non-concussive basin pillar tap with time delay closing action, built in adjustable flow rate device, self cleaning piston and anti-splash gauze strainer.....   | 289.00         | 36.90                    | 39.00                              | 104.00   | 20228 |
| 20229 | Self closing non-concussive basin pillar tap or mixer with lever action for disabled, with built in adjustable flow rate device, self cleaning piston and anti-splash gauze strainer .....  | 731.00         | 36.90                    | 39.00                              | 111.00   | 20229 |
| 20230 | Concealed self closing non-concussive shower stop cock with built-in adjustable flow rate device, supplied with anti-theft device fixed overhead shower and riser pipe and hose .....   | 553.00         | 36.90                    | 39.00                              | 117.00   | 20230 |
| 20231 | Surface mounted self closing non-concussive shower stop cock with ditto .....   | 740.00         | 36.90                    | 39.00                              | 117.00   | 20231 |
| 20232 | Concealed non-concussive shower stop cock, with lever action for disabled, with lever handle at least 75 mm long from the centre of rotation to the handle tip.....   | 502.00         | 36.90                    | 39.00                              | 113.00   | 20232 |
| 20233 | Ditto but for shower and bath mixer stop cock .....   | 629.00         | 36.90                    | 39.00                              | 113.00   | 20233 |
| 20234 | Concealed self closing non-concussive shower mixer stop cock , knob to select showering temperature, built in adjustable flow device supplied with anti-theft device fixed shower head, riser pipe and hose .....   | 1,685.00       | 36.90                    | 39.00                              | 130.00   | 20234 |
| 20235 | Surface mounted self closing non-concussive shower mixer stop cock, ditto. ....   | 1,874.00       | 36.90                    | 39.00                              | 130.00   | 20235 |
|       | <b>ELECTRONIC OPERATED TAPS, COCKS AND MIXERS</b>   |                |                          |                                    |          |       |
|       | Electronic operated taps, cocks or mixers with adjustable self closing timing devices, electronic infra-red sensor devices, powered by transformer or battery operated complete with control box, angle stop cocks with built-in filter and check valve, fittings and fixing accessories :-   |                |                          |                                    |          |       |
|       | <i>Each</i>   |                |                          |                                    |          |       |
|       |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20236 | Electronic operated basin bib or pillar tap powered by transformer or operated by battery including provision of connection to nearest power point by a registered electrical worker.....   | 997.00         | 36.90                    | 39.00                              | 124.00   | 20236 |
| 20237 | Ditto with thermostatic mixer.....  | 2,542.00       | 36.90                    | 39.00                              | 124.00   | 20237 |
| 20238 | Wall mounted electronic operated sensor tap with self closing device or premixed with adjustable sensing distance with special 220 mm projected spout supplied with extra flexible hose and electric cable with adaptor for 1 m length, powered by transformer or operated by battery including provision of connection to nearest power point by a registered electrical worker..... | 1,767.00       | 55.30                    | 58.40                              | 143.00   | 20238 |
| 20239 | Wall mounted electronic operated thermostatic mixer powered by transformer or operated by battery including provision of connection to nearest power point by a registered electrical worker.....   | 3,049.00       | 59.00                    | 62.50                              | 143.00   | 20239 |

| Item   |   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|---|----------------|--------------------------|------------------------------------|----------|-------|
| <b>SANITARY FITTINGS (CONT'D)</b>                  |   |                |                          |                                    |          |       |
| <b>THERMOSTATIC AND THERMOSCOPIC MIXING VALVES</b> |   |                |                          |                                    |          |       |
| <i>Each</i>  |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20240  | Thermostatic mixing valve 15mm including safety shut-off device .....   | 905.00         | 25.80                    | 39.10                              | 67.50    | 20240 |
| 20241  | Ditto 20 mm .....   | 1,065.00       | 25.80                    | 39.10                              | 67.50    | 20241 |
| 20242  | Ditto 22 mm .....   | 1,224.00       | 25.80                    | 39.10                              | 67.50    | 20242 |
| 20243  | Ditto 25 mm .....   | 1,390.00       | 25.80                    | 39.10                              | 67.50    | 20243 |
| 20244  | 15 mm Thermoscopic mixing valve including safety shut-off device.....   | 906.00         | 28.00                    | 39.10                              | 67.50    | 20244 |
| <b>PARTS OF SANITARY FITTINGS</b>                  |   |                |                          |                                    |          |       |
| <b>WATER CLOSET (W.C.) ACCESSORIES</b>             |   |                |                          |                                    |          |       |
| <i>Each</i>  |   | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20245  | Vitreous china W.C. pan.....  | 424.00         | 52.10                    | 54.70                              | 141.00   | 20245 |
| 20246  | Vitreous china accessible W.C. pan.....   | 466.00         | 52.10                    | 54.70                              | 141.00   | 20246 |
| 20247  | Vitreous china children W.C. pan.....   | 445.00         | 45.50                    | 48.20                              | 124.00   | 20247 |
| 20248  | Solid plastic W.C. seat with moulded plastic adjustable hinges .....  | 103.00         | 14.00                    | 17.00                              | 25.60    | 20248 |
| 20249  | Ditto but with cover .....  | 171.00         | 16.20                    | 19.90                              | 30.70    | 20249 |
| 20250  | Solid W.C. seat with moulded adjustable hinges for disabled.....  | 126.00         | 14.00                    | 17.00                              | 25.60    | 20250 |
| 20251  | India rubber buffer to W.C. seat .....  | 18.00          | 2.20                     | 2.20                               | 7.20     | 20251 |
| 20252  | Pair of pillar hinges to W.C. seat .....  | 33.40          | 2.20                     | 2.20                               | 8.20     | 20252 |
| 20253  | Pair of double pillar hinges to W.C. seat and cover .....   | 72.40          | 3.00                     | 3.00                               | 11.20    | 20253 |
| 20254  | Vitreous china low level lever flush cistern, 6 litre single flush, complete with plastic syphon fittings, ball valve, flush bend and pipe, inlet connector, overflow, chromium plated lever and fittings.....                                | 493.00         | 36.40                    | 39.00                              | 97.20    | 20254 |
| 20255  | Vitreous china close-coupled cistern with 6 litre single flush or 4 / 6 litre dual flush device, complete with plastic syphon fittings, ball valve, close coupling fitments, overflow, chromium plated lever or push button and fittings..... | 536.00         | 37.70                    | 40.30                              | 101.00   | 20255 |
| 20256  | Vitreous china high level cistern, 6 litre single flush, complete with plastic syphon fittings, ball valve, flush bend and pipe, inlet connector, overflow, chromium plated chain and rubber pull and fittings.....                           | 615.00         | 39.00                    | 41.60                              | 106.00   | 20256 |

| Item  |  |                                      |  |             | Item   |       |
|---|--|--------------------------------------|--|-------------|--------|-------|
| <b>PARTS OF SANITARY FITTINGS (CONT'D)</b>      |  |                                      |  |             |        |       |
| <b>WATER CLOSET (W.C.) ACCESSORIES (CONT'D)</b> |  |                                      |  |             |        |       |
| <i>Each</i>                                     |  |                                      |  |             |        |       |
|   | Supply<br>and<br>fix   | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |        |       |
|   | A<br>\$  | B<br>\$                              | C<br>\$  | D<br>\$     |        |       |
| 20257   | Plastic low level cistern, 6 litre single flush or 4 / 6 litre dual flush device, complete with plastic syphon fittings, ball valve, flush bend and pipe, inlet connector, overflow, chromium plated lever and fittings.....   | 316.00                               | 35.10  | 37.70       | 95.50  | 20257 |
| 20258   | Plastic high level cistern, 6 litre single flush, complete with plastic syphon fittings, ball valve, flush bend and pipe, inlet connector, overflow, chromium plated chain and rubber pull and fittings.....   | 557.00                               | 37.70  | 40.30       | 101.00 | 20258 |
| 20259   | Plastic concealed type cistern with 6 litre single flush or 4 / 6 litre dual flush device, complete with plastic syphon fittings, ball valve, flush bend and pipe, inlet connector, overflow and chromium plated lever or push button.....   | 576.00                               | 36.40  | 39.00       | 106.00 | 20259 |
| 20260   | Electronic operated vandal proof W.C. flush valve approved by Hong Kong Water Authority suitable for sea water, concealed/built-in type, including infra-red sensor with or without manual overriding button in case of failure of sensor, filter before flushing valve and DC powered and provision of connection to nearest power point by a registered electrical worker..... | 2,813.00                             | 28.80  | 42.10       | 123.00 | 20260 |
| 20261   | 32 mm Self-closing non-concussive flushing devices, inlet connector and remote control system .....  | 1,888.00                             | 28.80  | 42.10       | 123.00 | 20261 |
| 20262   | 32 mm Stainless steel flushing valve .....   | 1,389.00                             | 25.80  | 33.20       | 51.10  | 20262 |
| 20263   | Plastic syphon complete with chromium plated outlet connector including adjusting and re-fixing lever arm .....  | 168.00                               | 31.00  | 32.50       | 83.80  | 20263 |
| 20264   | Pair of porcelain enamelled brackets.....  | 294.00                               | 11.10  | 13.30       | 61.30  | 20264 |
| 20265   | Chromium plated brass lever handle with linkage to syphon including adjusting .....  | 89.30                                | 19.20  | 20.70       | 40.80  | 20265 |
| 20266   | Plastic lever handle ditto .....   | 62.60                                | 19.20  | 20.70       | 40.80  | 20266 |
| 20267   | Heavy galvanized chain pull to W.C. cistern .....  | 45.80                                | 19.20  | -           | 16.30  | 20267 |
| 20268   | Nylon cord pull ditto .....  | 26.70                                | 19.20  | -           | 16.30  | 20268 |
| 20269   | Rod pull and guide for high level cistern .....  | 33.00                                | 19.20  | -           | 16.30  | 20269 |
| 20270   | Foot operated flushing mechanism .....   | 778.00                               | 30.30  | 31.00       | 104.00 | 20270 |
| 20271   | Foot operated duct lever with high level cistern adaptor for wall thickness within 115 mm to 229 mm .....  | 1,069.00                             | 34.70  | 35.40       | 102.00 | 20271 |
| 20272   | Plastic flush pipe for low level cistern including connector .....   | 68.70                                | 18.50  | 20.70       | 44.00  | 20272 |
| 20273   | Plastic adjustable flush pipe for high level cistern .....   | 91.90                                | 25.80  | 27.30       | 51.10  | 20273 |
| 20274   | Plastic flush pipe connector .....   | 25.80                                | 8.90   | 9.60        | 19.40  | 20274 |

| Item                                       |  |                                      |  |             | Item   |       |
|--|--|--------------------------------------|--|-------------|--------|-------|
| <b>PARTS OF SANITARY FITTINGS (CONT'D)</b> |  |                                      |  |             |        |       |
| <b>URINAL FITTINGS AND ACCESSORIES</b>     |  |                                      |  |             |        |       |
| <i>Each</i>                                |  |                                      |  |             |        |       |
|  | Supply<br>and<br>fix   | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |        |       |
|  | A<br>\$  | B<br>\$                              | C<br>\$  | D<br>\$     |        |       |
| 20275                                      | Urinal flush valve .....   | 910.00                               | 28.80  | 42.10       | 123.00 | 20275 |
| 20276                                      | Electronic operated vandal proof urinal flush valve approved by Hong Kong Water Authority suitable for sea water, concealed / built-in type, infra-red sensor with or without manual overriding button in case of failure of sensor, filter before flushing valve and powered by transformer and provision of connection to nearest power point by a registered electrical worker..... | 1,546.00                             | 28.80  | 42.10       | 123.00 | 20276 |
| 20277                                      | Glazed fire-clay automatic flushing cistern, 4.50 litre capacity .....   | 623.00                               | 28.00  | 28.80       | 95.00  | 20277 |
| 20278                                      | Ditto but 9.00 litre capacity .....  | 650.00                               | 32.50  | 33.20       | 106.00 | 20278 |
| 20279                                      | Ditto but 13.50 litre capacity .....   | 719.00                               | 36.90  | 37.60       | 117.00 | 20279 |
| 20280                                      | Plastic syphon with screwed outlet and rubber washer to suit 4.50 litre capacity automatic flushing cistern .....  | 193.00                               | 17.70  | 18.50       | 59.20  | 20280 |
| 20281                                      | Ditto but for 9.00 litre capacity automatic flushing cistern .....   | 249.00                               | 19.20  | 20.70       | 65.40  | 20281 |
| 20282                                      | Ditto but for 13.50 litre capacity automatic flushing cistern .....  | 291.00                               | 22.90  | 23.60       | 70.50  | 20282 |
| 20283                                      | 10 mm Plastic drip cock for automatic cistern .....  | 102.00                               | 8.90   | 9.60        | 32.70  | 20283 |
| 20284                                      | 10 mm Brass drip cock ditto .....  | 292.00                               | 11.10  | 11.80       | 39.80  | 20284 |
| 20285                                      | P.V.C. flush pipe and spreader for single urinal stall or bowl .....   | 228.00                               | 23.60  | 24.40       | 69.50  | 20285 |
| 20286                                      | Add to Item 20285 for each additional stall or bowl in a range served from the same cistern .....  | 229.00                               | 11.10  | 11.80       | 35.80  | 20286 |
| 20287                                      | P.V.C. flush pipe and sparse pipe n.e. 1.0 m long for slab urinal .....  | 325.00                               | 31.00  | 31.70       | 81.70  | 20287 |
| 20288                                      | Add to Item 20287 for each additional 610 mm width of slab urinal .....  | 66.70                                | 8.90   | 9.60        | 24.50  | 20288 |

| Item                                       |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|--|----------------|--------------------------|------------------------------------|----------|-------|
| <b>PARTS OF SANITARY FITTINGS (CONT'D)</b> |  |                |                          |                                    |          |       |
| <b>SHOWER FITTINGS</b>                     |  |                |                          |                                    |          |       |
| <i>Each</i>                                |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20289                                      | Grating and waste connection to outlet from urinal channel .....   | 164.00         | 15.50                    | 16.20                              | 49.10    | 20289 |
| 20290                                      | Chromium plated shower rose / head with galvanised mild steel capped end for fixing to all pipeworks including adjustable swivel pattern.....      | 83.20          | 8.90                     | 9.60                               | 32.70    | 20290 |
| 20291                                      | Plastic or chromium plated shower hand spray.....  | 96.90          | 6.60                     | 10.50                              | 22.70    | 20291 |
| 20292                                      | Chromium plated wall mounted slide bar and brackets for shower hand spray including plugging to wall.....  | 117.00         | 11.80                    | 13.30                              | 26.60    | 20292 |
| 20293                                      | 15 mm Diameter chromium plated brass flexible tube, 1.20 m long .....  | 118.00         | 7.40                     | 8.90                               | 19.40    | 20293 |
| 20294                                      | Ditto but 1.50 m long .....  | 165.00         | 7.40                     | 8.90                               | 19.40    | 20294 |
| 20295                                      | Shower seat not less than 550 mm wide and 400 mm deep, and fixed to wall including wall brackets.....  | 1,524.00       | 38.40                    | 44.30                              | 97.10    | 20295 |
| <b>WASTE PLUGS AND CHAINS</b>              |  |                |                          |                                    |          |       |
| <i>Each</i>                                |  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20296                                      | Rubber or vulcanite waste plug n.e. 64 mm top diameter with chromium plated ring to receive chain (measured separately) .....                      | 9.80           | 3.00                     | 4.40                               | 5.10     | 20296 |
| 20297                                      | Stout chromium plated brass chain ring and screw fixing stud if required n.e. 0.8 m long .....   | 18.70          | 5.90                     | 6.60                               | 8.20     | 20297 |
| <b>SUNDRY CLEANING</b>                     |  |                |                          |                                    |          |       |
| <i>Each</i>                                |  |                |                          |                                    | A<br>\$  |       |
| 20298                                      | Thoroughly scrub and clean existing W.C. pan and cistern, urinal stall, lavatory basin, sink and the like with spirits of salts and hot water..... |                |                          |                                    | 18.10    | 20298 |



| Item  |  |                |                          |                                    | Item     |       |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>TOILET FITTINGS AND ACCESSORIES</b>   |                |                          |                                    |          |       |
|       | Shower cubicle screen in clear polycarbonate panel complete with frame, sliding or pivot door panel, track, fittings and accessories : -   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only |       |
|       | <i>Per square metre</i>  | A<br>\$        | B<br>\$                  | C<br>\$                            | D<br>\$  |       |
| 20299 | Shower cubicle.....  | 1,499.40       | 43.40                    | 65.10                              | 88.50    | 20299 |
|       | Shower curtain rails or hanging rails in polished chrome, stainless steel or aluminium finish including mounting flanges, caps, curtain rings, brackets and fixing accessories : - |                |                          |                                    |          |       |
|       | <i>Per linear metre</i>  |                |                          |                                    |          |       |
| 20300 | Shower curtain rail or hanging rail .....  | 35.70          | 2.20                     | 4.30                               | 5.90     | 20300 |
|       | Toilet roll holders including fixing accessories : -   |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
| 20301 | Toilet roll holder (heavy pattern) in stainless steel polished finish or satin finish, or chrome plated finish, surface mounted.....   | 91.60          | 6.50                     | 15.20                              | 29.50    | 20301 |
| 20302 | Locking type ditto .....   | 97.60          | 8.70                     | 15.20                              | 29.50    | 20302 |
| 20303 | Single toilet paper holder ditto.....  | 71.00          | 4.30                     | 8.70                               | 23.60    | 20303 |
| 20304 | Double toilet roll holder in ditto .....   | 125.00         | 4.30                     | 8.70                               | 23.60    | 20304 |
| 20305 | Single vitreous china toilet roll holder surface mounted.....  | 85.70          | 4.30                     | 8.70                               | 23.60    | 20305 |
| 20306 | Ditto but semi-recessed .....  | 74.40          | 4.30                     | 8.70                               | 23.60    | 20306 |
|       | Towel rails in polished chrome, stainless steel or aluminium finish including mounting flanges, caps, brackets and fixing accessories :-   |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
| 20307 | Towel rail 450 mm long.....  | 103.00         | 6.50                     | 13.00                              | 26.50    | 20307 |
| 20308 | Ditto 600 mm long.....   | 115.00         | 6.50                     | 13.00                              | 26.50    | 20308 |
| 20309 | Ditto 900 mm long.....   | 142.00         | 6.50                     | 13.00                              | 26.50    | 20309 |
|       | Multi-roll toilet tissue dispenser boxes including fixing accessories : -  |                |                          |                                    |          |       |
|       | <i>Each</i>  |                |                          |                                    |          |       |
| 20310 | Multi-roll toilet tissue dispenser box in plastic.....   | 142.00         | 8.70                     | 19.50                              | 20.40    | 20310 |
| 20311 | Ditto in stainless steel.....  | 329.00         | 8.70                     | 19.50                              | 35.40    | 20311 |

| Item  |   |                      |                                      |  | Item        |       |
|---|---|----------------------|--------------------------------------|--|-------------|-------|
| <b>TOILET FITTINGS AND ACCESSORIES (CONT'D)</b>   |   |                      |                                      |  |             |       |
| Towel and feminine napkin dispensers in polished chrome, stainless steel or aluminium finish including mounting flanges, caps, brackets and fixing accessories :-                       |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
|   |   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|   |   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
| 20312   | Towel dispenser, 275 x 230 x 110 mm surface mounted .....   | 357.00               | 6.50                                 | 15.20  | 35.40       | 20312 |
| 20313   | Ditto, 400 x 600 x 300 mm, surface mounted .....  | 527.00               | 6.50                                 | 15.20  | 35.40       | 20313 |
| 20314   | Feminine napkin disposal, size 190 x 255 x 95 mm.....   | 243.00               | 4.30                                 | 10.90  | 23.60       | 20314 |
| Grab bars in polished chrome finish, stainless steel hair line or mirror finish or aluminium finish including mounting flanges, caps, tenons plates, brackets and fixing accessories :- |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
| 20315   | Grab bar 32 - 40 mm diameter, 600 mm long.....  | 160.00               | 6.50                                 | 15.20  | 35.40       | 20315 |
| 20316   | Ditto but 900 mm long.....  | 293.00               | 10.90                                | 21.70  | 44.20       | 20316 |
| 20317   | Grab bar 32 - 40 mm diameter, in L-shaped or two bars arranged in L-shaped configuration, 750 mm by 900 mm in length, capable of carrying a static load of 150 kg.....  | 629.00               | 17.40                                | 32.50  | 59.00       | 20317 |
| Folding grab rails for disabled toilet, in stainless steel polished hair line or mirror finish, including mounting flanges, caps, tenon plates, brackets and fixing accessories :-      |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
| 20318   | Folding grab bar 32 - 40 mm diameter, in U-shaped of 750mm plan length, swing upwards, capable of carrying a static load of 150 kg.....                                 | 774.00               | 21.70                                | 43.40  | 73.70       | 20318 |
| Grab bars, in non-ferrous metal, with colour resin or similar covering, easy grip and stain proof coating :-  |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
| 20319   | Grab bar, 32 - 40 mm diameter, 600 mm long.....   | 273.00               | 6.50                                 | 15.20  | 35.40       | 20319 |
| 20320   | Ditto but 900 mm long.....  | 428.00               | 10.90                                | 21.70  | 44.20       | 20320 |
| 20321   | Grab bar, 32 - 40 mm diameter, in L-shaped or two bars arranged in L-shaped configuration, 750 mm by 900 mm in length, capable of carrying a static load of 150 kg..... | 1,034.00             | 17.40                                | 32.50  | 59.00       | 20321 |
| Folding grab rails for disabled toilet, in non-ferrous metal, with colour resin or similar covering, easy grip and stain proof coating :-   |   |                      |                                      |  |             |       |
| <i>Each</i>   |   |                      |                                      |  |             |       |
| 20322   | Folding grab rail, 32 - 40 mm diameter, in U-shaped of 750 mm plan length, swing upwards, capable of carrying a static load of 150 kg.....                              | 1,125.00             | 21.70                                | 43.40  | 73.70       | 20322 |

| Item  |  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|-------|--|----------------|--------------------------|------------------------------------|----------|-------|
|       | <b>TOILET FITTINGS AND ACCESSORIES (CONT'D)</b>  |                |                          |                                    |          |       |
|       | Accessories in polished chrome, stainless steel or aluminium finish including mounting flanges, caps, brackets and fixing accessories : -  |                |                          |                                    |          |       |
|       | <i>Each</i>  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20323 | Tumbler holder.....  | 74.20          | 4.30                     | 8.70                               | 17.70    | 20323 |
| 20324 | Tumbler and tooth brush holder.....  | 102.00         | 4.30                     | 8.70                               | 17.70    | 20324 |
| 20325 | Glass shelves including brackets and guard rail n.e. 0.50 m long.....  | 117.00         | 8.70                     | 19.50                              | 35.40    | 20325 |
| 20326 | Washing cream dispenser and plastic soap container.....  | 131.00         | 4.30                     | 8.70                               | 17.70    | 20326 |
| 20327 | Soap holder.....   | 179.00         | 4.30                     | 6.50                               | 14.80    | 20327 |
| 20328 | Surface mounted liquid soap dispenser.....   | 176.00         | 4.30                     | 8.70                               | 17.70    | 20328 |
| 20329 | Under-counter soap dispenser with 100 mm spout length.....   | 196.00         | 4.30                     | 8.70                               | 17.70    | 20329 |
| 20330 | Battery operated automatic soap dispenser with infra-red sensor, plastic cover, inspection window and soap container .....   | 241.00         | 4.30                     | 8.70                               | 17.70    | 20330 |
| 20331 | Adjustable mirror for disabled, 450 x 600 mm complete with adjustable pivoted brackets.....  | 305.00         | 10.90                    | 21.70                              | 32.50    | 20331 |
| 20332 | Plastic mirror cabinet.....  | 86.90          | 15.20                    | 26.00                              | 36.90    | 20332 |
| 20333 | Stainless steel mirror cabinet.....  | 137.00         | 15.20                    | 28.20                              | 36.90    | 20333 |
|       | <b>PROPRIETARY DIAPER CHANGING STATIONS</b>  |                |                          |                                    |          |       |
|       | Proprietary diaper changing station including all necessary accessories in accordance with the manufacturer's recommendations : -  |                |                          |                                    |          |       |
|       | <i>Each</i>  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20334 | Proprietary diaper changing station with FDA approved blow-moulded high-density, minimum size of 900 mm length x 500 mm width, durable polyethylene with Microban Antimicrobial additive; equipped with a pneumatic cylinder for controlled opening and closing of bed; secured to back plate with a concealed full-length steel-on-steel hinge, no hinge structure shall be exposed on interior and exterior surfaces; applicable for barrier-free accessibility and comply with ADA regulations; have smooth concave changing area with a nylon safety strap and two hooks for bags or purses; have universal instruction graphics; safety messages in 6 languages and Braille; static load performance requirements rated to support 250-300 lbs to comply with ASTM; and the product is to comply with ANSI S117.1, ASTM F2285-04 (formerly ASTM PS125), ANSI Z535.4, German TUV, ASTM G21 and ASTM G22..... | 3,007.00       | 24.60                    | 49.20                              | 102.00   | 20334 |
|       | <b>PROPRIETARY CHILD PROTECTION SEATS</b>  |                |                          |                                    |          |       |
|       | Proprietary child protection seat in anti-bacterial polypropylene or anti-microbial high density polyethylene including surface mounted seat shell, support framing and all necessary accessories, all in accordance with the manufacturer's instructions : -  |                |                          |                                    |          |       |
|       | <i>Each</i>  | A \$           | B \$                     | C \$                               | D \$     |       |
| 20335 | Proprietary child protection seat with static load of upto 23 kg.....  | 1,005.00       | 24.60                    | 49.20                              | 102.00   | 20335 |



| Item  | Item  |
|---|---|
| <b>BRaille AND TACTILE SIGNS (CONT'D)</b>   |   |
| Braille and tactile directory maps comprising graphics, logos, letters, numbers, Chinese characters, full stop, commas, and the like, complete with all necessary accessories in accordance with the manufacturer's recommendations : - |   |
| <i>Each</i>   |   |
| 20345   | Acid etched stainless steel Braille and tactile directory maps, polished with hair line or mirror finish, fixed to wall, n.e. 0.20 m <sup>2</sup> ..... 11,800.00 20345   |
| 20346   | Ditto but 0.20 m <sup>2</sup> to 0.50 m <sup>2</sup> ..... 23,500.00 20346  |
| 20347   | Acid etched stainless steel Braille and tactile directory maps, polished with fine grit or hair line finish, fixed to floor with and including stand, overall height including stand not exceeding 1.0 m above finished floor level; n.e. 0.20 m <sup>2</sup> ..... 17,000.00 20347 |
| 20348   | Ditto but 0.20 m <sup>2</sup> to 0.50 m <sup>2</sup> ..... 37,600.00 20348  |
| <i>Per square metre</i>   |   |
| 20349   | Acid etched stainless steel Braille and tactile directory maps, polished with fine grit or hair line finished, fixed to wall, exceeding 0.50 m <sup>2</sup> ..... 41,102.40 20349   |
| 20350   | Ditto but fixed to floor with and including stand, overall height including stand not exceeding 1.0 m above finished floor level; exceeding 0.50 m <sup>2</sup> ..... 54,300.30 20350   |
| <i>Each</i>   |   |
| 20351   | Extra over either of Items 20345 to 20350 inclusive for design, supply and installation of proprietary audio system including provision of connection to nearest power point by a registered electrical worker and providing necessary test certificate..... 5,732.00 20351         |
| <i>Per square metre</i>   |   |
| 20352   | Take down and clear away Braille and tactile directory maps..... 147.50 20352   |
| 20353   | Take down and set aside for re-use ditto..... 221.30 20353  |
| 20354   | Fix only ditto..... 590.10 20354  |

| Item  |  |                |                          |                                    | Item                  |       |
|-------|--|----------------|--------------------------|------------------------------------|-----------------------|-------|
|       | <b>FLAG POLES</b>  |                |                          |                                    |                       |       |
|       | Aluminium flag poles in hot-dipped zinc coated finish complete with all necessary accessories in accordance with the manufacturer's recommendations : -  | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only              |       |
|       | <i>Per linear metre</i>  | A \$           | B \$                     | C \$                               | D \$                  |       |
| 20355 | Aluminium flag pole, ground stand type, roof or wall mounted up to 9.0 m high including fixing brackets and stainless steel anchor bolts as required (concrete footing measured separately)..... | 4,770.00       | 32.50                    | 39.10                              | 178.00                | 20355 |
| 20356 | Add to Item 20355 for aluminium flag pole, ground stand-type exceeding 9.0 m high (concrete footing measured separately).....  | 3,864.00       | 21.70                    | 26.00                              | 142.60                | 20356 |
|       | Replacement parts only : -   |                |                          |                                    |                       |       |
|       | <i>Per linear metre</i>  |                |                          |                                    |                       |       |
| 20357 | Halyard, pulleys. etc. for aluminium flag pole up to 9.0 m high, including cutting halyard to length and fixing to hooks or pulleys of flag pole.....  | 678.00         | 17.40                    | 19.50                              | 118.00                | 20357 |
| 20358 | Halyard, pulleys. etc. for aluminium flag pole exceeding 9.0 m high including cutting halyard to length and fixing to hooks or pulleys of flag pole.....   | 474.50         | 15.20                    | 17.40                              | 104.00                | 20358 |
|       | <i>Each</i>  |                |                          |                                    |                       |       |
| 20359 | Nylon or plastic-coated line cut to any length and fixed to hooks or pulleys of flag pole.....   | 987.00         | 32.50                    | 42.30                              | 300.00                | 20359 |
|       | <b>PROJECTOR SCREENS</b>   |                |                          |                                    |                       |       |
|       | Projector screen including all necessary accessories in accordance with the manufacturer's recommendations : -   | Supply and fix | Take down and clear away | Take down and set aside for re-use | Fix only              |       |
|       | <i>Each</i>  | A \$           | B \$                     | C \$                               | D \$                  |       |
| 20360 | Projector screen, manually operated size : 1780 x 1780 mm .....  | 2,264.00       | 92.20                    | 107.00                             | 289.00                | 20360 |
| 20361 | Projector screen, electrically operated size : 1600 x 2130 mm, including provision of connection to nearest power point by a registered electrical worker.....                                   | 6,175.00       | 148.00                   | 166.00                             | 371.00                | 20361 |
|       | <b>TRAFFIC BARRIER SYSTEM</b>  |                |                          |                                    |                       |       |
|       | Traffic barrier system : -   |                | 3 m straight gate arm    | 4.5 m straight gate arm            | 6 m straight gate arm |       |
|       | <i>Per set</i>   |                | A \$                     | B \$                               | C \$                  |       |
| 20362 | Supply and fix traffic barrier system complete with gate arm and ON/OFF push button.....   | 21,800.00      | 22,200.00                | 22,500.00                          |                       | 20362 |
| 20363 | Take down and clear away traffic barrier system .....  |                | 148.00                   | 184.00                             | 221.00                | 20363 |
| 20364 | Take down and set aside for re-use ditto .....   |                | 246.00                   | 270.00                             | 295.00                | 20364 |
| 20365 | Fix only ditto .....   |                | 390.00                   | 406.00                             | 422.00                | 20365 |

**Section 21**

**PARTITIONS AND CUBICLE SYSTEM**

## SECTION 21

### PARTITIONS AND CUBICLE SYSTEM

#### SPECIAL CONDITIONS

|                                       |                |   |
|---------------------------------------|----------------|---|
| <b>Specification</b>                  | <b>SC21.01</b> | <p>This Section shall generally be read and used in conjunction with the Specification in particular G.S. Items 22.77 to 22.80, the Particular Specification for the Supply and Installation of Partitions (Demountable / Dry Wall / Sliding or Folding) and Particular Specification for the Supply and Installation of Open Plan Demountable Partitions adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages for complying with all requirements as stipulated in the Specification and Employer's Requirements adopted in the Contract for the supply and installation of partitions, open plan demountable partitions and toilet cubicle system.</p>   |
| <b>Particular Preamble</b>            | <b>SC21.02</b> | <p>The term "partitions" referred to in this Section shall include demountable partitions, dry wall partitions and sliding or folding partitions.</p> <p>All demountable partition systems shall be of proprietary type and include security type and fire resisting type partition system.</p>   |
| <b>Measurement of partitions</b>      | <b>SC21.03</b> | <p>All partitions shall be measured the area of the partitions over all framing, irrespective of whether the framing is concealed or exposed to view.</p> <p>No deduction shall be made for voids or openings not exceeding 0.50 m<sup>2</sup>.</p> <p>Sound insulation inside the partitions shall be measured the net area where the sound insulation is applied.</p> <p>Except flush doors for proprietary demountable partitions, all doors and ironmongery to partitions shall be measured and valued separately under Section 08 - Carpentry and Joinery and Section 09 - Ironmongery.</p> <p>Where the partition is described and measured as fully glazed, it means that the total glazed area of the partition shall be equal to or exceeding 80% of the total partition area.</p> <p>Measurement of repairs and alterations to demountable partition system and acoustic folding / sliding partition system shall be referred to Section 16 - Repairs and Alterations to Specialty Works.</p> |
| <b>Rates for partitions generally</b> | <b>SC21.04</b> | <p>The rates for partitions shall generally include for :-</p> <ol style="list-style-type: none"> <li>(a) Design, fabrication, assembly and erection of the complete system including all necessary riveting, drilling, welding etc. either on Site or off Site as required.</li> <li>(b) All steel stud framework and components, full or part length panels to complete length of partitions ordered with natural or other anodized colour acceptable to the Maintenance Surveyor.</li> </ol>   |



**SPECIAL CONDITIONS**

**Rates for  
partitions  
generally  
(Cont'd)**

**SC21.04  
(Cont'd)**

- (c) Sound sealing gaskets or other materials acceptable by the Maintenance Surveyor to all junctions of partitions and junctions with other walls, partitions, window mullions and suspended ceilings.
- (d) All framings and edging trims to intermediate, end or adjoining partitions and around door frames, openings and the like.
- (e) All mouldings at edges, skirtings and fixings complete.
- (f) In the case of panel stopped at door height, include additional capping to exposed upper edge of partitions.
- (g) For low level partitions, all upper cappings and intermediate stabilizers as required.
- (h) Providing and fixing to concrete structures, walls or fixtures with steel or stainless steel anchor bolts, brackets and the like.
- (i) Treating all exposed wood or veneer surfaces with fire retardant paint.
- (j) Treating all fabric surfaces with flame proof treatment.
- (k) Softboard covered with Hessian fabric.
- (l) Metal or timber skirting including all types of finishes and colour.
- (m) Unless specifically provided otherwise, provisions of finishes to partitions either applied in factories or on Site.
- (n) All base, ceiling and abutment fixing.
- (o) Forming wants including trimming edges.
- (p) Forming openings including trimming edges (forming openings through existing partitions shall be measured separately).
- (q) All necessary framing and suspension system from structural soffits to suspended ceiling level (above the exposed heights for partitions) for holding the partitions in place including all necessary stiffening and fixings.
- (r) Any glazing except for fully glazed partitions as described in Special Conditions Clause SC21.03.
- (s) Provisions of sample panels and applied finishes for selection by the Maintenance Surveyor.
- (t) Submission of design drawings, working details and shop drawings for the Maintenance Surveyor's approval prior to commencement of installation.

**Rates for  
proprietary  
demountable  
partition system**

**SC21.05**

- The rates for proprietary demountable partition system shall further include for : -
- (a) Providing manufacturer's guarantee and supplier's warranty.

**SPECIAL CONDITIONS**

|   |                |   |
|---|----------------|---|
| <b>Rates for flush doors for proprietary demountable partition system</b> | <b>SC21.06</b> | <p>The rates for flush doors for proprietary demountable partition system shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Glazing to partition doors or glazed doors.</li> <li>(b) Timber louvres and the like in any size including all timber framing, architrave, etc..</li> </ul>  |
| <b>Rates for alterations to existing dry wall partitions</b>              | <b>SC21.07</b> | <p>The rates for alterations to existing dry wall partitions shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Taking down and re-fixing existing dry wall partitions including framing, panels, covering materials, etc..</li> <li>(b) Replacement and provision of new compatible fittings and fixing accessories including additional accessories as necessary.</li> <li>(c) Modifying existing framing including provisions of additional framing, as required.</li> <li>(d) Modifying existing openings, finishes or covering to suit actual site conditions.</li> <li>(e) Multi-handling and delivery between the designated locations and storage area as directed.</li> <li>(f) Proper protection to the dry wall, framing, fittings and accessories for storage and re-use.</li> <li>(g) Making good surfaces disturbed.</li> </ul> |
| <b>Rates for security partitions</b>                                      | <b>SC21.08</b> | <p>The rates for security partitions shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) All galvanized mild steel framings, bracings, supports and the like rigidly and stably constructed for security purposes.</li> <li>(b) Sandwiched mild steel plate security panel.</li> <li>(c) Guard bar panel at top when required.</li> <li>(d) Providing and fixing wood battens or steel brackets for the face coverings.</li> </ul>   |
| <b>Rates for fire resisting partitions</b>                                | <b>SC21.09</b> | <p>The rates for fire resisting partitions shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Supply and installation in accordance with the manufacturer's instructions.</li> <li>(b) All galvanized mild steel or stainless steel framings, bracings, supports and the like rigidly and stably constructed for fire resisting purposes.</li> <li>(c) All additional fire resisting panel, components and materials.</li> <li>(d) Providing and fixing wood battens or steel brackets for the face coverings.</li> <li>(e) Submission of technical literature, shop drawings, test certificate, manufacturer's guarantees and supplier's warranty as required.</li> </ul>  |

### SPECIAL CONDITIONS

**Rates for sliding or folding partitions including proprietary acoustic partitions**

**SC21.10**

The rates for sliding or folding partitions including proprietary acoustic partitions shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions, including submission of all necessary design, calculations and shop drawings as required.
- (b) Providing and fixing all accessories, ironmongeries, suspension system, etc..
- (c) Cutting mortice or drilling in concrete, brick, stone or other surfaces as required.
- (d) Grouting into new or existing mortice or holes.
- (e) Finishing all surfaces, if required.
- (f) Making good disturbed surfaces.
- (g) Vertical and horizontal sound seals.
- (h) Providing test certificate, operation and maintenance manual, manufacturer's guarantee and supplier's warranty.

**Rates for proprietary toilet cubicle system**

**SC21.11**

The rates for proprietary toilet cubicle system shall further include for : -

- (a) Supply and installation in accordance with the manufacturer's instructions including submission of all necessary design, calculations and shop drawings as required.
- (b) Complete system with lightweight core and solid compact laminate panels (in conformity to BS EN 438 standard), finished with high performance surface veneer sheeting and colour to doors, partition, pilaster, divisions, etc..
- (c) All aluminium frames (in conformity to EN 6060 standard) coated with corrosion resistant nylon.
- (d) All necessary corrosion resistant nylon-aluminium accessories like hooks, toilet roll holders, and the like, and ironmongery including adjustable feet, automatic hinges, snib indicators, coat hooks with door stops and angle brackets, etc..
- (e) All types of surface finishes and colours.
- (f) All computerized fabrication to ensure excellent edge finish, with no sharp and corners for safety.
- (g) Submission of catalogues, technical literature, test certificates, shop drawings and supplier's / manufacturer's warranty of not less than 3 years where specified.

| Item  |   |                              |                                     |                              |                                     | Item             |       |
|-------|---|------------------------------|-------------------------------------|------------------------------|-------------------------------------|------------------|-------|
|       | <b>DRY WALL</b>   |                              |                                     |                              |                                     |                  |       |
|       | Dry wall, non-demountable complete with stud framework and panel covering 12.5 mm (min.) thick to both sides of dry wall : -  | Single layer full solid wall |                                     | Double layer full solid wall |                                     |                  |       |
|       |   | n.e. 100 mm thick            |                                     | n.e. 200 mm thick            |                                     |                  |       |
|       |   | Plaster-board panel covering | Plywood / chip-board panel covering | Plaster-board panel covering | Plywood / chip-board panel covering |                  |       |
|       | <i>Per square metre</i>   | A                            | B                                   | C                            | D                                   |                  |       |
|       |   | \$                           | \$                                  | \$                           | \$                                  |                  |       |
| 21001 | Dry wall with panel covering without any applied finish.....  | 260.90                       | 339.10                              | 414.70                       | 539.20                              | 21001            |       |
| 21002 | Dry wall with panel covering finished with vinyl wall paper, fabric sheeting, timber veneer sheeting or laminated plastic sheeting.....   | 400.90                       | 477.40                              | 637.30                       | 759.10                              | 21002            |       |
| 21003 | Fully glazed dry wall with glazing in clear glass of any thickness.....   | 293.10                       | 308.70                              | 425.70                       | 450.60                              | 21003            |       |
| 21004 | Ditto with glazing in obscure glass of any thickness.....   | 306.20                       | 321.90                              | 438.80                       | 463.70                              | 21004            |       |
| 21005 | Ditto with glazing in wired glass of any thickness.....   | 376.70                       | 392.30                              | 509.40                       | 534.20                              | 21005            |       |
| 21006 | Ditto with glazing in clear or coloured tempered glass of any thickness.....  | 569.00                       | 584.30                              | 698.80                       | 723.10                              | 21006            |       |
|       |   |                              |                                     |                              |                                     |                  |       |
|       | <i>Per square metre</i>   |                              |                                     |                              |                                     |                  |       |
| 21007 | Add to either of Items 21001 to 21002 inclusive for additional sound insulation, 50 mm thick fibreglass insulation (density not less than 16 kg/m <sup>3</sup> ) to single layer dry wall.....                  |                              |                                     |                              |                                     | A<br>\$<br>33.90 | 21007 |
| 21008 | Ditto but density 48 kg/m <sup>3</sup> .....  |                              |                                     |                              |                                     | 56.90            | 21008 |
|       | (Note : - The above Items 21007 to 21008 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   |                              |                                     |                              |                                     |                  |       |
| 21009 | Add to either of Items 21001 to 21002 inclusive for additional sound insulation, two layers, each 50 mm thick fibreglass insulation (density not less than 16 kg/m <sup>3</sup> ) to double layer dry wall..... |                              |                                     |                              |                                     | 54.20            | 21009 |
| 21010 | Ditto but density 48 kg/m <sup>3</sup> .....  |                              |                                     |                              |                                     | 96.70            | 21010 |
|       | (Note : - The above Items 21009 to 21010 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)   |                              |                                     |                              |                                     |                  |       |

| Item   | Item                    |
|--|-------------------------|
| <b>DRY WALL (CONT'D)</b>   |                         |
| <i>Per square metre</i>  |                         |
| 21011 Extra over either of Items 21001 to 21002 inclusive for security partitions for Level I security including lining with 1 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement .....   | A<br>\$<br>505.20 21011 |
| 21012 Extra over either of Items 21001 to 21002 inclusive for security partitions for Level II security including lining with 2 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement .....  | 813.60 21012            |
| 21013 Extra over either of Items 21001 to 21002 inclusive for security partitions for Level III security including lining with 5 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with sound seal requirement .....   | 1,214.80 21013          |
| 21014 Extra over either of Items 21001 to 21002 inclusive for single layer fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour FRR.....  | 252.60 21014            |
| 21015 Extra over either of Items 21001 to 21002 inclusive for double layer fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour FRR.....  | 315.80 21015            |
| 21016 Extra over either of Items 21001 to 21002 inclusive for fire resisting security partitions for Level I security including lining with 1 mm thick steel plate on both sides, all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour FRR, sound seal requirement.....                                 | 704.80 21016            |
| 21017 Extra over either of Items 21001 to 21002 inclusive for fire resisting security partitions for Level II security including lining with 2 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour FRR, sound seal requirement.....   | 991.60 21017            |
| 21018 Extra over either of Items 21001 to 21002 inclusive for fire resisting security partitions for Level III security including lining with 5 mm thick steel plate on both sides, all additional framing, fixing, panelling and accessories, in compliance with 1 hour FRR, sound seal requirement.....  | 1,364.70 21018          |
| 21019 Extra over either of Items 21001 to 21002 inclusive for louvre consisting of framing all round, louvre blades and architrave (louvre area measured).....   | 842.10 21019            |
| 21020 Ceiling baffle from structural soffit to suspended ceiling level, consisting of 50 mm thick fibreglass insulation (density 48 kg/m <sup>3</sup> ) on both sides of 12.50 mm thick plasterboard framed with metal channel including forming opening of any size for pipes or ducts and providing all necessary bolts, screws and the like ..... | 349.60 21020            |
| 21021 Extra over either of Items 21001 to 21002 inclusive for glazed sliding hatch consisting of framing all round, glass panels with polished edges and finger holes, tracks housed into framing at head and cill including forming opening in new partition, providing and fixing of all necessary additional framing and components.....          | 637.90 21021            |

| Item  |  |   |   | Item  |
|-------|--|---|---|-------|
|       | <b>PROPRIETARY DEMOUNTABLE PARTITION SYSTEM</b>  |   |   |       |
|       | Proprietary demountable partition system complete with stud framework, with panel covering 12.5 mm (min.) thick to both sides of partitions and fixed in accordance with the manufacturer's instructions : - | Plaster-board panel covering to both sides of partition | Plywood / chipboard panel covering to both sides of partition |       |
|       | <i>Per square metre</i>  | A<br>\$   | B<br>\$   |       |
| 21022 | Partition with panel covering finished with laminated vinyl wall paper, fabric sheeting, timber veneer sheeting or laminated plastic sheeting.....   | 717.70  | 827.10  | 21022 |
| 21023 | Fully glazed partition with glazing in clear glass of any thickness.....   | 745.20  | 767.20  | 21023 |
| 21024 | Ditto with glazing in obscure glass of any thickness.....  | 758.00  | 780.80  | 21024 |
| 21025 | Ditto with glazing in wired glass of any thickness.....  | 828.60  | 850.50  | 21025 |
| 21026 | Ditto with glazing in clear or coloured tempered glass of any thickness.....   | 1,020.40  | 1,043.00  | 21026 |
|       | <i>Per square metre</i>  |   | A<br>\$   |       |
| 21027 | Add to Item 21022 for additional sound insulation, 50 mm thick fibreglass insulation (density not less than 16 kg/m <sup>3</sup> ) to proprietary demountable partition system.....                          |   | 33.90   | 21027 |
| 21028 | Ditto but of density 48 kg/m <sup>3</sup> .....  |   | 56.90   | 21028 |
|       | (Note : - The above Items 21027 to 21028 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)  |   |   |       |
| 21029 | Add to Item 21022 for fire resisting partitions including all additional and enhanced framing, fixing, panelling and accessories, in compliance with 1 hour FRR.....   |   | 252.60  | 21029 |
|       | <b>FLUSH DOORS FOR PROPRIETARY DEMOUNTABLE PARTITION SYSTEM</b>  |   |   |       |
|       | Flush doors for partitions with or without frames, each leaf size 600 - 900 x 2100 mm high : - (ironmongery measured separately)   | Door type with or without frame                         |   |       |
|       |  | Hard-wood hollow core door and frame                    | Hard-wood solid core door and frame                           |       |
|       | <i>Each</i>  | A<br>\$   | B<br>\$   |       |
| 21030 | Partition door, single leaf, without door frame.....   | 514.00  | 598.00  | 21030 |
| 21031 | Ditto but with door frame.....   | 638.00  | 722.00  | 21031 |
| 21032 | Partition door, double leaf, without door frame.....   | 859.00  | 1,027.00  | 21032 |
| 21033 | Ditto but with door frame.....   | 1,002.00  | 1,170.00  | 21033 |

| Item   |  |                          |                                    |          |  |  |  |  | Item  |
|--|--|--------------------------|------------------------------------|----------|--|--|--|--|-------|
| <b>SLIDING OR FOLDING PARTITIONS</b>   |  |                          |                                    |          |  |  |  |  |       |
| Sliding or folding partitions complete with partitions continuously hinged and suspended with swivel hanger or centrally hung suspension system, tracks or guides and all ironmongeries, fittings, partition panels constructed of hardwood frame and edging with plywood facing : -   |  | Supply and fix           | A                                  | \$       |  |  |  |  |       |
| <i>Per square metre</i>  |  |                          |                                    |          |  |  |  |  |       |
| 21034  | 40 mm Thick sliding or folding partitions finished with painting, vinyl clothing, timber veneer sheeting or laminated plastic sheeting.....  | 1,554.30                 |                                    |          |  |  |  |  | 21034 |
| 21035  | Extra over Item 21034 for infilling with mineral wool.....   | 94.80                    |                                    |          |  |  |  |  | 21035 |
| <i>Each</i>  |  |                          |                                    |          |  |  |  |  |       |
| 21036  | Extra over Item 21034 for single pass door .....   | 312.00                   |                                    |          |  |  |  |  | 21036 |
| 21037  | Extra over Item 21034 for pair of pass doors.....  | 659.00                   |                                    |          |  |  |  |  | 21037 |
| <b>PROPRIETARY ACOUSTIC SLIDING OR FOLDING PARTITION SYSTEM</b>  |  |                          |                                    |          |  |  |  |  |       |
| Proprietary acoustic sliding or folding partition system, manual-operated, complete with partitions continuously hinged and suspended with swivel hanger or centrally hung and suspended with proprietary suspension system, tracks or guides and all ironmongery, fittings, partition panels constructed of aluminium or steel framing and facing panel, all in accordance with the manufacturer's recommendation : - |  | Supply and fix           | A                                  | \$       |  |  |  |  |       |
| <i>Per square metre</i>  |  |                          |                                    |          |  |  |  |  |       |
| 21038  | Proprietary acoustic sliding or folding partition system of sound transmission class (STC) of rating not less than 45 dB and finished with vinyl clothing, timber veneer sheeting or laminated plastic sheeting..... | 3,785.00                 |                                    |          |  |  |  |  | 21038 |
| 21039  | Extra over Item 21038 for infilling with mineral wool.....   | 94.80                    |                                    |          |  |  |  |  | 21039 |
| <i>Each</i>  |  |                          |                                    |          |  |  |  |  |       |
| 21040  | Extra over Item 21038 for single pass door.....  | 587.00                   |                                    |          |  |  |  |  | 21040 |
| 21041  | Extra over Item 21038 for pair of pass doors.....  | 791.00                   |                                    |          |  |  |  |  | 21041 |
| <i>Per linear metre</i>  |  |                          |                                    |          |  |  |  |  |       |
| 21042  | Extra over Item 21038 for additional track .....   | 1,273.90                 |                                    |          |  |  |  |  | 21042 |
| <b>REPAIRS TO DRY WALL AND SUNDRY ITEMS</b>  |  |                          |                                    |          |  |  |  |  |       |
|  |  | Take down and clear away | Take down and set aside for re-use | Fix only |  |  |  |  |       |
| <i>Per square metre</i>  |  | A                        | B                                  | C        |  |  |  |  |       |
|  |  | \$                       | \$                                 | \$       |  |  |  |  |       |
| 21043  | Single layer full solid dry wall complete with panel covering to both sides of dry wall, with or without applied finishes, stud framework, infilled sound insulation, fittings and accessories, if any .....         | 22.00                    | 46.90                              | 105.50   |  |  |  |  | 21043 |
| 21044  | Ditto but double layer full solid dry wall.....  | 29.30                    | 61.60                              | 139.20   |  |  |  |  | 21044 |
| 21045  | Ditto but fully glazed dry wall partition.....   | 23.50                    | 55.70                              | 146.60   |  |  |  |  | 21045 |
| 21046  | Ditto but as security / fire resisting / fire resisting security partition.....  | 26.40                    | 66.00                              | 148.00   |  |  |  |  | 21046 |

| Item   |   |  | Plaster-board panel covering | Plywood/ chip-board panel covering | Item  |
|--|---|--|------------------------------|------------------------------------|-------|
| <b>ALTERATION WORKS TO EXISTING DRY WALL</b> |   |  |                              |                                    |       |
| <i>Per square metre</i>                      |   |  |                              |                                    |       |
| 21047  | Replace panel covering 12.5 mm (min.) thick to one side of existing dry wall, without any applied finish.....   |  | A<br>\$<br>118.00            | B<br>\$<br>143.70                  | 21047 |
| 21048  | Replace panel covering 12.5 mm (min.) thick to one side of existing dry wall finished with vinyl wall paper, fabric sheeting, timber veneer sheeting or laminated plastic sheeting.....   |  | 206.00                       | 223.20                             | 21048 |
| <i>Per square metre</i>                      |   |  |                              |                                    |       |
| 21049  | Alter existing glazed or fully glazed partitions to double glazed partition with 6 mm thick clear glass.....  |  |                              | A<br>\$<br>508.40                  | 21049 |
| 21050  | Ditto but with 6 mm thick obscure glass.....  |  |                              | 526.00                             | 21050 |
| 21051  | Ditto but with 6 mm thick wired glass.....  |  |                              | 674.90                             | 21051 |
| 21052  | Ditto but with glazing in clear or coloured tempered glass of any thickness.....  |  |                              | 779.70                             | 21052 |
| 21053  | Alter existing dry wall partitions to insert 50 mm thick fibreglass insulation layer (density not less than 16 kg/m <sup>3</sup> ).....   |  |                              | 37.30                              | 21053 |
| 21054  | Ditto but density 48 kg/m <sup>3</sup> .....  |  |                              | 67.80                              | 21054 |
| 21055  | Forming opening of any size through existing dry wall partition including all necessary partition components.....   |  |                              | 153.90                             | 21055 |
| 21056  | Construct glazed sliding hatch consisting of framing all round, glass panels with polished edges and finger hole, tracks housed into framing at head and cill including forming opening in existing dry wall partition, providing and fixing of all necessary framing components..... |  |                              | 702.00                             | 21056 |
| <i>Each</i>                                  |   |  |                              |                                    |       |
| 21057  | Construct 15 mm thick plywood blind box overall size 600 x 340 x 80 mm deep and lined with 13 mm thick softboard.....   |  |                              | 715.00                             | 21057 |
| 21058  | Cutting and trimming partition / dry wall around beams, air-conditioning ducts, etc., including all necessary framing components and fixings, girth of cut n.e. 1.20 m .....  |  |                              | 70.90                              | 21058 |
| 21059  | Scribe infill up to 300 mm wide in 12 mm thick luan plywood to existing window opening for abutting dry wall partition of any description and height, and finished to match abutting partition / dry wall .....   |  |                              | 616.00                             | 21059 |
| <i>Per linear metre</i>                      |   |  |                              |                                    |       |
| 21060  | Pack top of dry wall partition to ceiling to make up height to 75 mm with painted scantlings plugged and screwed to concrete soffit or tapped and screwed to grid of suspended ceiling .....  |  |                              | 45.70                              | 21060 |
| 21061  | Construct over dry wall partition n.e. 100 mm wide and up to 300 mm high painted false beam to make up height built up of 12 mm thick luan plywood and 50 x 50 mm hardwood framing plugged and screwed to concrete soffits or tapped and screwed to grid of suspended ceiling.....    |  |                              | 215.70                             | 21061 |
| 21062  | Ditto but 300 - 600 mm high.....  |  |                              | 400.50                             | 21062 |



| Item   |  | Supply and fix | Supply and fix (with provision of a minimum 3-year warranty) | Take down and clear away | Take down and set aside for re-use | Fix only | Item  |
|--|--|----------------|--|--------------------------|------------------------------------|----------|-------|
|  |  | A \$           | B \$   | C \$                     | D \$                               | E \$     |       |
| <b>PROPRIETARY TOILET CUBICLE SYSTEM</b>   |  |                |  |                          |                                    |          |       |
| Proprietary toilet cubicle system of impregnated homogeneous core with solid compact laminate panels conforming to BS EN 438, both sides of panels finished with laminated plastic sheeting, and powder coated aluminium frame, headrails and adjustable legs complete with ironmongery, hardware and accessories and all in accordance the manufacturer's instruction : - |  |                |  |                          |                                    |          |       |
| <i>Per set</i>   |  |                |  |                          |                                    |          |       |
| 21063  | Set of one cubicle unit comprising one front panel with one door included, n.e. 1.00 m wide x n.e. 2.10 m high.....  | 1,127.00       | 1,734.00   | 73.30                    | 147.00                             | 337.00   | 21063 |
| 21064  | Set of one corner cubicle unit comprising one front panel with one door included and one open-end panel, n.e. 1.00 m wide x n.e. 1.90 m deep x n.e. 2.10 m high.....   | 1,879.00       | 2,890.00   | 96.70                    | 207.00                             | 422.00   | 21064 |
| 21065  | Set of one cubicle unit comprising one front panel with one door included, 1.00 - 1.25 m wide x n.e. 2.10 m high.....  | 1,184.00       | 1,821.00   | 76.90                    | 154.00                             | 354.00   | 21065 |
| 21066  | Set of one corner cubicle unit comprising one front panel with one door included and one open-end panel, 1.00 - 1.25 m wide x n.e. 1.90 m deep x n.e. 2.10 m high..... | 1,973.00       | 3,035.00   | 102.00                   | 217.00                             | 443.00   | 21066 |
| 21067  | Set of one cubicle unit comprising one front panel with one door included, 1.25 - 1.50 m wide x n.e. 2.10 m high.....  | 1,246.00       | 1,917.00   | 86.40                    | 188.00                             | 368.00   | 21067 |
| 21068  | Set of one corner cubicle unit comprising one front panel with one door included and one open-end panel, 1.25 - 1.50 m wide x n.e. 1.90 m deep x n.e. 2.10 m high..... | 2,076.00       | 3,194.00   | 103.00                   | 221.00                             | 450.00   | 21068 |
| <i>Each</i>  |  |                |  |                          |                                    |          |       |
| 21069  | Add to either of Items 21063 to 21068 inclusive for division panel, n.e. 1.90 m deep x n.e. 2.10 m high.....   | 822.00         | 1,265.00   | 55.70                    | 119.00                             | 123.00   | 21069 |
| <i>Per set</i>   |  |                |  |                          |                                    |          |       |
|  | Add to Item 21067 for each additional 0.20 m or part thereof in width.....   | 5%             | 5%   | -                        | -                                  | 5%       |       |
|  | Add to Item 21068 for each additional 0.20 m or part thereof in width.....   | 3%             | 3%   | -                        | -                                  | 3%       |       |
|  | Add to either of Items 21063 to 21068 inclusive for each additional 0.25 m or part thereof in height.....  | 8%             | 8%   | -                        | -                                  | 8%       |       |

| Item   |                                   |                      |                                      |  | Item        |       |
|--|-----------------------------------|----------------------|--------------------------------------|--|-------------|-------|
| <b>PROPRIETARY TOILET CUBICLE SYSTEM (CONT'D)</b>          |                                   |                      |                                      |  |             |       |
| Replacement parts for proprietary toilet cubicle system :- |                                   |                      |                                      |  |             |       |
|  |                                   | Supply<br>and<br>fix | Take<br>down<br>and<br>clear<br>away | Take<br>down<br>and set<br>aside for<br>re-use | Fix<br>only |       |
|  |                                   | A<br>\$              | B<br>\$                              | C<br>\$  | D<br>\$     |       |
|  | <b><i>Pair</i></b>                |                      |                                      |  |             |       |
| 21070  | Hinge (L/H or R/H) .....          | 101.00               | 2.30                                 | 4.60   | 10.50       | 21070 |
|  | <b><i>Each</i></b>                |                      |                                      |  |             |       |
| 21071  | Adjustable leg .....              | 128.00               | 2.30                                 | 4.60   | 10.50       | 21071 |
| 21072  | Rail fixing rose .....            | 63.20                | 2.30                                 | 4.60   | 10.50       | 21072 |
| 21073  | Angle bracket .....               | 38.00                | 2.30                                 | 4.60   | 10.50       | 21073 |
| 21074  | Headrail 3000mm (L) .....         | 265.00               | 2.30                                 | 4.60   | 10.50       | 21074 |
| 21075  | Rail bracket .....                | 67.30                | 2.30                                 | 4.60   | 10.50       | 21075 |
| 21076  | Rail elbow .....                  | 33.70                | 2.30                                 | 4.60   | 10.50       | 21076 |
| 21077  | Coat hook .....                   | 33.70                | 2.30                                 | 4.60   | 10.50       | 21077 |
| 21078  | Indicator snib (L/H or R/H) ..... | 189.00               | 2.30                                 | 4.60   | 10.50       | 21078 |
| 21079  | Rail T connector .....            | 114.00               | 2.30                                 | 4.60   | 10.50       | 21079 |

**Section 22**

**LANDSCAPE WORK**

## SECTION 22

### LANDSCAPE WORK

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Specification</b>  | <b>SC22.01</b> | <p>This Section shall also be read and used in conjunction with the Specification relating to landscape work and new planting works adopted in the Contract.</p> <p>Due allowance is deemed to have been made in the Contract Percentages for complying with all requirements as stipulated in the Specification adopted in the Contract for landscape work and new planting works.</p>   |
|   |                | <b>PART I – PREPARATORY WORKS</b>   |
| <b>Measurement of clearing and removing from Site rubbish, litter, etc.</b> | <b>SC22.02</b> | <p>Clearing, cutting down and removing from Site rubbish, litter, construction debris, stones, grass, weed, vines, shrubs, undergrowth, etc. and the like including trees not exceeding 95 mm DBH shall be measured based on the overall surface area covered; and no allowance shall be made for surface irregularities or other local peculiarities.</p> <p>No deduction shall be made for any area not exceeding 1.00m<sup>2</sup>.</p> <p>The items for clearing, cutting down and removing from Site rubbish, litter, construction debris, stones, grass, weed, vines, shrubs, undergrowth, etc. and the like including trees not exceeding 95 mm DBH shall not be paid for if such work is carried out in conjunction with the excavation works, or if excavation is subsequently carried out by the Contractor at the same location.</p> |
| <b>Rates for clearing and removing from Site rubbish, litter, etc.</b>      | <b>SC22.03</b> | <p>The rates for clearing, cutting down and removing from Site rubbish, litter, construction debris, stones, grass, weed, vines, shrubs, clearing and undergrowth, etc. and the like including trees not exceeding 95 mm DBH shall include for cutting the same down to below 25 mm of the level of the ground or sloping ground and, if required, grubbing out all roots and stumps and filling voids with approved materials.</p>   |
| <b>Rates for removing bamboo protective fencing</b>                         | <b>SC22.04</b> | <p>The rates for removing bamboo protective fencing shall include for taking down bamboo fencing and transporting to a storage area for re-use; or disposal as directed by the Maintenance Surveyor including all necessary operations to make good the disturbed areas.</p>  |

### SPECIAL CONDITIONS

#### PART I – PREPARATORY WORKS

|   |                       |  |
|---|-----------------------|--|
| <p><b>Rates for spreading and levelling or mixing decomposite granite, manufactured soil conditioner, sand, mulch, pine bark mulch, peat moss, alginate, soil stabilizer, stone chips and water absorbing soil additive</b></p> | <p><b>SC22.05</b></p> | <p>The rates for spreading, levelling or mixing the decomposite granite, manufactured soil conditioner, sand, mulch, pine bark mulch, peat moss, alginate, soil stabilizer, stone chips and water absorbing soil additive shall include for supplying, delivering, loading, and/or transporting from any locations as directed; unloading, spreading the mulch or pine bark mulch evenly on the surface of the soil to the specified depth; or mixing the decomposite granite, manufactured soil conditioner, sand, peat moss, alginate, soil stabilizer, stone chips and water absorbing soil additive into the soil to a specified depth and/or at a specified rate; submission of material samples as specified; and testing of sample by the PWL/AL and provision of Certificates of Analysis of the material where necessary.</p> |
| <p><b>Rates for spreading and levelling drainage aggregate, lightweight aggregate, round river-washed pebbles, pea gravel and gravel, laying and protecting filter layer</b></p>  | <p><b>SC22.06</b></p> | <p>The rates for spreading and levelling drainage aggregate, lightweight aggregate, round river-washed pebbles, pea gravel and gravel, laying and protecting filter layer shall include for supplying, delivering, loading, and/or transporting from any locations as directed, unloading; spreading and levelling to specified depth; laying filter layer and all necessary protection; and submission of material samples as specified.</p>  |
| <p><b>Rates for stripping of topsoil</b></p>  | <p><b>SC22.07</b></p> | <p>The rates for stripping of topsoil in layers not exceeding 150mm thick shall include for excavating, multi-handling, levelling, grading and trimming surfaces of excavation, depositing the excavated material in spoil heaps including removal to a distance not exceeding 100 metres, or disposal to an approved dump site when direct, and all necessary temporary protection.</p>   |
| <p><b>Rates for underground guying system</b></p>   | <p><b>SC22.08</b></p> | <p>The rates for specified underground guying system shall include for supplying, excavating, multi-handling, backfilling, grading, fabricating and fixing the straps, ties, and other necessary materials as specified in the required location.</p> <p>The rates for underground guying systems shall also include for submission of samples and particulars of all the necessary materials of the system for the Maintenance Surveyor's approval prior to importation and use on site.</p>  |

**SPECIAL CONDITIONS**

**PART II – LANDSCAPE HARDWORKS**

|  |                |  |
|--|----------------|--|
| <b>Measurement of ornamental boulders</b>  | <b>SC22.09</b> | Ornamental boulders shall be measured as the smallest square or rectangular block laid. In the case of ornamental boulders exceeding 3.00 m <sup>3</sup> , they shall be measured in the multiple of the largest size and the remainder shall be added. For example, a block of 10.25 m <sup>3</sup> shall be measured 3 times boulders 1.00 - 3.00 m <sup>3</sup> and the remainders are 1 times boulders of 0.75 - 1.00 m <sup>3</sup> and 1 times 0.25 - 0.50 m <sup>3</sup> .  |
| <b>Rates for ornamental boulders</b>   | <b>SC22.10</b> | <p>The rates for ornamental boulders shall further include for :-</p> <ul style="list-style-type: none"> <li>(a) Mobilization, maintenance and demobilization of all plants necessary for the works.</li> <li>(b) Sourcing of the ornamental boulders per specified type and size, and provision of samples if required.</li> <li>(c) Supply, loading, transport, unloading, all multiple handling and disposal of surplus excavated material, storage and placing in final position including all necessary excavation (footing shall be measured separately).</li> <li>(d) Marking of ornamental boulders on delivery and removing all marking after installation as instructed by the Maintenance Surveyor.</li> <li>(e) Assembling ornamental boulders to any shape, pattern, sculptures as directed by the Maintenance Surveyor.</li> </ul> |
| <b>Rates for natural stepping stones</b>   | <b>SC22.11</b> | The rates for supplying and laying stepping stones shall include for sourcing and supplying, transporting, unloading, all multi-handling and placing at the final position, excavation and disposal of soil or surplus material. The stones shall be laid flush to the adjacent finished ground level.   |
| <b>Rates for edging to planter beds</b>  | <b>SC22.12</b> | The rates for supplying and laying bricks / concrete blocks for edging to planter beds shall include for supplying, loading, transporting, unloading, placing in position, including excavation and disposal to allow stable placing, all mortar and bedding, cutting and laying in patterns.  |
| <b>Rates for supplying, delivering and installing bamboo protective fencing and plastic lattices</b> | <b>SC22.13</b> | The rates for supplying, delivering and installing bamboo protective fencing and plastic lattices shall include for supplying, loading, and/or transporting from any locations as directed, unloading, excavating, multi-handling, levelling, grading, fabricating and fixing the fences and lattices with all necessary materials as specified in the required location; fixing and adjusting; and submission of material samples as specified.   |

**SPECIAL CONDITIONS**

**PART II – LANDSCAPE HARDWORKS**

|  |                |  |
|--|----------------|--|
| <b>Rates for supplying plant labels</b>  | <b>SC22.14</b> | The rates for supplying plant labels shall include for supplying and delivering the plant labels as specified and provision of material samples if required for all types of vegetation including tree, shrub, conifer, palm, climber, herbaceous plant, groundcovers, etc.  |
| <b>Rates for fixing plant labels</b>   | <b>SC22.15</b> | The rates for fixing plant labels shall include for mounting and installing plant labels with appropriate mounting devices as specified in the required location, and regularly inspecting, adjusting, reinstating and replacing the plant labels.   |
| <b>Rates for lifting cast iron tree grilles</b>                                | <b>SC22.16</b> | The rates for lifting existing cast iron tree grilles shall include for lifting the set of cast iron tree grilles and frames out of the tree pit, transporting the grilles to a required location and making good any damages resulting from the operation.  |
| <b>Rates for installing cast iron tree grilles</b>                             | <b>SC22.17</b> | The rates for installing cast iron tree grilles shall include for delivering the set of tree grilles and frames from the storage area or a location as directed by the Maintenance Surveyor and placing the grilles in the required position. The rates shall include for all necessary protective coating and painting.   |
| <b>Rates for lifting mild steel tree guards</b>                                | <b>SC22.18</b> | The rates for lifting mild steel tree guards shall include for lifting the tree guard, backfilling with suitable materials and making good existing tree pit and transporting the guard to a location as directed by the Maintenance Surveyor.   |
| <b>Rates for installing mild steel tree guards</b>                             | <b>SC22.19</b> | The rates for installing mild steel tree guards shall include for delivery to the Site and securing the guard in the required location.  |
| <b>Rates for supplying and installing root barrier</b>                         | <b>SC22.20</b> | The rates for supplying and installing root barrier shall include for supplying, delivering, loading, and/or transporting from any locations as directed, unloading, levelling and installing root barriers as specified in the required location; and submission of material samples as specified.  |
| <b>Rates for proprietary tree bracing support system “Cobra” or equivalent</b> | <b>SC22.21</b> | The rates for supply and install proprietary tree support and bracing system “Cobra” or equivalent shall include supply of all necessary materials including rope, loop, expansion insert, antiabrasion hose and shock absorber, transport, storage, manufacturer’s guarantees or warranties of products etc., submission of method statement, provision of all necessary equipment and safety measures, installation by qualified specialists, and multi-handlings and adjustment of tree support and bracing system for valuable problematic trees. The rates shall further include for working at any height, slope inclination, cable length and any other insurance required. |

### SPECIAL CONDITIONS

#### PART III – LANDSCAPE SOFTWORKS

**Rates for landscape softworks generally**

**SC22.22**

The rates for landscape softworks shall generally include for : -

- (a) Works executed by the contractor on the List of Approved Suppliers of Materials and Specialist Contractors for Public Works for the appropriate Group of the appropriate Class under the Landscaping category.
- (b) Carrying out establishment works after completion for a period of 12 months including all works required as stated in Special Conditions Clauses SC22.48, SC22.49 and SC22.50.

#### PART III.A – LANDSCAPE SOFTWORKS – SUPPLY ITEMS

**Rates for supplying of plant materials**

**SC22.23**

The rates for supplying of various categories of plant materials shall further include for supplying the plant material including sourcing, loading, transportation, unloading, storage, transit protection and placing to the required locations. The rates shall include for all necessary replacement of plant materials found dead or defective.

The grouping of planting materials referred to in this Section of the Schedule is appended in Annex 'B' to this Schedule.

The rates for supply of plant materials shall also include for provision of samples and annotated photographs of the specified species of plant materials.

**Rates for supplying of climbers**

**SC22.24**

The rates for supplying of climbers shall also include for supplying and delivering the associated supports for the non-self-clinging climbers and submission of material samples for the supports.

**Rates for supplying of aquatic plants**

**SC22.25**

The rates for supplying of aquatic plants shall also include for supplying and delivering all the associated materials including plastic mesh containers, wire mesh cages, growing medium, supports and ballast; and submission of material samples for all the associated materials.

#### PART III.B – LANDSCAPE SOFTWORKS – PLANTING ITEMS

**Rates for landscape softworks - planting items**

**SC22.26**

The rates for landscape softworks - planting items shall further include for : -

- (a) Provision and application of pre-planting fertilizer to fabricated soil mix or top soil or light weight soil mix as specified.
- (b) Setting-out and excavating planting pits for root balls, placing the plant in the pit, backfilling with fabricated soil mix or top soil or light weight soil mix.
- (c) All necessary supports, staking and tying or guying as specified.
- (d) Provision and application of follow-up fertilizer and insect and disease control treatment, thorough watering and all necessary operations as specified for satisfactory completion of planting works.



**SPECIAL CONDITIONS**

**PART III.B – LANDSCAPE SOFTWORKS – PLANTING ITEMS**

|   |                |  |
|---|----------------|--|
| <b>Rates for soiling in landscape areas</b> | <b>SC22.27</b> | <p>The rates for soiling in landscape areas shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Mixing, depositing, compaction, spreading, levelling and beating.</li> <li>(b) Multiple handling.</li> <li>(c) Protection of prepared ground against compaction, erosion and siltation.</li> <li>(d) Importing soils from any source.</li> <li>(e) Provision of samples.</li> <li>(f) Additional bulk of material required to allow for compaction and consolidation.</li> <li>(g) Removing, replacing or making good placed or compacted soiling as required where soiling material subsequently becomes damaged or unsuitable.</li> </ul> |
| <b>Rates for fabricated soil mix</b>        | <b>SC22.28</b> | <p>Further to Special Conditions Clause SC22.27, the rates for fabricated soil mix shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Testing of samples by the PWL/AL and provision of Certificates of Analysis of the fabricated soil mix.</li> <li>(b) Protection and storage of fabricated soil mix.</li> <li>(c) Replacement of fabricated soil mix which is not conforming to the Specification.</li> </ul>  |
| <b>Rates for top soil</b>                   | <b>SC22.29</b> | <p>Further to Special Conditions Clause SC22.27, the rates for top soil shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Testing of samples by the PWL/AL and provision of Certificates of Analysis of the top soil.</li> <li>(b) Protection and storage of top soil.</li> <li>(c) Replacement of top soil which is not conforming to the Specification.</li> </ul>  |
| <b>Rates for planting of climbers</b>       | <b>SC22.30</b> | <p>The rates for planting of climbers shall also include for fixing the associated supports for the non-self-clinging climbers.</p>  |
| <b>Rates for planting of aquatic plants</b> | <b>SC22.31</b> | <p>The rates for planting of aquatic plants shall also include for placing and fixing all the associated materials including plastic mesh containers, wire mesh cages, growing medium, supports and ballast.</p>   |

**SPECIAL CONDITIONS**

**PART III.B – LANDSCAPE SOFTWARES – PLANTING ITEMS**

|   |                |   |
|---|----------------|---|
| <b>Rates for pots / containers</b>                        | <b>SC22.32</b> | The rates for pots / containers shall include provision of samples if required, supplying, loading, transporting, unloading, placing in positions as directed, and removing from the Site if required the pots / containers including the associated trays.   |
| <b>Rates for ornamental plants other than Orchidaceae</b> | <b>SC22.33</b> | <p>The rates for ornamental plants other than the Orchidaceae family shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Supplying pots / containers with trays of different materials, in variety of shapes, colours and finishes, and in different size categories, and provision of samples of pots / containers if required.</li> <li>(b) Provision of samples of the specified plant species if required.</li> <li>(c) Supplying, delivering and placing the plants with appropriate planting medium in pots / containers at locations as directed.</li> <li>(d) Removing the plants in pots / containers from the Site if required.</li> </ul> |
| <b>Rates for ornamental plants - Orchidaceae</b>          | <b>SC22.34</b> | <p>The rates for ornamental plants from the Orchidaceae family shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Supplying pots / containers with trays of different materials, in variety of shapes, colours sand finishes, and in different size categories, and provision of samples of pots / containers if required.</li> <li>(b) Provision of samples of the specified plant species if required.</li> <li>(c) Supplying, delivering and placing the plants with appropriate planting medium in pots / containers at locations as directed.</li> <li>(d) Removing the plants in pots / containers from the Site if required.</li> </ul>      |
| <b>Rates for artificial plants</b>                        | <b>SC22.35</b> | <p>The rates for artificial plants shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Supplying pots / containers with trays of different materials, in variety of shapes, colours sand finishes, and in different size categories, and provision of samples of pots / containers if required.</li> <li>(b) Provision of samples of the specified plant species if required.</li> <li>(c) Supplying, delivering and placing the plants in pots / containers at locations as directed.</li> <li>(d) Removing the plants in pots / containers from the Site if required.</li> </ul>   |

**SPECIAL CONDITIONS**

**PART III.C – TURFING AND GRASSING**

**Measurement of hydroseeding, hydro-mulching, broadcasting, sprigging and turfing**

**SC22.36**

Hydroseeding, hydro-mulching, broadcasting, sprigging, turfing and the like shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m<sup>2</sup>.

**Rates for hydroseeding**

**SC22.37**

The rates for hydroseeding shall further include for : -

- (a) Cleaning ground and scarifying existing soil.
- (b) All materials and equipment necessary for the successful establishment of the vegetation.
- (c) Watering.
- (d) Protection of prepared ground surfaces.
- (e) Providing and fixing protective layers of biodegradable fabric including allowance for laps and staples.
- (f) Making good areas not covered by approved germinated grass.
- (g) First cut and subsequent cuts.
- (h) Follow up fertilizer.
- (i) Insect and disease control.
- (j) Provision of samples and testing certificates.
- (k) All necessary operations for satisfactory germination and completion of grass areas as specified.
- (l) Mobilization and demobilization of all plant and equipment necessary for the works.
- (m) Carrying out survey and checking the existing conditions before applications.
- (n) Provision of all necessary working platform.

**Rates for hydro-mulching**

**SC22.38**

The rates for hydro-mulching shall further include for : -

- (a) Mobilization and demobilization of all plant and equipment necessary for the works.
- (b) Checking and carrying out survey of existing conditions and protection of prepared ground surfaces before application.
- (c) Application by a specialist approved by the Maintenance Surveyor.
- (d) Provision of all necessary working platform.

### SPECIAL CONDITIONS

#### PART III.C – TURFING AND GRASSING

**Rates for hydro-mulching (Cont'd)**

**SC22.38 (Cont'd)**

- (e) Submission of samples of materials to be used and particulars including manufacturer's catalogue and literature.
- (f) Providing specialist's guarantee for a period of a minimum of five years.
- (g) Providing deed of warranty when required.
- (h) All necessary materials, equipment and operations for satisfactory germination and completion grass areas as specified.

**Rates for turfing and sprigging**

**SC22.39**

The rates for turfing and sprigging shall further include for : -

- (a) Cleaning ground and scarifying existing soil.
- (b) Cultivation and watering.
- (c) Protection of prepared ground surfaces.
- (d) Firming turfs with wooden beaters.
- (e) Dressing of finely sifted topsoil mix and well brushing into joints.
- (f) Adjusting any inequalities in finished levels.
- (g) Making good areas not covered by approved germinated grass.
- (h) First cut and subsequent cuts.
- (i) Preplant fertilizer and follow up fertilizer.
- (j) Insect and disease control.
- (k) Provision of samples and testing certificates.
- (l) All necessary materials, equipment and operations for satisfactory germination and completion grass areas as specified.

#### PART III.D –TRANSPLANTING

**Measurement generally**

**SC22.40**

The DBH of trees to be transplanted shall be measured at a point 1.30 m above ground level.

**Rates for transplanting trees**

**SC22.41**

The rates for transplanting trees shall further include for : -

- (a) Submission of method statement and programme for transplanting to the Maintenance Surveyor and obtaining his approval prior to commencement of any operations related to transplanting.

**SPECIAL CONDITIONS**

**PART III.D – TRANSPLANTING**

**Rates for  
transplanting  
trees  
(Cont'd)**

**SC22.41  
(Cont'd)**

- (b) Mobilization, maintenance and demobilization of all necessary plant and equipment for the transplanting operations.
- (c) Cleaning soil of existing ground and any contaminated ground including preparation of tree pit at receptor site and provision of protection of pit.
- (d) Excavating trenches for root ball preparation, root pruning to achieve the required size of root ball, maintenance of the root ball during the period of root ball preparation, and undercutting the root ball prior to lifting for transplanting.
- (e) Protecting the root ball by wrapping the root ball and encasing the root ball if required by materials proposed in the approved method statement, spraying with approved anti-transpiration spray if required, and keeping the whole plant moist at all time.
- (f) Crown thinning of the tree to the required form and shape.
- (g) Protection of the tree from mechanical damages, excessive sunlight, wind and drought including dressing wounds during the whole process of transplanting.
- (h) Provision of tree lifting, transporting of the tree from the donor site to the receptor site, provision of temporary storage of the tree at holding nursery if required, planting of the tree at the receptor site including backfilling of the tree pit, watering, mulching and all other necessary operations as specified for satisfactory completion of planting works.
- (i) Provision of supporting measures at donor site during root ball preparation prior to lifting for transplanting and at receptor site after transplanting.
- (j) Replacement of dead / dying tree after transplantation with the same species and size of tree.
- (k) Backfilling voids and making good disturbed surface at donor site.
- (l) Provision of a complete set of date-imprinted photographic records for each stage of the whole transplanting process.

**Rates for  
root  
pruning  
prior to  
transplanting**

**SC22.42**

The rates for root pruning shall further include for all works to prepare for the uplift of the plant at original location, including :

- (a) Provision of plant and equipment necessary for the works;
- (b) Inspection and programming;
- (c) Crown thinning;
- (d) Root pruning and anchoring; and
- (e) Maintenance during root pruning period.

### SPECIAL CONDITIONS

#### PART III.D – TRANSPLANTING

**Rates for temporary storage**

**SC22.43**

The rates of temporary storage at the Contractor's holding nursery shall cover the cost of taking up the physical space by individual plant at monthly rate, under the condition that the crowns of the trees / plants shall not touch each other when placed in the nursery. If the transplanted plant is a tree, the rates shall also cover the cost of the root ball container per G.S. Item 25.73.5.

#### PART III.E – TREE FELLING AND PRUNING / SURGERY WORKS

**Measurement generally**

**SC22.44**

The DBH of trees to be felled shall be measured at a point 1.30 m above ground level.

Pruning to climbers and groundcovers shall be measured the coverage area on plan irrespective of the planting density and /or height of the plants.

Pruning to whip trees, seedling trees, shrubs, bamboos, herbaceous plants, standard trees, light standard trees, small conifers and palms (Group A, B, C and E) shall be measured per number irrespective of the height of the plants.

**Rates for tree felling**

**SC22.45**

The rates for tree felling shall further include for : -

- (a) Fell only those trees earmarked and labeled or those as directed or approved by the Maintenance Surveyor.
- (b) Commence any work related to tree felling on the Site only after the contractor's compliance with the requirements, such as those related to method statement, stipulated to be completed prior to commencing the tree felling work.
- (c) Take all necessary safety precautions to protect the people engaged in the tree felling work as well as the people and property in the vicinity throughout the whole process of tree felling.
- (d) Tree trunks and branches shall be removed in sections for reasons of safety and in such a manner that any potential damage to the public and adjacent utilities, services or pipes, structure, slopes or stream course vegetation is avoided.
- (e) Fell the trees by cutting them near the ground, with their stumps ground rather than pulled so that the roots of the nearby plants to be retained are not injured.
- (f) Remove the stumps and rootballs of the felled trees carefully to avoid causing damage to the roots of the nearby plants to be retained, where it is necessary to have such removal as directed by the Maintenance Surveyor.
- (g) Do not use a preserved tree as anchor when winching out a stump.
- (h) Remove from site all debris, wood, and roots where necessary. Burning of vegetation or any other construction debris is not permitted.
- (i) All voids formed as a result of the above works shall be backfilled with clean material as appropriate.

### SPECIAL CONDITIONS

#### PART III – TREE FELLING AND PRUNING / SURGERY WORKS

**Rates for tree  
felling  
(Cont'd)**

**SC22.45  
(Cont'd)**

- (j) Report to the Maintenance Surveyor the necessity of such tree removal.
- (k) Provide all reasonable assistance as required by the Maintenance Surveyor in the tree survey and the justification for the proposed tree removal with substantiation and the necessary details such as site formation plan and architectural or engineering drawings, for the Maintenance Surveyor's preparation of the tree felling or transplanting application for the tree removal.
- (l) Fell or transplant the trees only after the Maintenance Surveyor's approval to the tree removal which shall normally be given only after the tree felling application has been approved by the government approving authority (Lands Department (LandsD)/Leisure and Cultural Services Department (LCSD)/Agriculture, Fisheries and Conservation Department (AFCD)).
- (m) At the commencement of works, and concurrent with the tree protection works, Contractor shall identify and clearly mark all trees that are indicated on Contract drawing as trees to be felled. Any tree which for any reason is required to be felled during the progress of the work shall be immediately drawn to the Maintenance Surveyor's attention and permission sought from relevant authority prior to any felling being carried out.
- (n) Unless under emergency situation agreed by the Maintenance Surveyor, the Contractor shall submit method statement on tree felling for the Maintenance Surveyor's approval and shall commence any work related to tree felling only after the method statement has been approved in writing by the Maintenance Surveyor.

**Rates for  
pruning /  
surgery works**

**SC22.46**

The rates for tree pruning / surgery works to existing trees shall further include for operations as specified in G.S. Items 25.80 to 25.92 and removal of branch of 100 mm diameter or above.

The grouping of planting materials referred to in this Section of the Schedule is appended in Annex 'B' to this Schedule.

#### PART IV – ESTABLISHMENT WORKS

**Measurement  
generally**

**SC22.47**

The 12-month Establishment Works to be provided for all planting items shall generally be included in the landscape softworks as stated in Special Conditions Clause SC22.22.

Establishment Works shall only be measured where such operations are specifically ordered by the Maintenance Surveyor in writing and in a separate Works Order.

**SPECIAL CONDITIONS**

**PART IV – ESTABLISHMENT WORKS**

**Rates for  
Establishment  
Works**

**SC22.48**

The rates for Establishment Works generally shall include for the following for the operations as specified and ordered : -

- (a) All necessary site inspections to identify the need for the implementation of the operations concerned.
- (b) Supply, loading, transportation, unloading, storage, multi-handling, and disposal of surplus of all the necessary materials.
- (c) Provision of samples, testing of samples by the PWL/AL, and provision of Certificates of Analysis of the materials if required.
- (d) Provision of method statements if required.
- (e) Implementation of the operations concerned.
- (f) Maintenance and provision of the records of the operations concerned upon completion.

**Rates for  
basic  
establishment  
operations**

**SC22.49**

The rates for basic establishment operations for various types of plants / grassed areas shall further include for : -

- (a) Watering.
- (b) Control of pests and disease.
- (c) Weeding and litter removal.
- (d) Aeration and forking over.
- (e) Replacement of plants and grass with the same species and sizes where the plants or grass fail to become established or to conform to the Specification.
- (f) Firming-up and security.
- (g) Topping up of mulching.
- (h) Apply fertilizers.
- (i) Pruning and removal of dead leaves and branches.
- (j) Grass cutting.
- (k) Top-dressing.
- (l) Aeration and rolling of turf area.



**SPECIAL CONDITIONS**

**PART IV – ESTABLISHMENT WORKS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for basic establishment operations (Cont'd)</b> | <b>SC22.49 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(m) Cleaning and polishing of all plant leaves of indoor plants with an approved leaf polish at monthly interval.</li> <li>(n) Monthly Establishment Operations Record.</li> </ul> |
|--|-------------------------|---|

|   |                |   |
|---|----------------|---|
| <b>Rates for establishment operations for indoor plants</b> | <b>SC22.50</b> | <p>The rates for basic establishment works operations for indoor plants shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Cleaning and polishing all plant leaves with an approved leaf polish at monthly intervals.</li> <li>(b) Supply and application of slow-release fertilizer at rate according to G.S. Item 25.67(d).</li> <li>(c) Removal of dead leaves and branches, where necessary.</li> </ul> |
|---|----------------|---|

|   |                |  |
|---|----------------|--|
| <b>Rates for supplying and installing metal / bamboo staking system and guying system</b> | <b>SC22.51</b> | <p>The rates for supplying and installing metal / bamboo staking system and guying system shall include for supplying, loading, and/or transporting from any locations as directed, unloading, excavating, multi-handling, and fixing the stakes and guys with all necessary materials such as ties, guying stakes, trunk protection materials as specified in the required location; and submission of material samples as specified.</p> |
|---|----------------|--|

**PART V – SUNDRIES**

|  |                |  |
|--|----------------|--|
| <b>Measurement of plant identification</b> | <b>SC22.52</b> | <p>The item for “collect, handle and transport plant specimens” shall be measured once for each plant species in question as directed by the Maintenance Surveyor.</p> |
|--|----------------|--|

|                                       |                |   |
|---------------------------------------|----------------|---|
| <b>Rates for plant identification</b> | <b>SC22.53</b> | <p>The rate for “collect, handle and transport plant specimens” shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Storage of specimen in an approved container and other; and</li> <li>(b) Collection, handling and transporting all collected plant specimen(s) to the Herbarium of Agriculture, Fisheries and Conservation Department (“AFCD”).</li> </ul> |
|---------------------------------------|----------------|---|

| Item   |  | A<br>\$ | Item  |
|--|--|---------|-------|
| <b>PART I - PREPARATORY WORKS</b>  |  |         |       |
| <i>Per square metre</i>  |  |         |       |
| 22001  | Clear, cut down and remove from Site rubbish, litter, construction debris, stones, grass, weed, vines, shrubs, undergrowth, etc. and the like including trees not exceeding 95 mm DBH, and grubbing up roots and filling void with approved materials, where required, and making good disturbed surfaces to match existing..... | 28.60   | 22001 |
| (Note : Item 22001 will not be paid for if the clearance, cutting down and removal works are carried out in conjunction with the excavation works, or if excavation works are subsequently carried out by the Contractor at the same location.)                      |  |         |       |
| 22002  | Ditto but to surfaces of slope including clearing up blockages of weep holes and removing all ladders, gang planks, etc. as required.....  | 31.70   | 22002 |
| (Note: Items 22001 and 22002 inclusive shall not be paid for if the clearance, cutting down and removal works are carried out in conjunction with the excavation works, or if excavation works are subsequently carried out by the Contractor at the same location.) |  |         |       |
| <i>Per linear metre</i>  |  |         |       |
| 22003  | Remove bamboo protective fencing.....  | 10.10   | 22003 |
| <i>Per cubic metre</i>   |  |         |       |
| 22004  | Supply pine bark mulch.....  | 29.50   | 22004 |
| 22005  | Supply manufactured soil conditioner.....  | 158.50  | 22005 |
| 22006  | Supply mulch.....  | 158.50  | 22006 |
| 22007  | Supply decomposite granite.....  | 192.10  | 22007 |
| 22008  | Supply sand.....   | 339.00  | 22008 |
| 22009  | Supply stone chips.....  | 565.00  | 22009 |
| 22010  | Supply soil stabilizer.....  | 339.00  | 22010 |
| 22011  | Supply drainage aggregate.....   | 339.00  | 22011 |
| 22012  | Supply lightweight aggregate.....  | 732.90  | 22012 |
| <i>Per square metre</i>  |  |         |       |
| 22013  | Supply filter layer.....   | 22.60   | 22013 |
| <i>Per kg</i>  |  |         |       |
| 22014  | Supply peat moss.....  | 10.20   | 22014 |
| 22015  | Supply alginate.....   | 28.30   | 22015 |
| 22016  | Supply approved water absorbing soil additive.....   | 39.60   | 22016 |

| Item                                       |  |          | Item  |
|--|--|----------|-------|
| <b>PART I - PREPARATORY WORKS (CONT'D)</b> |  |          |       |
| <i>Per cubic metre</i>                     |  | A<br>\$  |       |
| 22017                                      | Spread and level or mix in manufactured soil conditioner, mulch, pine bark mulch and soil stabilizer.....  | 79.10    | 22017 |
| 22018                                      | Spread and level or mix in sand.....   | 101.70   | 22018 |
| 22019                                      | Spread and level or mix in stone chips and decomposite granite.....  | 113.00   | 22019 |
| 22020                                      | Spread and level drainage aggregate and lightweight aggregate.....   | 113.00   | 22020 |
| <i>Per square metre</i>                    |  |          |       |
| 22021                                      | Spread and mix in peat moss, alginate (at rate of 150kg per m <sup>2</sup> ).....  | 14.50    | 22021 |
| 22022                                      | Laying and protecting filter layer.....  | 17.00    | 22022 |
| 22023                                      | Spread and mix in approved water absorbing soil additive.....  | 17.00    | 22023 |
| 22024                                      | Cultivate the surface of the formation up to 300 mm deep.....  | 6.40     | 22024 |
| 22025                                      | Cultivate the surface of the formation 300 - 450 mm deep.....  | 9.50     | 22025 |
| 22026                                      | Rip the surface of the formation.....  | 4.70     | 22026 |
| 22027                                      | Scarify the surface of the formation.....  | 3.10     | 22027 |
| 22028                                      | Grade the surface of the formation.....  | 3.10     | 22028 |
| 22029                                      | Strip topsoil in layers n.e. 150 mm thick.....   | 11.10    | 22029 |
| <i>Each</i>                                |  |          |       |
| 22030                                      | Rod out, clear and clean existing weep hole and remove off Site all arising, and fill behind with geotextile fabric pocket with 20 - 25 mm coarse aggregate in 150 x 150 x 150 mm overall size.....              | 50.00    | 22030 |
| 22031                                      | Core out 50 mm diameter weep hole in existing reinforced concrete or masonry planter wall and fill behind with geotextile fabric pocket with 20 - 25 mm coarse aggregate in 150 x 150 x 150 mm overall size..... | 288.00   | 22031 |
| <i>Per set</i>                             |  |          |       |
| 22032                                      | Underground guying system.....   | 4,633.00 | 22032 |

| Item                                 |   | Stone Size                  |                                |                                |                               | Item  |
|--------------------------------------|---|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------|
|                                      |   | N.e.<br>0.05 m <sup>2</sup> | 0.05 -<br>0.075 m <sup>2</sup> | 0.075 -<br>0.10 m <sup>2</sup> | 0.10 -<br>0.15 m <sup>2</sup> |       |
|                                      |   | A<br>\$                     | B<br>\$                        | C<br>\$                        | D<br>\$                       |       |
| <b>PART II - LANDSCAPE HARDWORKS</b> |   |                             |                                |                                |                               |       |
|                                      | <i>Each</i>   |                             |                                |                                |                               |       |
| 22033                                | Supply and lay 50 mm thick natural stepping stones.....                                     | 50.00                       | 72.00                          | 108.00                         | 144.00                        | 22033 |
|                                      | <i>Per cubic metre</i>  |                             |                                |                                | A<br>\$                       |       |
| 22034                                | Supply and place natural round river-washed pebbles.....                                    |                             |                                |                                | 3,242.60                      | 22034 |
| 22035                                | Supply and place natural pea gravel.....  |                             |                                |                                | 4,053.20                      | 22035 |
|                                      | <i>Per linear metre</i>   |                             |                                |                                |                               |       |
| 22036                                | Supply and lay 210 x 110 x 50 mm coloured concrete blocks edging to planter beds.....       |                             |                                |                                | 45.40                         | 22036 |
| 22037                                | Supply and lay 220 x 110 x 50 mm coloured bricks edging to planter beds.....                |                             |                                |                                | 45.40                         | 22037 |
| 22038                                | Supply and lay 225 x 105 x 70 mm bricks in diagonal fashion at planter edge.....            |                             |                                |                                | 63.50                         | 22038 |
|                                      | <i>Per square metre</i>   |                             |                                |                                |                               |       |
| 22039                                | Supply and lay 255 x 105 x 70 mm bricks in tree pits.....                                   |                             |                                |                                | 324.20                        | 22039 |
|                                      | <i>Per linear metre</i>   |                             |                                |                                |                               |       |
| 22040                                | Supply and fix bamboo protective fencing n.e. 600 mm high to planted and grassed areas..... |                             |                                |                                | 46.90                         | 22040 |
| 22041                                | Ditto but 600 - 900 mm high.....  |                             |                                |                                | 50.50                         | 22041 |
| 22042                                | Supply and fix plastic lattices of 300 mm high to planted and grassed areas.....            |                             |                                |                                | 177.60                        | 22042 |
| 22043                                | Ditto but 600 mm high.....  |                             |                                |                                | 289.00                        | 22043 |
|                                      | <i>Each</i>   |                             |                                |                                |                               |       |
| 22044                                | Supply plant labels.....  |                             |                                |                                | 17.00                         | 22044 |
| 22045                                | Fix plant labels.....   |                             |                                |                                | 3.00                          | 22045 |

Item

Item

**PART II - LANDSCAPE HARDWORKS (CONT'D)**

| Size / Diameter  |                  |                  |                   |                   |
|------------------|------------------|------------------|-------------------|-------------------|
| 1.00 x<br>1.00 m | 1.05 x<br>1.05 m | 1.50 x<br>1.50 m | 1.20m<br>diameter | 1.50m<br>diameter |
| Type 5           | Type 4           | Type 1           | Type 3            | Type 2            |
| A                | B                | C                | D                 | E                 |
| \$               | \$               | \$               | \$                | \$                |
| 912.00           | 1,006.00         | 2,093.00         | 1,342.00          | 2,356.00          |
| 151.00           | 151.00           | 209.00           | 180.00            | 209.00            |
| 76.00            | 76.00            | 104.00           | 90.00             | 104.00            |

*Per set*

|       |   |        |          |          |          |          |       |
|-------|---|--------|----------|----------|----------|----------|-------|
| 22046 | Supply cast iron tree grille.....                   | 912.00 | 1,006.00 | 2,093.00 | 1,342.00 | 2,356.00 | 22046 |
| 22047 | Install cast iron tree grille.....                  | 151.00 | 151.00   | 209.00   | 180.00   | 209.00   | 22047 |
| 22048 | Lift existing cast iron tree grille for re-use..... | 76.00  | 76.00    | 104.00   | 90.00    | 104.00   | 22048 |

*Per set*

|       |  |  |  |  |  |        |       |
|-------|--|--|--|--|--|--------|-------|
| 22049 | Supply mild steel tree guard.....                    |  |  |  |  | 288.00 | 22049 |
| 22050 | Install small mild steel tree guard to tree pit..... |  |  |  |  | 109.00 | 22050 |
| 22051 | Lift existing mild steel tree guard for re-use.....  |  |  |  |  | 57.60  | 22051 |

*Per square metre*

|       |   |  |  |  |  |        |       |
|-------|---|--|--|--|--|--------|-------|
| 22052 | Supply and install precast reinforced concrete baffle as root barrier in tree pit.....          |  |  |  |  | 432.30 | 22052 |
| 22053 | Supply and install 0.7 mm thick high density PVC sheet as root barrier (Horizontally laid)..... |  |  |  |  | 180.20 | 22053 |
| 22054 | Supply and install 2 mm thick high density PVC sheet as root barrier (Vertically laid).....     |  |  |  |  | 216.20 | 22054 |

Item

Item

**PART II - LANDSCAPE HARDWORKS (CONT'D)**

(Note :- The following Items 22055 to 22058 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)

Supply and install proprietary tree bracing support system "Cobra" or equivalent including all necessary materials and fittings like rope, loop, expansion insert, anti-abrasion hose and shock absorber etc. all in accordance with manufacturer's recommendation :-

**Per set**

|       |                    |          |       |
|-------|--------------------|----------|-------|
| 22055 | Cobra plus 2T..... | 3,177.00 | 22055 |
| 22056 | Cobra plus 4T..... | 3,638.00 | 22056 |
| 22057 | Cobra 8T.....      | 5,728.00 | 22057 |

**Per linear metre**

|       |                        |        |       |
|-------|------------------------|--------|-------|
| 22058 | Cobra Ultrastatic..... | 600.40 | 22058 |
|-------|------------------------|--------|-------|

**ORNAMENTAL BOULDERS**

Ornamental boulders shall be natural, rounded rocks of various overall sizes and types as specified and selected by the Maintenance Surveyor, supply, lay or assemble in mortar, place and sit in soil base or concrete base (concrete base measured separately) :-

| Boulder size (m³) |                          |             |             |             |          |          |       |
|-------------------|--------------------------|-------------|-------------|-------------|----------|----------|-------|
| n.e. 0.25         | 0.25 - 0.50              | 0.50 - 0.75 | 0.75 - 1.00 | 1.00 - 3.00 |          |          |       |
| A                 | B                        | C           | D           | E           |          |          |       |
| \$                | \$                       | \$          | \$          | \$          |          |          |       |
| 22059             | Granite.....             | 264.00      | 799.00      | 1,023.00    | 1,220.00 | 2,818.00 | 22059 |
| 22060             | Great Lake rock.....     | 330.00      | 1,144.00    | 1,784.00    | 2,262.00 | 3,491.00 | 22060 |
| 22061             | Serpentine boulders..... | 291.00      | 959.00      | 1,448.00    | 1,865.00 | 3,041.00 | 22061 |
| 22062             | Ying rock.....           | 251.00      | 702.00      | 907.00      | 1,160.00 | 2,512.00 | 22062 |
| 22063             | Yellow soap stone.....   | 317.00      | 1,104.00    | 1,607.00    | 2,070.00 | 3,339.00 | 22063 |

**Each**

|       |                          |        |          |          |          |          |       |
|-------|--------------------------|--------|----------|----------|----------|----------|-------|
| 22059 | Granite.....             | 264.00 | 799.00   | 1,023.00 | 1,220.00 | 2,818.00 | 22059 |
| 22060 | Great Lake rock.....     | 330.00 | 1,144.00 | 1,784.00 | 2,262.00 | 3,491.00 | 22060 |
| 22061 | Serpentine boulders..... | 291.00 | 959.00   | 1,448.00 | 1,865.00 | 3,041.00 | 22061 |
| 22062 | Ying rock.....           | 251.00 | 702.00   | 907.00   | 1,160.00 | 2,512.00 | 22062 |
| 22063 | Yellow soap stone.....   | 317.00 | 1,104.00 | 1,607.00 | 2,070.00 | 3,339.00 | 22063 |

**Per cubic metre**

|       |   |        |       |
|-------|---|--------|-------|
| 22064 | Take down and clear away ornamental boulders in any sizes.....              | 306.50 | 22064 |
| 22065 | Take down and set aside for re-use ditto.....                               | 131.50 | 22065 |
| 22066 | Lay only in concrete or soil (concrete base measured separately) ditto..... | 220.10 | 22066 |

Item

Item

**PART IIIA - LANDSCAPE SOFTWORKS - SUPPLY ITEMS**

Supply the following plants : -

|   | Group A  | Group B  | Group C  | Group D  | Group E | Group F | Group G  |       |
|---|----------|----------|----------|----------|---------|---------|----------|-------|
| <i>Each</i>                                 | A        | B        | C        | D        | E       | F       | G        |       |
|   | \$       | \$       | \$       | \$       | \$      | \$      | \$       |       |
| 22067 Seedling tree.....                    | 14.00    | 20.00    | 29.00    | 14.00    | 26.00   | 32.00   | 20.00    | 22067 |
| 22068 Whip.....                             | 22.00    | 29.00    | 43.00    | 26.00    | 37.00   | 55.00   | 29.00    | 22068 |
| 22069 Light standard tree.....              | 86.00    | 144.00   | 216.00   | 115.00   | 202.00  | 249.00  | 144.00   | 22069 |
| 22070 Standard tree.....                    | 144.00   | 216.00   | 432.00   | 202.00   | 346.00  | 577.00  | 216.00   | 22070 |
| 22071 Heavy standard tree.....              | 432.00   | 721.00   | 1,729.00 | 577.00   | -       | -       | 721.00   | 22071 |
| 22072 Semi-mature tree n.e. 200 mm DBH..... | 3,603.00 | 4,324.00 | 7,206.00 | 4,035.00 | -       | -       | 4,324.00 | 22072 |

| <i>Each</i>  | A        |       |
|--|----------|-------|
|  | \$       |       |
| 22073 Add to Item 22072A for each addition of 50 mm or part thereof in DBH.....  | 987.00   | 22073 |
| 22074 Add to Item 22072B for each addition of 50 mm or part thereof in DBH.....  | 1,189.00 | 22074 |
| 22075 Add to Item 22072C for each addition of 50 mm or part thereof in DBH.....  | 2,162.00 | 22075 |
| 22076 Add to Item 22072D for each addition of 50 mm or part thereof in DBH.....  | 1,153.00 | 22076 |
| 22077 Add to Item 22072G for each addition of 50 mm or part thereof in DBH.....  | 1,189.00 | 22077 |
| 22078 Extra over either of Items 22067 to 22072 inclusive for tree in clipped form with overall height n.e. 1200 mm..... | 432.00   | 22078 |
| 22079 Ditto overall height 1200 -1500 mm.....  | 721.00   | 22079 |
| 22080 Ditto overall height 1500 -1800 mm.....  | 1,009.00 | 22080 |

|                           | Group A  | Group B  | Group C  | Group D  |       |
|---------------------------|----------|----------|----------|----------|-------|
| <i>Each</i>               | A        | B        | C        | D        |       |
|                           | \$       | \$       | \$       | \$       |       |
| 22081 Small conifers..... | 288.00   | 504.00   | 360.00   | 396.00   | 22081 |
| 22082 Large conifers..... | 1,153.00 | 1,729.00 | 1,441.00 | 1,657.00 | 22082 |

| Item  |   |          | Item     |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
|---|---|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|--------|----------|---|--------|
| <b>PART IIIA - LANDSCAPE SOFTWORKS - SUPPLY ITEMS (CONT'D)</b>  |   |          |          |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| Supply the following plants : - (Cont'd)  |   |          |          |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| <i>Each</i>   |   | A<br>\$  |          |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22083   | Add to Item 22082A for each additional 300 mm height or part thereof.....                                 | 144.00   | 22083    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22084   | Add to Item 22082B for each additional 300 mm height or part thereof.....                                 | 231.00   | 22084    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22085   | Add to Item 22082C for each additional 300 mm height or part thereof.....                                 | 187.00   | 22085    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22086   | Add to Item 22082D for each additional 300 mm height or part thereof.....                                 | 216.00   | 22086    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22087   | Extra over either of Items 22081 and 22082 for tree in clipped form with overall height n.e. 1200 mm..... | 432.00   | 22087    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22088   | Ditto overall height 1200 -1500 mm.....   | 721.00   | 22088    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22089   | Ditto overall height 1500 -1800 mm.....   | 1,009.00 | 22089    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Group A</th> <th>Group B</th> <th>Group C</th> <th>Group D</th> <th>Group E</th> <th>Group F</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A<br/>\$</td> <td style="text-align: center;">B<br/>\$</td> <td style="text-align: center;">C<br/>\$</td> <td style="text-align: center;">D<br/>\$</td> <td style="text-align: center;">E<br/>\$</td> <td style="text-align: center;">F<br/>\$</td> </tr> <tr> <td style="text-align: right;">432.00</td> <td style="text-align: right;">216.00</td> <td style="text-align: right;">144.00</td> <td style="text-align: right;">259.00</td> <td style="text-align: right;">115.00</td> <td style="text-align: right;">180.00</td> </tr> <tr> <td style="text-align: right;">721.00</td> <td style="text-align: right;">504.00</td> <td style="text-align: right;">288.00</td> <td style="text-align: right;">504.00</td> <td style="text-align: right;">259.00</td> <td style="text-align: right;">375.00</td> </tr> <tr> <td style="text-align: right;">2,162.00</td> <td style="text-align: right;">1,297.00</td> <td style="text-align: right;">721.00</td> <td style="text-align: right;">1,153.00</td> <td style="text-align: center;">-</td> <td style="text-align: right;">973.00</td> </tr> </tbody> </table> |   |          |          | Group A | Group B | Group C | Group D | Group E | Group F | A<br>\$ | B<br>\$ | C<br>\$ | D<br>\$ | E<br>\$ | F<br>\$ | 432.00 | 216.00 | 144.00 | 259.00 | 115.00 | 180.00 | 721.00 | 504.00 | 288.00 | 504.00 | 259.00 | 375.00 | 2,162.00 | 1,297.00 | 721.00 | 1,153.00 | - | 973.00 |
| Group A   | Group B   | Group C  | Group D  | Group E | Group F |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| A<br>\$   | B<br>\$   | C<br>\$  | D<br>\$  | E<br>\$ | F<br>\$ |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 432.00  | 216.00  | 144.00   | 259.00   | 115.00  | 180.00  |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 721.00  | 504.00  | 288.00   | 504.00   | 259.00  | 375.00  |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 2,162.00  | 1,297.00  | 721.00   | 1,153.00 | -       | 973.00  |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| <i>Each</i>   |   | A<br>\$  |          |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22090   | Small palms.....  | 432.00   | 22090    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22091   | Medium palms.....   | 721.00   | 22091    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22092   | Large palms.....  | 2,162.00 | 22092    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| <i>Each</i>   |   | A<br>\$  |          |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22093   | Add to Item 22092A for each additional 150 mm height or part thereof.....                                 | 288.00   | 22093    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22094   | Add to Item 22092B for each additional 300 mm height or part thereof.....                                 | 432.00   | 22094    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22095   | Add to Item 22092C for each additional 300 mm height or part thereof.....                                 | 216.00   | 22095    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22096   | Add to Item 22092D for each additional 500 mm height or part thereof.....                                 | 216.00   | 22096    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22097   | Add to Item 22092F for each additional 300 mm height or part thereof.....                                 | 288.00   | 22097    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22098   | Small shrubs, 150 - 300 mm high, 150 - 250 mm spread.....   | 12.00    | 22098    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22099   | Small shrubs, 300 - 450 mm high, 250 - 400 mm spread.....   | 17.00    | 22099    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |
| 22100   | Small shrubs, 450 - 600 mm high, 400 - 550 mm spread.....   | 18.00    | 22100    |         |         |         |         |         |         |         |         |         |         |         |         |        |        |        |        |        |        |        |        |        |        |        |        |          |          |        |          |   |        |



| Item   |  |        | Item  |
|--|--|--------|-------|
| <b>PART IIIA - LANDSCAPE SOFTWORKS - SUPPLY ITEMS (CONT'D)</b> |  |        |       |
| Supply the following plants : - (Cont'd)                       |  |        |       |
|  | <i>Each</i>  | A<br>S |       |
| 22101  | Large shrubs, 600 - 900 mm high, 550 - 750 mm spread.....                                    | 23.00  | 22101 |
| 22102  | Large shrubs, 900 - 1200 mm high, 750 - 1000 mm spread.....                                  | 72.00  | 22102 |
| 22103  | Large shrubs exc. 1200 mm high .....   | 144.00 | 22103 |
| 22104  | Extra over either of Items 22098 to 22100 inclusive for small shrubs in clipped form.....    | 68.00  | 22104 |
| 22105  | Extra over either of Items 22101 to 22103 inclusive for large shrubs in clipped form.....    | 170.00 | 22105 |
| 22106  | Herbaceous plants, 150 - 300 mm high, 100 - 200 mm spread.....                               | 14.00  | 22106 |
| 22107  | Herbaceous plants, 300 - 450 mm high, 200 - 400 mm spread.....                               | 15.00  | 22107 |
| 22108  | Herbaceous plants, 450 - 600 mm high, 400 - 600 mm spread.....                               | 17.00  | 22108 |
| 22109  | Ground cover plants (except Wedelia trilobata), 100 - 200 mm high, 100 - 200 mm spread ..... | 6.00   | 22109 |
| 22110  | Ground cover plants (except Wedelia trilobata), 200 - 300 mm high, 200 - 450 mm spread ..... | 9.00   | 22110 |
| 22111  | Ground cover plants (except Wedelia trilobata), 300 - 450 mm high, 450 - 700 mm spread ..... | 11.00  | 22111 |
| 22112  | Wedelia trilobata ground cover 100 - 200 mm high, 200 - 300 mm spread.....                   | 2.00   | 22112 |
| 22113  | Climbers of shoot length 600 - 1500 mm.....  | 17.00  | 22113 |
| 22114  | Climbers of shoot length 1500 - 2500 mm.....   | 35.00  | 22114 |
| 22115  | Bamboos 500 - 1200 mm.....   | 23.00  | 22115 |
| 22116  | Bamboos 1200 - 1500 mm.....  | 43.00  | 22116 |
| 22117  | Bamboos 1500 - 2100 mm.....  | 72.00  | 22117 |
| 22118  | Add to Item 22117 for each additional 600 mm height or part thereof.....                     | 68.00  | 22118 |
| 22119  | Aquatic plants, n.e. 450 mm high.....  | 14.00  | 22119 |
| 22120  | Aquatic plants, 450 - 600 mm high.....   | 22.00  | 22120 |
| 22121  | Aquatic plants, exc. 600 mm high.....  | 29.00  | 22121 |

| Item   |   |          |          |          |          |         |          | Item     |       |
|--|---|----------|----------|----------|----------|---------|----------|----------|-------|
| <b>PART IIIA - LANDSCAPE SOFTWORKS - SUPPLY ITEMS (CONT'D)</b>                         |   |          |          |          |          |         |          |          |       |
| Supply, place and remove (when instructed) the following acclimatized indoor plants :- |   |          |          |          |          |         |          |          |       |
|  |   | Group A  | Group B  | Group C  | Group D  | Group E | Group F  | Group G  |       |
|  |   | A        | B        | C        | D        | E       | F        | G        |       |
|  |   | \$       | \$       | \$       | \$       | \$      | \$       | \$       |       |
|  | <b>Each</b>   |          |          |          |          |         |          |          |       |
| 22122  | Standard tree.....  | 159.00   | 238.00   | 476.00   | 216.00   | 382.00  | 634.00   | 238.00   | 22122 |
| 22123  | Heavy standard tree.....  | 476.00   | 793.00   | 1,902.00 | 634.00   | -       | -        | 793.00   | 22123 |
| 22124  | Semi-mature tree.....   | 3,963.00 | 4,756.00 | 7,926.00 | 4,439.00 | -       | -        | 4,756.00 | 22124 |
| 22125  | Small conifer.....  | 317.00   | 555.00   | 396.00   | 432.00   | -       | -        | -        | 22125 |
| 22126  | Large conifer.....  | 1,268.00 | 1,902.00 | 1,585.00 | 1,744.00 | -       | -        | -        | 22126 |
| 22127  | Small palm.....   | 476.00   | 238.00   | 159.00   | 285.00   | 127.00  | 199.00   | -        | 22127 |
| 22128  | Medium palm.....  | 793.00   | 555.00   | 317.00   | 555.00   | 285.00  | 412.00   | -        | 22128 |
| 22129  | Large palm.....   | 2,378.00 | 1,427.00 | 793.00   | 1,268.00 | -       | 1,030.00 | -        | 22129 |
|  |   |          |          |          |          |         |          |          |       |
|  | <b>Each</b>   |          |          |          |          |         |          | A        |       |
|  |   |          |          |          |          |         |          | \$       |       |
| 22130  | Add to Item 22129A for each additional 150 mm height or part thereof.....   |          |          |          |          |         |          | 317.00   | 22130 |
| 22131  | Add to Item 22129B for each additional 300 mm height or part thereof.....   |          |          |          |          |         |          | 476.00   | 22131 |
| 22132  | Add to Item 22129C for each additional 300 mm height or part thereof.....   |          |          |          |          |         |          | 238.00   | 22132 |
| 22133  | Add to Item 22129D for each additional 500 mm height or part thereof.....   |          |          |          |          |         |          | 238.00   | 22133 |
| 22134  | Add to Item 22129F for each additional 300 mm height or part thereof.....   |          |          |          |          |         |          | 317.00   | 22134 |
| 22135  | Shrubs, climbers and herbaceous plants n.e. 600 mm high above ground level with minimum 200 mm diameter pot.....    |          |          |          |          |         |          | 50.00    | 22135 |
| 22136  | Shrubs, climbers and herbaceous plants 600 - 1200 mm high above ground level with minimum 300 mm diameter pot.....  |          |          |          |          |         |          | 231.00   | 22136 |
| 22137  | Shrubs, climbers and herbaceous plants 1200 - 1800 mm high above ground level with minimum 400 mm diameter pot..... |          |          |          |          |         |          | 749.00   | 22137 |
| 22138  | Shrubs, climbers and herbaceous plants exc. 1800 mm high above ground level with minimum 450 mm diameter pot.....   |          |          |          |          |         |          | 1,773.00 | 22138 |
|  |   |          |          |          |          |         |          |          |       |
|  | <b>Per cubic metre</b>  |          |          |          |          |         |          |          |       |
| 22139  | Supply, spread and mix in potting medium.....   |          |          |          |          |         |          | 14.30    | 22139 |
|  |   |          |          |          |          |         |          |          |       |
|  | <b>Each</b>   |          |          |          |          |         |          |          |       |
| 22140  | Supply and plant plants in clipped form of overall height n.e. 1200 mm.....   |          |          |          |          |         |          | 476.00   | 22140 |
| 22141  | Ditto - overall height 1200 - 1500 mm.....  |          |          |          |          |         |          | 793.00   | 22141 |
| 22142  | Ditto - overall height 1500 - 1800 mm.....  |          |          |          |          |         |          | 1,268.00 | 22142 |

| Item  |  |        | Item  |
|---|--|--------|-------|
| <b>PART III. B - LANDSCAPE SOFTWORKS - PLANTING ITEMS</b> |  |        |       |
|   | Plant the following plants :-  |        |       |
|   | <i>Each</i>  | A<br>S |       |
| 22143   | Plant seedling tree.....   | 5.00   | 22143 |
| 22144   | Collect seedling tree, whip and pot plant from the Government Nursery or other site and deliver to the Site.....   | 8.00   | 22144 |
| 22145   | Plant whip.....  | 7.00   | 22145 |
| 22146   | Plant light standard tree.....   | 34.00  | 22146 |
| 22147   | Plant standard tree.....   | 108.00 | 22147 |
| 22148   | Plant heavy standard tree.....   | 144.00 | 22148 |
| 22149   | Plant semi-mature tree n.e. 200 mm DBH.....  | 432.00 | 22149 |
| 22150   | Add to Item 22149 for each addition of 50 mm or part thereof in DBH.....   | 72.00  | 22150 |
| 22151   | Plant small conifer.....   | 36.00  | 22151 |
| 22152   | Plant large conifer.....   | 144.00 | 22152 |
| 22153   | Add to Item 22152 for each additional 600 mm height or part thereof.....   | 72.00  | 22153 |
| 22154   | Plant small palm.....  | 29.00  | 22154 |
| 22155   | Plant medium palm.....   | 50.00  | 22155 |
| 22156   | Plant large palm.....  | 144.00 | 22156 |
| 22157   | Add to Item 22156 for each additional 1000 mm height or part thereof.....  | 72.00  | 22157 |
|   | <i>Per cubic metre</i>   |        |       |
| 22158   | Supply decomposed granite sub-soil filling materials, wheel, spread, level and compact in layers 75 mm thick to flat areas and slopes or filled into flower bed or flower boxes, including trimming and beating surface and forming mitres and curves..... | 202.20 | 22158 |
| 22159   | Supply fabricated soil mix ditto.....  | 263.30 | 22159 |
| 22160   | Supply top soil ditto.....   | 355.40 | 22160 |
| 22161   | Supply lightweight soil filling materials, wheel, spread, level and compact in layers 75 mm thick to flat areas and slopes or filled into flower bed or flower boxes, including trimming and beating surface and forming mitres and curves.....            | 771.50 | 22161 |
|   | <i>Each</i>  |        |       |
| 22162   | Plant small shrub.....   | 4.00   | 22162 |
| 22163   | Plant large shrub.....   | 6.00   | 22163 |
| 22164   | Plant herbaceous plant.....  | 4.00   | 22164 |
| 22165   | Plant ground cover plant.....  | 3.00   | 22165 |

| Item  |   |          | Item  |
|---|---|----------|-------|
| <b>PART III.B - LANDSCAPE SOFTWORKS - PLANTING ITEMS (CONT'D)</b>   |   |          |       |
|   | Plant the following plants : - (Cont'd)   |          |       |
|   | <i>Each</i>   | A<br>\$  |       |
| 22166   | Plant climber with shortest shoot 600 - 1500 mm length.....   | 6.00     | 22166 |
| 22167   | Plant climber with shortest shoot 1500 - 2500 mm length.....  | 12.00    | 22167 |
| 22168   | Plant bamboo of height n.e. 1200 mm .....   | 7.00     | 22168 |
| 22169   | Plant bamboo of height 1200 - 2100 mm.....  | 14.00    | 22169 |
| 22170   | Add to Item 22169 for each additional 600 mm height or part thereof.....  | 7.00     | 22170 |
| 22171   | Plant aquatic plant.....  | 7.00     | 22171 |
| Supply the following pots or containers and remove from the Site when instructed by the Maintenance Surveyor<br>(supply of plants is measured separately) : - |   |          |       |
|   | <i>Each</i>   |          |       |
| 22172   | Plastic pot 250 - 300 mm diameter.....  | 14.00    | 22172 |
| 22173   | Plastic pot 300 - 900 mm diameter.....  | 29.00    | 22173 |
| 22174   | Glazed ceramic pot 400 - 450 mm diameter.....   | 115.00   | 22174 |
| 22175   | Glazed ceramic pot 450 - 550 mm diameter.....   | 144.00   | 22175 |
| 22176   | Glazed ceramic pot 550 - 1000 mm diameter.....  | 216.00   | 22176 |
| 22177   | Unglazed pot in variety of shapes and colours with perimeter of inner rim n.e. 2000 mm.....   | 57.00    | 22177 |
| 22178   | Unglazed pot in variety of shapes and colours with perimeter of inner rim 2000 - 4000 mm.....   | 283.00   | 22178 |
| 22179   | Unglazed pot in variety of shapes and colours with perimeter of inner rim 4000 - 6000 mm.....   | 678.00   | 22179 |
| 22180   | Unglazed pot in variety of shapes and colours with perimeter of inner rim 6000 - 8000 mm.....   | 1,130.00 | 22180 |
| 22181   | Polished, coloured fibre-glass pot in variety of shapes and colours with perimeter of inner rim n.e. 2000 mm.....   | 452.00   | 22181 |
| 22182   | Polished, coloured fibre-glass pot in variety of shapes and colours with perimeter of inner rim 2000 - 4000 mm.....   | 1,695.00 | 22182 |
| 22183   | Polished, coloured fibre-glass pot in variety of shapes and colours with perimeter of inner rim 4000 - 6000 mm.....   | 3,390.00 | 22183 |
| 22184   | Polished, coloured fibre-glass pot in variety of shapes and colours with perimeter of inner rim 6000 - 8000 mm.....   | 5,085.00 | 22184 |
| 22185   | Coloured fibre-glass pots in 'granolithic' finish in variety of shapes with drain holes; bottom recessed for stand; concealed lifting eyebolts and colours with inner rim n.e. 2000 mm.....   | 678.00   | 22185 |
| 22186   | Coloured fibre-glass pots in 'granolithic' finish in variety of shapes with drain holes; bottom recessed for stand; concealed lifting eyebolts and colours with inner rim 2000 - 4000 mm..... | 2,260.00 | 22186 |
| 22187   | Coloured fibre-glass pots in 'granolithic' finish in variety of shapes with drain holes; bottom recessed for stand; concealed lifting eyebolts and colours with inner rim 4000 - 6000 mm..... | 3,955.00 | 22187 |
| 22188   | Coloured fibre-glass pots in 'granolithic' finish in variety of shapes with drain holes; bottom recessed for stand; concealed lifting eyebolts and colours with inner rim 6000 - 8000 mm..... | 6,780.00 | 22188 |

| Item  | A<br>S   | Item  |
|---|----------|-------|
| <b>PART III.B - LANDSCAPE SOFTWORKS - PLANTING ITEMS (CONT'D)</b>   |          |       |
| Supply the following pots or containers and remove from the Site when instructed by the Maintenance Surveyor<br>(supply of plants is measured separately) : - (Cont'd)                                |          |       |
| <i>Each</i>   |          |       |
| 22189   | 848.00   | 22189 |
| Coloured fibre-glass pots in decorative molding finish in variety of shapes with drain holes; bottom recessed for stand;<br>concealed lifting eyebolts and colours with inner rim n.e. 2000 mm.....   |          |       |
| 22190   | 2,543.00 | 22190 |
| Coloured fibre-glass pots in decorative molding finish in variety of shapes with drain holes; bottom recessed for stand;<br>concealed lifting eyebolts and colours with inner rim 2000 - 4000 mm..... |          |       |
| 22191   | 4,520.00 | 22191 |
| Coloured fibre-glass pots in decorative molding finish in variety of shapes with drain holes; bottom recessed for stand;<br>concealed lifting eyebolts and colours with inner rim 4000 - 6000 mm..... |          |       |
| 22192   | 7,345.00 | 22192 |
| Coloured fibre-glass pots in decorative molding finish in variety of shapes with drain holes; bottom recessed for stand;<br>concealed lifting eyebolts and colours with inner rim 6000 - 8000 mm..... |          |       |
| 22193   | 678.00   | 22193 |
| Natural granite pots in variety of shapes, finishes and colours with stands and inner rim n.e. 2000 mm.....   |          |       |
| 22194   | 2,260.00 | 22194 |
| Natural granite pots in variety of shapes, finishes and colours with stands and inner rim 2000 - 4000 mm.....   |          |       |
| 22195   | 3,955.00 | 22195 |
| Natural granite pots in variety of shapes, finishes and colours with stands and inner rim 4000 - 6000 mm.....   |          |       |
| 22196   | 6,780.00 | 22196 |
| Natural granite pots in variety of shapes, finishes and colours with stands and inner rim 6000 - 8000 mm.....   |          |       |
| 22197   | 848.00   | 22197 |
| Concrete pots in variety of shapes with perimeter of inner rim n.e. 2000 mm.....  |          |       |
| 22198   | 1,695.00 | 22198 |
| Concrete pots in variety of shapes with perimeter of inner rim 2000 - 4000 mm.....  |          |       |
| 22199   | 2,825.00 | 22199 |
| Concrete pots in variety of shapes with perimeter of inner rim 4000 - 6000 mm.....  |          |       |
| 22200   | 6,780.00 | 22200 |
| Concrete pots in variety of shapes with perimeter of inner rim 6000 - 8000 mm.....  |          |       |
| 22201   | 1,130.00 | 22201 |
| Stainless steel plant containers in variety of shapes with perimeter of inner rim n.e. 2000 mm.....   |          |       |
| 22202   | 2,260.00 | 22202 |
| Stainless steel plant containers in variety of shapes with perimeter of inner rim 2000 - 4000 mm.....   |          |       |
| 22203   | 3,955.00 | 22203 |
| Stainless steel plant containers in variety of shapes with perimeter of inner rim 4000 - 6000 mm.....   |          |       |
| 22204   | 8,475.00 | 22204 |
| Stainless steel plant containers in variety of shapes with perimeter of inner rim 6000 - 8000 mm.....   |          |       |
| 22205   | 29.00    | 22205 |
| Supply and place ornamental plants other than Orchidaceae family 150-300 mm high, 150-300 mm spread<br>including appropriately sized pot with tray.....   |          |       |
| 22206   | 43.00    | 22206 |
| Supply and place ornamental plants other than Orchidaceae family 300-450 mm high, 300-400 mm spread<br>including appropriately sized pot with tray.....   |          |       |
| 22207   | 72.00    | 22207 |
| Supply and place ornamental plants other than Orchidaceae family 450-600 mm high, 400-550 mm spread<br>including appropriately sized pot with trays.....  |          |       |
| 22208   | 101.00   | 22208 |
| Supply and place ornamental plants other than Orchidaceae family 600-900 mm high, 550-750 mm spread<br>including appropriately sized pot with trays.....  |          |       |
| 22209   | 115.00   | 22209 |
| Supply and place ornamental plants from the Orchidaceae family with appropriately sized pot with tray.....  |          |       |

Item

Item

**PART IILB - LANDSCAPE SOFTWORKS - PLANTING ITEMS (CONT'D)**

Supply and fix in position artificial plants as described and specified including appropriate sized pots with trays :-

|       |            | Height       |                 |                  |                  |       |
|-------|------------|--------------|-----------------|------------------|------------------|-------|
|       |            | N.e<br>900mm | 900 -<br>1200mm | 1200 -<br>1500mm | 1500 -<br>1800mm |       |
|       |            | A<br>\$      | B<br>\$         | C<br>\$          | D<br>\$          |       |
| 22210 | Trees..... | 288.00       | 721.00          | 996.00           | 2,599.00         | 22210 |

|       |  | A<br>\$ |        |
|-------|--|---------|--------|
| 22211 | Add to Item 22210D for each additional 1000 mm height or part thereof..... |         | 565.00 |

|       |             | Height       |                |                |                 |       |
|-------|-------------|--------------|----------------|----------------|-----------------|-------|
|       |             | N.e<br>300mm | 300 -<br>600mm | 600 -<br>900mm | 900 -<br>1200mm |       |
|       |             | A<br>\$      | B<br>\$        | C<br>\$        | D<br>\$         |       |
| 22212 | Shrubs..... | 144.00       | 216.00         | 288.00         | 432.00          | 22212 |

|       |            | Height        |                  |                  |                  |                  |       |
|-------|------------|---------------|------------------|------------------|------------------|------------------|-------|
|       |            | N.e<br>1000mm | 1000 -<br>1500mm | 1500 -<br>2000mm | 2000 -<br>3000mm | 3000 -<br>4000mm |       |
|       |            | A<br>\$       | B<br>\$          | C<br>\$          | D<br>\$          | E<br>\$          |       |
| 22213 | Palms..... | 432.00        | 577.00           | 865.00           | 1,153.00         | 1,441.00         | 22213 |

|       |  | A<br>\$ |        |
|-------|--|---------|--------|
| 22214 | Add to Item 22213E for each additional 1000 mm height or part thereof..... |         | 288.00 |

|       |             | Height          |                  |                  |        |       |
|-------|-------------|-----------------|------------------|------------------|--------|-------|
|       |             | 500 -<br>1200mm | 1200 -<br>1500mm | 1500 -<br>2100mm |        |       |
|       |             | A<br>\$         | B<br>\$          | C<br>\$          |        |       |
| 22215 | Bamboo..... |                 | 360.00           | 432.00           | 577.00 | 22215 |

|       |  | A<br>\$ |        |
|-------|--|---------|--------|
| 22216 | Add to Item 22215C for each additional of 600 mm height or part thereof..... |         | 288.00 |

Item

Item

**PART IILB - LANDSCAPE SOFTWORKS - PLANTING ITEMS (CONT'D)**

Supply and fix in position artificial plants as described and specified including appropriate sized pots with trays :- (Cont'd)

|       |               | Height        |                  |                  |                  |                  |       |
|-------|---------------|---------------|------------------|------------------|------------------|------------------|-------|
|       |               | N.e<br>1200mm | 1200 -<br>1500mm | 1500 -<br>2100mm | 2100 -<br>2700mm | 2700 -<br>3600mm |       |
|       |               | A             | B                | C                | D                | E                |       |
|       |               | \$            | \$               | \$               | \$               | \$               |       |
| 22217 | Conifers..... | 432.00        | 577.00           | 865.00           | 1,153.00         | 1,441.00         | 22217 |

*Each*

*Each*

|       |   |  |  |  |  |                   |       |
|-------|---|--|--|--|--|-------------------|-------|
| 22218 | Add to Item 22217E for each additional 500 mm height or part thereof..... |  |  |  |  | A<br>\$<br>288.00 | 22218 |
|-------|---|--|--|--|--|-------------------|-------|

*Each*

|       |                    | Height         |              | Spread         |                |       |
|-------|--------------------|----------------|--------------|----------------|----------------|-------|
|       |                    | 200 -<br>300mm | 300 -<br>450 | 200 -<br>450mm | 450 -<br>700mm |       |
|       |                    | A              | B            | A              | B              |       |
|       |                    | \$             | \$           | \$             | \$             |       |
| 22219 | Ground covers..... |                |              | 43.00          | 72.00          | 22219 |

*Each*

|       |               | Shoot Length |                |                 |                  |       |
|-------|---------------|--------------|----------------|-----------------|------------------|-------|
|       |               | N.e<br>600mm | 600 -<br>900mm | 900 -<br>1200mm | 1200 -<br>1800mm |       |
|       |               | A            | B              | C               | D                |       |
|       |               | \$           | \$             | \$              | \$               |       |
| 22220 | Climbers..... | 43.00        | 58.00          | 72.00           | 101.00           | 22220 |

*Per square metre*

|       |                        |  |  |  |  |                   |       |
|-------|------------------------|--|--|--|--|-------------------|-------|
| 22221 | Turf (decorative)..... |  |  |  |  | A<br>\$<br>720.60 | 22221 |
|-------|------------------------|--|--|--|--|-------------------|-------|

| Item  |   |                          |                           | Item  |
|---|---|--------------------------|---------------------------|-------|
| <b>PART III.C - TURFING AND GRASSING</b>  |   |                          |                           |       |
| Hydro-mulching on sprayed concrete or other non-soil surface with slope gradient of not more than 70 degrees, all in strict accordance with manufacturer's instructions : -   |   |                          |                           |       |
| <i>Per square metre</i>   |   | A<br>\$                  |                           |       |
| 22222   | Hydro-mulching on spray-concrete or other non-soil surface.....                           | 1,261.70                 |                           | 22222 |
| 22223   | Broadcast seed.....   | 11.60                    |                           | 22223 |
| 22224   | Supply and lay grass sprigs (grass species excluding Cynodon dactylon 'Tifway T419')..... | 28.20                    |                           | 22224 |
| 22225   | Supply and lay grass sprigs of species Cynodon dactylon 'Tifway T419'.....                | 36.50                    |                           | 22225 |
| 22226   | Supply and lay turf (grass species excluding Cynodon dactylon 'Tifway T419').....         | 50.50                    |                           | 22226 |
| 22227   | Supply and lay Cynodon dactylon 'Tifway T419' species turf .....                          | 57.60                    |                           | 22227 |
| 22228   | Lay only turfs on flat or slopes areas.....   | 22.20                    |                           | 22228 |
| 22229   | Spray hydroseeding to surfaces of slope n.e. 30 degree from horizontal.....               | 33.90                    |                           | 22229 |
| 22230   | Ditto exceeding 30 degree from horizontal .....   | 37.50                    |                           | 22230 |
| <b>PART III.D - TRANSPLANTING</b>   |   |                          |                           |       |
| Transplant the following plants obtained from an existing or a designated location to any distance from or to Site including all necessary excavation, backfilling, pruning, removing surplus excavated material from Site, loading, transporting, unloading, tree surgery work, cultivating, planting firming, staking, protecting and watering as required for new works by the Specification and as directed by the Maintenance Surveyor : - |   |                          |                           |       |
| <i>Each</i>   |   | A<br>\$                  |                           |       |
| 22231   | Groundcovers, herbaceous, climbers, small shrubs or any height and spread.....            | 14.00                    |                           | 22231 |
| 22232   | Large shrubs of any height and spread / bamboos n.e. 1200 mm height.....                  | 29.00                    |                           | 22232 |
| 22233   | Bamboos exc. 1200 mm height.....  | 49.00                    |                           | 22233 |
| <i>Each</i>   |   | A<br>\$                  | B<br>\$                   |       |
|   |   | Location within the Site | Location outside the Site |       |
| 22234   | Transplant trees/palms/conifers smaller than 150 mm DBH.....                              | 1,080.00                 | 1,606.00                  | 22234 |
| 22235   | Ditto 150 - 450 mm DBH.....   | 2,122.00                 | 3,156.00                  | 22235 |
| 22236   | Ditto 450 - 900 mm DBH.....   | 4,266.00                 | 5,409.00                  | 22236 |
| 22237   | Ditto 900 - 1350 mm DBH.....  | 5,638.00                 | 9,447.00                  | 22237 |
| 22238   | Ditto 1350 - 1800 mm DBH.....   | 19,154.00                | 30,473.00                 | 22238 |
| 22239   | Ditto 1800 - 2250 mm DBH.....   | 37,547.00                | 54,688.00                 | 22239 |



| Item              |  |  | Item        |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------|--|--|-------------|-------------------|-------------|-------------|---------------|------------|---|----|----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                   | <b>PART III.D - TRANSPLANTING (CONT'D)</b>   | <table border="1" style="float: right; margin-left: auto;"> <tr><th colspan="2">Slope Inclination</th></tr> <tr><th>30°- 45°</th><th>exceeding 45°</th></tr> <tr><th>A</th><th>B</th></tr> <tr><th>\$</th><th>\$</th></tr> </table>  |             | Slope Inclination |             | 30°- 45°    | exceeding 45° | A          | B | \$ | \$       |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Slope Inclination |  |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 30°- 45°          | exceeding 45°  |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A                 | B  |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$                | \$   |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22240             | <p><i>Each</i></p> <p>Extra over either of Items 22234 to 22239 inclusive for transplanting on slope inclination.....</p>  | 721.00   | 1,441.00    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   | <p>Temporary storage at the Contractor's holding nursery of the following plants obtained from an existing or a designated location of any distance to the nursery : -</p>   |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   | <i>Number per month</i>  |  | A           |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22241             | Bamboos, shrubs, ground covers, herbaceous, climbers / small palms and conifers / standard trees or below.....   |  | \$ 14.00    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22242             | Large palms and conifer / heavy standard trees.....  |  | 108.00      |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22243             | Semi mature trees or above.....  |  | 144.00      |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   | <p>Root prune the following plants at the existing location ready for uplift, including all necessary excavation, backfilling, pruning, removing surplus excavated material from Site, staking, protecting and watering as required for new works by the Specification and as directed by the Maintenance Surveyor : -</p> |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><th colspan="9">Stem Diameter</th></tr> <tr><th>0 - 50mm</th><th>50 - 100mm</th><th>100 - 200mm</th><th>200 - 350mm</th><th>350 - 500mm</th><th>500 - 600mm</th><th>600 - 700mm</th><th>700 - 800mm</th><th>exc. 800mm</th></tr> <tr><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th><th>H</th><th>I</th></tr> <tr><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th></tr> </table> |             | Stem Diameter     |             |             |               |            |   |    |          |            | 0 - 50mm    | 50 - 100mm  | 100 - 200mm | 200 - 350mm | 350 - 500mm | 500 - 600mm | 600 - 700mm | 700 - 800mm | exc. 800mm | A | B | C | D  | E  | F  | G  | H  | I  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| Stem Diameter     |  |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0 - 50mm          | 50 - 100mm   | 100 - 200mm  | 200 - 350mm | 350 - 500mm       | 500 - 600mm | 600 - 700mm | 700 - 800mm   | exc. 800mm |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A                 | B  | C  | D           | E                 | F           | G           | H             | I          |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$                | \$   | \$   | \$          | \$                | \$          | \$          | \$            | \$         |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22244             | Root prune trees / palms / conifers.....   | 22.00  | 72.00       |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 144.00   | 432.00      |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 565.00   | 791.00      |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 1,130.00   | 2,306.00    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 3,635.00   |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   | <b>PART III.E - TREE FELLING AND PRUNING / SURGERY WORKS</b>   |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><th colspan="7">DBH</th></tr> <tr><th>0 - 95mm</th><th>95 - 150mm</th><th>150 - 300mm</th><th>300 - 450mm</th><th>450 - 600mm</th><th>600 - 750mm</th><th>exc. 750mm</th></tr> <tr><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th></tr> <tr><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th>\$</th></tr> </table>   |             | DBH               |             |             |               |            |   |    | 0 - 95mm | 95 - 150mm | 150 - 300mm | 300 - 450mm | 450 - 600mm | 600 - 750mm | exc. 750mm  | A           | B           | C           | D          | E | F | G | \$ | \$ | \$ | \$ | \$ | \$ | \$ |    |    |    |    |    |    |    |    |
| DBH               |  |  |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0 - 95mm          | 95 - 150mm   | 150 - 300mm  | 300 - 450mm | 450 - 600mm       | 600 - 750mm | exc. 750mm  |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| A                 | B  | C  | D           | E                 | F           | G           |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| \$                | \$   | \$   | \$          | \$                | \$          | \$          |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22245             | <p><i>Each</i></p> <p>Fell tree including grubbing up of roots and stumps and filling in voids with approved material, if required, clearing away all arisings, and making good all disturbed ground surfaces.....</p>   | 226.00   | 565.00      |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 1,695.00   | 2,345.00    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 3,842.00   | 5,831.00    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   |  | 7,820.00   |             |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                   | <i>Per square metre</i>  |  | A           |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22246             | Prune climbers and groundcovers.....   |  | \$ 11.60    |                   |             |             |               |            |   |    |          |            |             |             |             |             |             |             |             |             |            |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |



Item

Item

**PART IV - ESTABLISHMENT WORKS**

(Note : The following Items 22260 to 22275 inclusive will only be paid for, if ordered by the Maintenance Surveyor in writing.)

*Square metre per month*

A  
\$

22260 Basic monthly establishment operations for climbers and groundcovers..... 2.90 22260

22261 Basic monthly establishment operations for grass area..... 4.40 22261

*Number per month*

22262 Basic monthly establishment operations for semi-mature trees of above..... 10.90 22262

22263 Basic monthly establishment operations for heavy standard trees, large palms and large conifers..... 8.70 22263

22264 Basic monthly establishment operations for standard trees, medium palms and small conifers..... 5.80 22264

22265 Basic monthly establishment operations for light standard trees and small palms..... 3.60 22265

22266 Basic monthly establishment operations for whip trees / seedling trees / shrubs / bamboos / herbaceous plants..... 0.50 22266

22267 Basic monthly establishment operations for aquatic plants..... 0.60 22267

22268 Basic monthly establishment operations for indoor semi-mature trees or above..... 5.80 22268

22269 Basic monthly establishment operations for indoor heavy standard trees, large palms and large conifers..... 5.80 22269

22270 Basic monthly establishment operations for indoor standard trees, medium palms and small conifers..... 5.80 22270

22271 Basic monthly establishment operations for indoor potted light standard trees, small palms and bamboos..... 1.20 22271

22272 Basic monthly establishment operations for indoor potted shrubs and herbaceous plants..... 1.00 22272

22273 Basic monthly establishment operations for ornamental plants other than Orchidaceae family..... 2.90 22273

22274 Basic monthly establishment operations for ornamental plants from the Orchidaceae family..... 2.90 22274

| DBH       |             |             |              |               |               |
|-----------|-------------|-------------|--------------|---------------|---------------|
| 0 - 150mm | 150 - 450mm | 450 - 900mm | 900 - 1350mm | 1350 - 1800mm | 1800 - 2250mm |
| A         | B           | C           | D            | E             | F             |
| \$        | \$          | \$          | \$           | \$            | \$            |
| 309.00    | 906.00      | 1,466.00    | 1,678.00     | 3,009.00      | 3,182.00      |

*Each*

22275 Basic monthly establishment operations for transplanted trees / palms / conifers..... 309.00 906.00 1,466.00 1,678.00 3,009.00 3,182.00 22275

| Item  |  |         | Item  |
|---|--|---------|-------|
| <b>PART IV - ESTABLISHMENT WORKS (CONT'D)</b> |  |         |       |
|   | <i>Per square metre</i>  | A<br>\$ |       |
| 22276   | Weed planted area, free of weed.....   | 5.40    | 22276 |
| 22277   | Water turf and ground cover plants.....  | 4.30    | 22277 |
| 22278   | Apply fertilizer at 40g per m <sup>2</sup> to grass, ground cover plants and herbaceous plants.....                    | 3.70    | 22278 |
| 22279   | Extra over Item 22278 for the use of approved organic fertilizer.....  | 5.00    | 22279 |
| 22280   | Forking over.....  | 3.50    | 22280 |
| 22281   | Apply pesticide or fungicide to ground covers / grassed area.....  | 5.00    | 22281 |
| 22282   | Grass cutting.....   | 3.80    | 22282 |
| 22283   | Top-dressing.....  | 30.10   | 22283 |
| 22284   | Aeration of turf area.....   | 9.60    | 22284 |
| 22285   | Rolling of turf area.....  | 10.40   | 22285 |
|   | <i>Per number</i>  |         |       |
| 22286   | Firm up semi-mature and heavy standard trees, large palms and large conifers.....                                      | 289.00  | 22286 |
| 22287   | Firm up standard and light standard trees, medium and small palms and small conifers.....                              | 91.00   | 22287 |
| 22288   | Firm up whips, seedling, bamboos, shrubs, ground cover plants, herbaceous plants and climbers.....                     | 6.00    | 22288 |
| 22289   | Water light standard and standard trees, conifers and palms.....   | 5.00    | 22289 |
| 22290   | Water heavy standard and semi-mature trees or above.....   | 6.00    | 22290 |
| 22291   | Water bamboos, seedlings, whips, climbers, shrubs and herbaceous plants.....   | 2.00    | 22291 |
| 22292   | Water indoor potted trees, bamboos, and palms.....   | 1.50    | 22292 |
| 22293   | Water indoor potted shrubs and herbaceous plants.....  | 1.30    | 22293 |
| 22294   | Apply fertilizer at 75g per plant to seedling trees, whips, small palms and conifers, shrubs, bamboo and climbers..... | 4.00    | 22294 |
| 22295   | Apply fertilizer at 125g per plant to standard trees, medium size palms.....   | 7.00    | 22295 |
| 22296   | Apply fertilizer at 200g per plant to heavy standard trees, large palms and large conifers or above.....               | 9.00    | 22296 |
| 22297   | Apply fertilizer at 250g per plant to semi-mature trees or above.....  | 11.00   | 22297 |
| 22298   | Extra over either of Items 22294 and 22295 for the use of approved organic fertilizer.....                             | 15.00   | 22298 |
| 22299   | Extra over either of Items 22296 and 22297 for the use of approved organic fertilizer.....                             | 15.00   | 22299 |
| 22300   | Apply pesticide or fungicide to seedling trees, whips, bamboos, shrubs, herbaceous plants or climbers.....             | 11.00   | 22300 |
| 22301   | Apply pesticide or fungicide to light standard, standard trees, small conifers, small & medium palms.....              | 23.00   | 22301 |
| 22302   | Apply pesticide or fungicide to heavy standard and semi-mature trees, large conifers and palms, and above.....         | 34.00   | 22302 |

| Item  |   |          | Item  |
|---|---|----------|-------|
| <b>PART IV - ESTABLISHMENT WORKS (CONT'D)</b> |   |          |       |
|   | <i>Per set</i>  | A<br>\$  |       |
| 22303   | Supply and install staking system, with one bamboo stake.....                                 | 23.10    | 22303 |
| 22304   | Supply and install staking system, with three bamboo stakes.....                              | 75.20    | 22304 |
| 22305   | Supply and install staking system, with two metal stakes and single tie per stake.....        | 170.00   | 22305 |
| 22306   | Supply and install staking system, with two metal stakes and two ties per stake.....          | 226.00   | 22306 |
| 22307   | Supply and install staking system, with three metal stakes and single tie per stake.....      | 274.00   | 22307 |
| 22308   | Supply and install guying system, with three guy wires.....                                   | 339.00   | 22308 |
| 22309   | Extra over Item 22308 for semi-mature trees, extra large palms, and extra large conifers..... | 116.00   | 22309 |
| 22310   | Adjust tree guys and guy stakes.....  | 73.30    | 22310 |
| 22311   | Adjust tree stakes and ties.....  | 42.50    | 22311 |
| 22312   | Remove tree stakes and ties.....  | 44.30    | 22312 |
| 22313   | Remove tree guys and guy stakes.....  | 69.40    | 22313 |
| <b>PART V - SUNDRIES</b>                      |   |          |       |
|   | Plant identification : -  |          |       |
|   | <i>Number Per Works Order</i>   | A<br>\$  |       |
| 22314   | Collect, handle and transport plant specimen(s) to AFCD for identification.....               | 1,370.00 | 22314 |

**Section 23**

**GEOTECHNICAL WORKS**

## SECTION 23

### GEOTECHNICAL WORKS

#### SPECIAL CONDITIONS

**Measurement  
generally**

**SC23.01**

Inspection scaffolding shall be measured the area of the face to be covered by the scaffolding and no allowance shall be made for surface irregularities or other local peculiarities.

The rates for inspection scaffolding will only be paid for, if : -

- (a) No other works will be executed by the Contractor and it is ordered in writing by the Maintenance Surveyor; and
- (b) The scaffolding will be taken down and cleared away after the use for inspection or uses by other Government departments or other contractor employed by the Government.

Preliminary stripping to existing slopes shall be measured the surface area of the area or face cleared and no allowance shall be made for surface irregularities or other local peculiarities.

Rock scaling shall be measured the surface area of the face to be scaled and no allowance shall be made for surface irregularities or other local peculiarities.

Mesh protection to rock slopes shall be measured the surface area of the face to be protected and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for openings each not exceeding 1.00 m<sup>2</sup>.

All geotechnical works items other than those items specifically included in this Section shall be measured and paid for at the appropriate rates under applicable Work Sections in this Schedule.

For avoidance of doubt, all rates in this Section and other appropriate rates under applicable Works Sections measured in relation to all geotechnical works shall deem to apply to works executed by the Approved Suppliers of Material and Specialist Contractors for Public Works : Landslip Preventive/Remedial Works to Slopes/Retaining Walls.

**Measurement  
of mats for  
erosion control**

**SC23.02**

Mats for erosion control shall be measured net to the area fixed or laid. No deduction shall be made for an area not exceeding 1.00 m<sup>2</sup>.

**Measurement  
of surface  
protection**

**SC23.03**

Different types of surface protection shall be measured as the surface area of the face to be covered and no allowance shall be made for surface irregularities or other local peculiarities. No deduction shall be made for an area not exceeding 1.00 m<sup>2</sup>.

### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Measurement of topographic survey</b> | <b>SC23.04</b> | <p>Measurement of topographic survey shall be the plan area within the boundary as directed by the Maintenance Surveyor inclusive of all terrains and irregularities, etc. and measured flat. Measurement shall either be taken at the date of commencement or at the completion or both.</p> <p>The rate for topographic survey will only be paid for if order in writing by the Maintenance Surveyor.</p>   |
| <b>Rates generally</b>                   | <b>SC23.05</b> | <p>The rates for all items shall generally include for : -</p> <ul style="list-style-type: none"> <li>(a) Conveying, lowering, hoisting and placing in any position at any height on slopes.</li> <li>(b) All multi-handling between excavation and final position.</li> <li>(c) All multi-handling between temporary deposition in spoil heaps and removal from site.</li> <li>(d) All scaffolding and temporary works.</li> <li>(e) Submission of survey records before and upon the completion of the geotechnical works.</li> </ul> |

#### PART I - EARTHWORK ON EXISTING SLOPES

|  |                |  |
|--|----------------|--|
| <b>Rates for excavation on existing slopes</b> | <b>SC23.06</b> | <p>The rates for excavation on existing slopes shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Mobilization, maintenance and demobilization of excavator, roller, compaction plant, moving plant and the like.</li> <li>(b) Allowance for increase in bulk of all materials arising from excavation.</li> <li>(c) Excavating in any type of ground including earth, clay, sand, gravel, loose boulders each not exceeding 0.20 m<sup>3</sup>, any hard surface and the like.</li> <li>(d) Setting out the work and all profiles, rods, etc. and work straight or circular on plan.</li> <li>(e) Excavating to form buttress.</li> <li>(f) Cutting down shrubs, under-growths, etc. including trees not exceeding 150 mm girth, grubbing up roots and clearing away.</li> <li>(g) Removing old drains, channels, stepped channels, catch pits, etc. and sealing off connections.</li> <li>(h) Provision of temporary drainage to the area affected and clearing away after completion.</li> <li>(i) Getting out excavated materials by any means necessary and deposit excavated material in heaps.</li> <li>(j) Cutting and trimming banks and slopes.</li> </ul> |
|--|----------------|--|



### SPECIAL CONDITIONS

#### PART I - EARTHWORK ON EXISTING SLOPES

**Rates for excavation on existing slopes (Cont'd)**

**SC23.06 (Cont'd)**

- (k) Protecting the exposed surfaces of excavation by any necessary means.
- (l) Preparation and submission of survey record when ordered by the Maintenance Surveyor.
- (m) Depositing in temporary spoil heaps.

**Rates for earth filling to existing slopes**

**SC23.07**

The rates for earth filling to existing slopes shall further include for : -

- (a) Additional bulk of filling required to allow for compaction.
- (b) Forming and trimming banks and slopes and compaction.
- (c) Temporary retaining boards to edges and slopes.
- (d) Removing, replacing or making good placed or compacted filling material as required where filling material subsequently becomes damaged or unsuitable.
- (e) Protecting the exposed surfaces of filling by any necessary means.
- (f) All soil tests including in-situ density tests, maximum dry density tests and etc. as required.

**Rates for soil-cement filling**

**SC23.08**

The rates for soil-cement filling shall further include for : -

- (a) Preliminary mix trials.
- (b) Preliminary trial panels.
- (c) Preparation of surface to be filled.
- (d) Compacting and finishing surfaces.
- (e) Recording and submitting records.

#### PART II - SLOPE TREATMENTS

**Drawings**

**SC23.09**

The drawings as referred to in this Schedule and listed in Annex 'A' - Drawing Schedule and Drawings for Builder's Works of the Schedule can be viewed on the internet websites via the pathways referred therein. The latest version of drawings posted shall be referred to when reading this Section.

**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**PRELIMINARY STRIPPING**

**Rates for preliminary stripping of top soil**

**SC23.10**

The rates for preliminary stripping of top soil shall further include for : -

- (a) Excavation and disposal of topsoil including loose soil, clearance of vegetations and undergrowths.
- (b) Taking up and clearing away vegetation, topsoil, disused drains, stepped channels and the like.
- (c) Temporary protection of stripped area.
- (d) Clearing of the slope surface and the area so affected after stripping work by means of compressed air or other approved means.
- (e) Clearing, trimming, scarifying and regulating the surface for slope treatment works.
- (f) Taking readings, measurements and observations, recordings and submitting survey records.
- (g) Reinstatement of over-stripped area with approved materials.
- (h) Removing surplus soil and debris.

**Rates for preliminary stripping of impermeable surfaces**

**SC23.11**

The rates for preliminary stripping of impermeable surfaces shall further include for : -

- (a) Excavation and disposal of existing chunam, sprayed concrete and other impermeable surfaces in any thickness including vegetations and under-growths.
- (b) Cutting of reinforcement.
- (c) Taking up and clearing away vegetation, topsoil, disused drains, stepped channels and the like.
- (d) Temporary protection of stripped areas.
- (e) Clearing of the slope surface and the area so affected after stripping work by means of compressed air.
- (f) Clearing, trimming, scarifying and regulating the surface for slope treatment works.
- (g) Taking readings, measurements and observations, recordings and submitting survey records.
- (h) Reinstatement of over-stripped area.
- (i) Removing surplus soil and debris.

**SPECIAL CONDITIONS****PART II - SLOPE TREATMENTS****INSPECTION SCAFFOLDING****Rates for  
inspection  
scaffolding****SC23.12**

The rates for inspection scaffolding shall further include for : -

- (a) Provision, maintenance, inspection, replacement (if required) and subsequent removal.
- (b) Safety ropes, fall-arresting system, harnesses hand and foot holds.
- (c) Platforms, ramps, access, protection fences and barriers.
- (d) Provision of drawings, calculations in relation to the design of Temporary Works including endorsement by a Registered Structural Engineer.
- (e) Allowance in the works programme for inspection carried out by the Maintenance Surveyor.
- (f) Re-erect or repair the inspection scaffolding to allow the re-inspection, if required.
- (g) Obtaining permission from the Maintenance Surveyor for any dismantle works.
- (h) Compliance with the requirements of the current Code of Practice for Bamboo Scaffolding Safety and Code of Practice for Metal Scaffolding Safety.

**SURFACE PROTECTION****Rates for  
chunam****SC23.13**

The rates for chunam shall further include for : -

- (a) Cleaning, trimming and regulating the surface to be covered.
- (b) Preliminary trial panels.
- (c) Dowels (if required).
- (d) Weep holes and filter materials.
- (e) Finishing and curing.
- (f) Fixing anchorage.
- (g) Protection of trees, structures, street furniture and the like.
- (h) Recording and submitting records.

**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**SURFACE PROTECTION**

**Rates for  
sprayed  
concrete**

**SC23.14**

The rates for sprayed concrete shall further include for : -

- (a) Providing, setting up, maintenance and removal of concrete spraying plant, equipment and all necessary ancillary equipment.
- (b) Preliminary mix trials.
- (c) Preliminary trial panels.
- (d) Test specimens and test panels.
- (e) Preparation of surface to be covered.
- (f) Formwork.
- (g) Weep holes and filter materials.
- (h) Forming and including construction joint and expansion joint.
- (i) Finishing and curing.
- (j) Inspection, sounding, and removal and replacement of sub-standard or hollow areas.
- (k) Coring samples, testing and making good core holes to match existing.
- (l) Protection of trees, structures, street furniture and the like.
- (m) Recording and submitting records.

**Rate for  
slope  
registration  
sign plate**

**SC23.15**

The rate for supply and installation of sign plate shall include for excavation in any material and disposal of surplus material; backfilling and compaction; waterproof membrane or blinding layer; formwork; reinforcement and concrete, supply and protective treatment of all metal/alloy or other components of the sign plate; painting; welding; qualification tests for welders and welding tests.

**SPECIAL CONDITIONS****PART II - SLOPE TREATMENTS****ROCK SCALING, REMOVAL OF BOULDERS, MESH PROTECTIONS AND SEALING AND INFILLING ROCK JOINTS**

**Rates for scaling and trimming of rock slopes**

**SC23.16**

The rates for scaling and trimming of rock slopes shall further include for : -

- (a) Soil cushions and subsequent removal.
- (b) Washing down.
- (c) Scaling and trimming using hand-held tools.
- (d) Disposal of scale, debris and boulders using hand-held tools.
- (e) Temporary protective measures and subsequent removal.

**Rates for mesh protection to rock slopes**

**SC23.17**

The rates for mesh protection to rock slopes shall further include for : -

- (a) Preparation of surface.
- (b) Bolts and anchorages.
- (c) Lapping, binding and jointing.
- (d) Taking down and carting away existing mesh on rock slope.

**Rates for rock or boulder splitting and removal**

**SC23.18**

The rates for rock or boulder splitting and removal shall further include for : -

- (a) Mobilization, maintenance and demobilization of plant, tools and ancillary equipment necessary for the works.
- (b) Moving the plant, tools and ancillary equipment at various locations.
- (c) Temporary supports for plant, tools and ancillary.
- (d) Temporary protective measures and subsequent removal.
- (e) Disposal of boulders and debris.

**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**ROCK SCALING, REMOVAL OF BOULDERS, MESH PROTECTIONS AND SEALING AND INFILLING ROCK JOINTS**

**Rates for sealing and infilling rock joints**

**SC23.19**

The rates for sealing and infilling rock joints shall further include for : -

- (a) Clearing unsuitable infill.
- (b) Excavating in rock joints to the depth required.
- (c) Concrete, cement mortar and/or epoxy mortar.
- (d) Formwork.
- (e) Reinforcement.
- (f) Masonry infilling.

**Rates for concrete buttress**

**SC23.20**

The rates for concrete buttress shall further include for : -

- (a) Preliminary mix trials.
- (b) Slump and other tests as required.
- (c) Preparation of surface to be buttressed.
- (d) Compacting and finishing surfaces.
- (e) Formwork, fair face, if required.
- (f) Reinforcement, if required.
- (g) PVC outlets connected to relief drainage system.
- (h) Recording and submitting records.

**ROCK DOWELS**

**Rates for rock dowels**

**SC23.21**

The rates for rock dowels shall further include for : -

- (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs and ancillary equipment.
- (b) Moving the drill rigs, plant and ancillary equipment between rock dowel positions.
- (c) Drilling in any material.

**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**ROCK DOWELS**

**Rates for  
rock dowels  
(Cont'd)**

**SC23.21  
(Cont'd)**

- (d) Water, compressed air and drilling fluids.
- (e) Washing out holes.
- (f) Grouting.
- (g) Protective treatment to stud components.
- (h) Recording and submitting records.

**SOIL NAILS**

**Rates for  
soil nails**

**SC23.22**

The rates for soil nails shall further include for : -

- (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs, plant and ancillary equipment.
- (b) Moving the drill rigs, plant and ancillary equipment between soil nail positions.
- (c) Drilling in any material.
- (d) Temporary support to drillholes.
- (e) Water, compressed air and drilling fluids.
- (f) Washing out holes.
- (g) Pre-grouting and reaming.
- (h) Provision and installation of steel bars.
- (i) Grouting.
- (j) Protective treatment to steel components.
- (k) Couplers and centralizers.
- (l) Head assembly, concrete, reinforcement and formwork.
- (m) Excavation for soil nail head and disposal of surplus materials.
- (n) Supporting device including wire, ties and the like.

## SPECIAL CONDITIONS

### PART II - SLOPE TREATMENTS

#### SOIL NAILS

|   |                         |   |
|---|-------------------------|---|
| <b>Rates for soil nails (Cont'd)</b>                                | <b>SC23.22 (Cont'd)</b> | <ul style="list-style-type: none"> <li>(o) Recording and submitting records.</li> <li>(p) Reinstatement to affected areas.</li> <li>(q) Protective treatment to steel components, including provision of heat-shrinkable sleeve, if ordered by the Maintenance Surveyor.</li> </ul>   |
| <b>Rates for soil nails with double corrosion protection</b>        | <b>SC23.23</b>          | <p>The rates for soil nails with double corrosion protection shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Corrugated sheathing as described in the Specification as adopted in the Contract with proven record for use in similar projects as approved by the Maintenance Surveyor.</li> </ul>  |
| <b>Rates for pull out tests and performance tests on soil nails</b> | <b>SC23.24</b>          | <p>The rates for pull out tests and performance tests on soil nails shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Setting up, operating, calibrating and maintaining load jacks.</li> <li>(b) Provisions of temporary supports to spread the applied loads.</li> <li>(c) Applying and re-applying the test loads and releasing.</li> <li>(d) Pulling out of soil nail for inspection and grouting the drillhole.</li> <li>(e) Cutting off any protrusion from the drillhole and grout the remaining part of drillhole.</li> <li>(f) Taking readings, measurements and observations of the test and recording and submitting results of test.</li> <li>(g) Submission of remedial proposal and replacement of all soil nails failing the test.</li> <li>(h) Reinstatement of affected areas.</li> </ul> |

#### DRAINAGE AND EROSION CONTROL

|                                |                |  |
|--------------------------------|----------------|--|
| <b>Rates for relief drains</b> | <b>SC23.25</b> | <p>The rates for relief drains shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Nails, bolts and nuts for fixing and jointing.</li> <li>(b) Excavation and disposal of material from joints, faults and discontinuities.</li> <li>(c) Connecting to outlets including junction boxes.</li> </ul> |
|--------------------------------|----------------|--|



**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**DRAINAGE AND EROSION CONTROL**

**Rates for relief  
drains  
(Cont'd)**

**SC23.25  
(Cont'd)**

- (d) Weep holes.
- (e) Trial length.
- (f) Sealing up impermeable layers.
- (g) Submission of method statement.
- (h) P.V.C. flange and end cap.

**Rates for  
raking drains**

**SC23.26**

The rates for raking drains shall further include for : -

- (a) Providing, setting up, maintenance and removal of sufficient number of drill rigs and plant together with all ancillary equipment.
- (b) Moving the drill rigs, plant and ancillary equipment between drain hole positions.
- (c) Drilling in any material.
- (d) Temporary support to drillholes.
- (e) Water, compressed air and drilling fluids.
- (f) Taking soil samples and rock cores.
- (g) Recording and submitting records.
- (h) Disposal of material.
- (i) Temporary sealing for holes.
- (j) Pipes, tubes, drain liners, drain screens and the like, including slots and perforations.
- (k) Filter sheaths and fabric.
- (l) Jointing and socketing.
- (m) Bentonite plugs and mortar seals.
- (n) Marking.
- (o) Reinstatement of affected areas.

## SPECIAL CONDITIONS

### PART II - SLOPE TREATMENTS

#### DRAINAGE AND EROSION CONTROL

**Rates for maintenance of raking drains**

**SC23.27**

The rates for maintenance of raking drains shall include for : -

- (a) All the equipment and labours, including supply and pumping of water, required for carrying out the maintenance of raking drains as per paragraphs 16 & 17 of WBTC No. 10/91 and agreed by the Maintenance Surveyor.
- (b) Replacement of geotextile filter sheath, if required, shall be measured separately under Section 13 - Plumbing and Drainage.
- (c) Disposal of the old filter sheath in an environmentally acceptable way as agreed by the Maintenance Surveyor.

**Rates for mats for erosion control**

**SC23.28**

The rates for mats for erosion control shall further include for : -

- (a) Preparation of surfaces to receive mats including filling irregularities with suitable materials.
- (b) Taking down and carting away existing mats for erosion control on slope.
- (c) Pins, anchorages and the like for fixing mats.
- (d) Allowance for laps between joints.
- (e) Biodegradable or non-biodegradable properties.

**Rates for forming opening to rock mesh and erosion mat on slope**

**SC23.29**

The rates for forming opening to rock mesh and erosion mat on slope shall further include for : -

- (a) Setting-out works, wire trimming and making good opening.

#### GEOTECHNICAL INSTRUMENTATION AND SUNDRIES

**Rates for tree rings and planter holes**

**SC23.30**

The rates for tree rings and planter holes in sprayed concrete shall, in addition to the requirements of Special Conditions Clause SC23.14 shall include for : -

- (a) Thickened concrete, reinforcement and anchor bars, if required.
- (b) Removal of any excessive sprayed concrete inside tree ring and planter hole.
- (c) Filling hole with topsoil mix.

### SPECIAL CONDITIONS

#### PART II - SLOPE TREATMENTS

#### GEOTECHNICAL INSTRUMENTATION AND SUNDRIES

|   |                |   |
|---|----------------|---|
| <b>Rates for supply and installation of survey monitoring point</b>   | <b>SC23.31</b> | <p>The rates for supply and installation of survey monitoring point shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Installation of stainless steel bolts of minimum 12 mm diameter or other similar and approved with tapered lower end firmly embedded in stone or concrete and protected hemispherical upper end with 1 mm diameter drilled hole at apex.</li> <li>(b) Provision of concrete bedding as directed by the Maintenance Surveyor.</li> </ul>                    |
| <b>Rates for monitoring operation at each survey monitoring point</b> | <b>SC23.32</b> | <p>The rates for monitoring operation at each survey monitoring point shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Labour, supervisory staff and equipment necessary for the recording of measurements to the frequency as required by the Maintenance Surveyor.</li> <li>(b) Preparation and submission of daily records.</li> </ul>   |
| <b>Rates for topographic survey</b>                                   | <b>SC23.33</b> | <p>The rates for topographic survey shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Carrying out the topographic survey by the qualified personnel of an approved independent firm using their own equipment and providing such labour and assistance as may be required.</li> <li>(b) Preparation and submission of survey plans and reports duly signed by an authorized surveyor and approved by the Maintenance Surveyor.</li> <li>(c) Payment of all charges incurred.</li> </ul> |
| <b>Rates for monitoring of piezometer</b>                             | <b>SC23.34</b> | <p>The rate shall include for provision of labour / supervisory staff and diameter for measuring of groundwater level.</p>  |
| <b>Rates for safety fence</b>   | <b>SC23.35</b> | <p>The rates for safety fence shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Provision, erection, maintenance, alteration as required.</li> <li>(b) Dismantle and clear away to left-in position as required.</li> <li>(c) Providing all materials including posts, strut, plates, wire meshes, rock dowel, anchor bolts, nuts and washers, cable wire, tarpaulin sheets and the like.</li> </ul>   |

**SPECIAL CONDITIONS**

**PART II - SLOPE TREATMENTS**

**GEOTECHNICAL INSTRUMENTATION AND SUNDRIES**

**Rates for  
safety fence  
(Cont'd)**

**SC23.35  
(Cont'd)**

- (d) Designs for the temporary works including calculations and drawings endorsed by a Registered Structural Engineer when required.
- (e) All associated footings including all necessary excavation, disposal, concrete, reinforcement, base plates as required.
- (f) Adequate lightings and warning lights and associated power supply and electrical works and payment of all charges incurred.
- (g) Reinstatement and making good surface disturbed.

**SPECIFICATION FOR GEOTECHNICAL WORKS**

**Specification  
clauses**

**SC23.36**

The specification clauses for geotechnical works can be found in :-

- (a) The General Specification for Building.
- (b) The General Specification for Civil Engineering Works.
- (c) Geotechnical Manual for Slopes.
- (d) Relevant Geoguides.

**GEOTECHNICAL WORKS FOUND IN OTHER SECTIONS OF THIS  
SCHEDULE**

**Turfing and  
grassing to slopes**

**SC23.37**

Turfing and grassing to slopes can be found in Section 22 - Landscape Work of this Schedule.

**Drainage system  
to slopes**

**SC23.38**

Drainage system to slopes can be found in Section 13 - Plumbing and Drainage of this Schedule.

**Concrete works  
to slopes**

**SC23.39**

Concrete staircase to slopes and reinforcement to buttress can be found in Section 04 - Concrete Work of this Schedule.

**Steel railing and  
staircase to slopes**

**SC23.40**

Steel railing and staircase to slopes can be found in Section 10 - Steel and Metal Work of this Schedule.

**Paintwork  
to slopes**

**SC23.41**

Paintwork to slopes can be found in Section 15 - Painting of this Schedule.

| Item   | Item   |
|--|--------|
| <b>PART I - EARTHWORK ON EXISTING SLOPES</b>   |        |
| <b>EARTHWORK ON EXISTING SLOPES</b>  |        |
| <i>Per cubic metre</i>   |        |
| 23001  | 23001  |
| Excavate on slopes to reduce levels.....   | 88.70  |
| 23002  | 23002  |
| Load surplus excavated materials and remove from Site.....   | 138.20 |
| 23003  | 23003  |
| Spread and level or patching up excavated material on slopes in layers n.e. 250 mm including compacting and handling from spoil heaps.....   | 106.20 |
| 23004  | 23004  |
| Approved soil brought to Site from Contractor's own source and wheeled, spread, levelled, patching up, watered if necessary and compacted in layers as filling.....<br>(Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)  | 179.10 |
| <b>SOIL - CEMENT FILLING</b>   |        |
| <i>Per cubic metre</i>   |        |
| 23005  | 23005  |
| Soil-cement filling including compacting and finishing surfaces as required.....   | 219.30 |
| <b>REMEDIAL WORK TO BANKS, LANDSLIPS, ETC.</b>   |        |
| <i>Per cubic metre</i>   |        |
| 23006  | 23006  |
| Excavate as necessary to trim and cut back eroded, fissured or overhanging banks, slopes and sides of slips at any height to revised profile, throw or lower earth, boulders, shrubs and other debris arising to bottom of slope and break or cut up these arisings together with any former material and debris which had been washed down, into a suitable size for handling, and load and remove from Site and erection, use and clearing away of any ladders, gang planks, shoring, etc., required (Total volume of material actually loaded and removed measured) ..... | 170.50 |

| Item  |  |        |                |                            |        | Item              |     |       |
|-------|--|--------|----------------|----------------------------|--------|-------------------|-----|-------|
|       | <b>PART II - SLOPE TREATMENTS</b>  |        |                |                            |        |                   |     |       |
|       | <b>PRELIMINARY STRIPPING</b>   |        |                |                            |        |                   |     |       |
|       | <i>Per square metre</i>  |        |                | A<br>\$                    |        |                   |     |       |
| 23007 | Preliminary stripping of top soil in any depth.....  | 37.50  |                |                            |        | 23007             |     |       |
| 23008 | Preliminary stripping of impermeable surfaces in any thickness.....  | 54.50  |                |                            |        | 23008             |     |       |
|       | <b>INSPECTION SCAFFOLDING</b>  |        |                |                            |        |                   |     |       |
|       | <i>Per square metre</i>  |        |                | A<br>\$                    |        |                   |     |       |
| 23009 | Inspection scaffolding.....  | 78.80  |                |                            |        | 23009             |     |       |
|       | <b>SURFACE PROTECTION</b>  |        |                |                            |        |                   |     |       |
|       | <i>Per square metre</i>  |        |                | A<br>\$                    |        |                   |     |       |
| 23010 | Chunam, 50 mm thick.....   | 112.20 |                |                            |        | 23010             |     |       |
| 23011 | Ditto with single layer of 50 x 50 x 2.7 mm wire diameter galvanized welded mesh.....  | 300.80 |                |                            |        | 23011             |     |       |
| 23012 | Chunam, 75 mm thick.....   | 154.40 |                |                            |        | 23012             |     |       |
| 23013 | Ditto with single layer of 50 x 50 x 2.7 mm wire diameter galvanized welded mesh.....  | 364.90 |                |                            |        | 23013             |     |       |
|       | Grade 20 or 20MPa sprayed concrete with A252 galvanized welded mesh to BS4483, and with 50 mm diameter weep holes at 1.50 m staggered centres in each direction :- |        |                |                            |        |                   |     |       |
|       |  |        |                | Sprayed concrete with mesh |        |                   |     |       |
|       |  |        |                | Single layer mesh          |        | Double layer mesh |     |       |
|       |  |        | Thickness (mm) | 75                         | 100    | 125               | 150 | 200   |
|       |  |        | A              | B                          | C      | D                 | E   |       |
|       |  |        | \$             | \$                         | \$     | \$                | \$  |       |
| 23014 | Sprayed concrete to slopes.....  | 224.50 | 276.70         | 312.80                     | 340.80 | 507.20            |     | 23014 |

| Item  |  |                               | Item   |        |
|-------|--|-------------------------------|--------|--------|
|       | <b>PART II - SLOPE TREATMENTS (CONT'D)</b>   |                               |        |        |
|       | <b>SURFACE PROTECTION (CONT'D)</b>   |                               |        |        |
|       | Grade 20 or 20MPa sprayed concrete, with single layer of 50 x 50 x 2.7 mm wire diameter galvanized welded mesh, and with 50 mm diameter weepholes at 1.50 m staggered centres in each direction :- |                               |        |        |
|       |  | Sprayed concrete with mesh    |        |        |
|       | Thickness (mm)   | 50                            | 75     | 100    |
|       |  | A                             | B      | C      |
|       |  | \$                            | \$     | \$     |
| 23015 | Sprayed concrete to slopes.....  | 138.40                        | 175.70 | 214.90 |
|       |  | Sprayed concrete without mesh |        |        |
|       |  | Thickness (mm)                | 50     | 75     |
|       |  | A                             | B      |        |
|       |  | \$                            | \$     |        |
| 23016 | Sprayed concrete to slopes.....  |                               | 117.90 | 158.40 |
|       |  |                               | A      |        |
|       |  |                               | \$     |        |
| 23017 | Extra over either of Items 23014 to 23016 inclusive for colour pigments in sprayed concrete in accordance with ASTM C979.....  |                               |        | 26.50  |
|       |  |                               |        | A      |
|       |  |                               |        | \$     |
| 23018 | Supply and installation of slope registration sign plate as Standard Drawing Nos. 7116_01 to 7116_05.....  |                               |        | 99.20  |
| 23019 | Take down and clear away ditto.....  |                               |        | 29.50  |
| 23020 | Take down and set aside for re-use ditto.....  |                               |        | 36.90  |
| 23021 | Fix only ditto.....  |                               |        | 51.70  |

| Item  |   |                           |          |          | Item     |       |
|---|---|---------------------------|----------|----------|----------|-------|
| <b>PART II - SLOPE TREATMENTS (CONT'D)</b>  |   |                           |          |          |          |       |
| <b>ROCK SCALING, REMOVAL OF BOULDERS, MESH PROTECTION AND SEALING AND INFILLING ROCK JOINTS</b>           |   |                           |          |          |          |       |
| <i>Per square metre</i>   |   | A                         |          |          |          |       |
|   |   | \$                        |          |          |          |       |
| 23022   | Scaling and trimming of rock slopes including boulders n.e. 0.20 m <sup>3</sup> ..... | 142.90                    |          |          | 23022    |       |
| 23023   | Mesh protection as Standard Drawing No. C2205.....                                    | 182.60                    |          |          | 23023    |       |
| 23024   | Take down and clear away ditto.....   | 73.80                     |          |          | 23024    |       |
| <i>Per cubic metre</i>  |   |                           |          |          |          |       |
| 23025   | Sealing rock joints with 1:3 cement mortar.....                                       | 641.60                    |          |          | 23025    |       |
| 23026   | Infilling rock joints with no fine concrete.....                                      | 625.50                    |          |          | 23026    |       |
| 23027   | Ditto but with Grade 20 or 20MPa concrete.....  | 902.20                    |          |          | 23027    |       |
| 23028   | Ditto but with soil-cement fill.....  | 513.20                    |          |          | 23028    |       |
| 23029   | Ditto but with masonry bedded in cement mortar.....                                   | 661.60                    |          |          | 23029    |       |
| 23030   | Ditto but with proprietary epoxy mortar.....  | 1,506.70                  |          |          | 23030    |       |
| 23031   | Concrete Grade 20 or 20MPa buttress.....  | 1,202.90                  |          |          | 23031    |       |
| 23032   | Concrete Grade 30 or 30MPa buttress.....  | 1,323.30                  |          |          | 23032    |       |
| 23033   | Split rocks or boulders exceeding 0.20 m <sup>3</sup> and remove from Site.....       | 531.30                    |          |          | 23033    |       |
| (Note : - The above Item 23030 will only be paid for, if ordered by the Maintenance Surveyor in writing.) |   |                           |          |          |          |       |
| <b>ROCK DOWELS</b>  |   |                           |          |          |          |       |
| Supply and install rock dowels as detailed in Standard Drawing No. C2202 :-                               |   |                           |          |          |          |       |
|   |   | Rock dowels diameter (mm) |          |          |          |       |
|   |   | 25                        | 32       | 40       | 50       |       |
| <i>Each</i>   |   | A                         | B        | C        | D        |       |
|   |   | \$                        | \$       | \$       | \$       |       |
| 23034   | Rock dowels n.e. 2.00 m long.....   | 868.00                    | 922.00   | 962.00   | 1,089.00 | 23034 |
| 23035   | Ditto 2.00 - 3.00 m long.....   | 1,307.00                  | 1,355.00 | 1,444.00 | 1,630.00 | 23035 |
| 23036   | Ditto 3.00 - 4.00 m long.....   | 1,688.00                  | 1,794.00 | 1,951.00 | 2,191.00 | 23036 |
| 23037   | Ditto 4.00 - 5.00 m long.....   | 2,021.00                  | 2,378.00 | 2,626.00 | 2,760.00 | 23037 |
| 23038   | Ditto 5.00 - 6.00 m long.....   | 2,678.00                  | 2,842.00 | 3,005.00 | 3,633.00 | 23038 |
| 23039   | Ditto 6.00 - 7.00 m long.....   | 3,316.00                  | 3,511.00 | 3,756.00 | 4,221.00 | 23039 |
| 23040   | Add to Item 23039 for each additional 1.00 m or part thereof in length.....           | 457.00                    | 480.00   | 540.00   | 604.00   | 23040 |



| Item   |   | Soil nails diameter (mm) |          |          |           | Item  |
|--|---|--------------------------|----------|----------|-----------|-------|
|  |   | 25                       | 32       | 40       | 50        |       |
|  |   | A                        | B        | C        | D         |       |
|  |   | \$                       | \$       | \$       | \$        |       |
| <b>PART II - SLOPE TREATMENTS (CONT'D)</b>   |   |                          |          |          |           |       |
| <b>SOIL NAILS</b>  |   |                          |          |          |           |       |
| Supply and install soil nails as detailed in Standard Drawing No. C2106/1 to C2106/8 :-  |   |                          |          |          |           |       |
|  | <i>Each</i>   |                          |          |          |           |       |
| 23041  | Soil nail n.e. 3.00 m long.....   | 1,614.00                 | 1,776.00 | 1,937.00 | 2,255.00  | 23041 |
| 23042  | Ditto 3.00 - 4.00 m long.....   | 2,152.00                 | 2,368.00 | 2,583.00 | 3,013.00  | 23042 |
| 23043  | Ditto 4.00 - 5.00 m long.....   | 2,690.00                 | 2,960.00 | 3,229.00 | 3,767.00  | 23043 |
| 23044  | Ditto 5.00 - 6.00 m long.....   | 3,229.00                 | 3,551.00 | 3,874.00 | 4,520.00  | 23044 |
| 23045  | Ditto 6.00 - 7.00 m long.....   | 3,767.00                 | 4,143.00 | 4,520.00 | 4,996.00  | 23045 |
| 23046  | Ditto 7.00 - 8.00 m long.....   | 4,280.00                 | 4,606.00 | 4,916.00 | 5,453.00  | 23046 |
| 23047  | Add to Item 23046 for each additional 1.00 m or part thereof in length..... | 445.00                   | 489.00   | 551.00   | 631.00    | 23047 |
| Supply and install soil nails with double corrosion protection as detailed in Drawing No. R1043/3 and R1043/3-1 and as specified in the Specification :- |   |                          |          |          |           |       |
|  | <i>Each</i>   |                          |          |          |           |       |
|  |   | 25                       | 32       | 40       |           |       |
|  |   | A                        | B        | C        |           |       |
|  |   | \$                       | \$       | \$       |           |       |
| 23048  | Soil nail n.e. 3.00 m long.....   | 1,776.00                 | 1,937.00 | 2,099.00 |           | 23048 |
| 23049  | Ditto 3.00 - 4.00 m long.....   | 2,368.00                 | 2,583.00 | 2,798.00 |           | 23049 |
| 23050  | Ditto 4.00 - 5.00 m long.....   | 2,960.00                 | 3,229.00 | 3,498.00 |           | 23050 |
| 23051  | Ditto 5.00 - 6.00 m long.....   | 3,551.00                 | 3,874.00 | 4,197.00 |           | 23051 |
| 23052  | Ditto 6.00 - 7.00 m long.....   | 4,143.00                 | 4,520.00 | 4,897.00 |           | 23052 |
| 23053  | Ditto 7.00 - 8.00 m long.....   | 4,735.00                 | 5,166.00 | 5,596.00 |           | 23053 |
| 23054  | Add to Item 23053 for each additional 1.00 m or part thereof in length..... | 743.00                   | 807.00   | 861.00   |           | 23054 |
|  | <i>Each</i>   |                          |          |          |           |       |
|  |   |                          |          |          | A         |       |
|  |   |                          |          |          | \$        |       |
| 23055  | Pull-out test of any diameter.....  |                          |          |          | 13,400.00 | 23055 |
| 23056  | Performance test of any diameter.....                                       |                          |          |          | 4,300.00  | 23056 |

| Item  |   |          |                                   | Item  |
|-------|---|----------|-----------------------------------|-------|
|       | <b>PART II - SLOPE TREATMENTS (CONT'D)</b>  |          |                                   |       |
|       | <b>DRAINAGE AND EROSION CONTROL</b>   |          |                                   |       |
|       | <i>Each</i>   |          | A<br>\$                           |       |
| 23057 | Relief drains 200 mm wide, length n.e. 1.50 m, as detailed in Standard Drawing No. C2404.....   | 357.00   |                                   | 23057 |
| 23058 | Ditto for length 1.50 - 3.00 m.....   | 777.00   |                                   | 23058 |
| 23059 | Ditto for length 3.00 - 4.50 m.....   | 1,224.00 |                                   | 23059 |
|       |   |          |                                   |       |
|       |   |          | Overall length<br>of each drain   |       |
|       |   |          | n.e. exceeding<br>25.00 m 25.00 m |       |
|       | <i>Per linear metre</i>   |          | A<br>\$      B<br>\$              |       |
| 23060 | Raking drains Type 1 upwards at 0° - 45° to the horizontal as detailed in Standard Drawing No. C2403.....   | 177.60   | 202.50                            | 23060 |
| 23061 | Ditto but Type 2.....   | 217.00   | 283.50                            | 23061 |
| 23062 | Ditto but Type 3.....   | 279.50   | 344.20                            | 23062 |
|       |   |          |                                   |       |
|       | <i>Per item</i>   |          | A<br>\$                           |       |
| 23063 | Maintenance of raking drains, including flushing with a clean air/water jet with a suitable pressure for a period not exceeding 4 hours as agreed by the Maintenance Surveyor, in accordance with the requirements as paragraphs 16 & 17 of WBTC No. 10/91..... |          | 1,719.00                          | 23063 |
| 23064 | Add to Item 23063 for each additional 4 hours or part thereof in hour.....  |          | 1,235.00                          | 23064 |
|       |   |          |                                   |       |
|       | Proprietary mats for erosion prevention/control on level or slope complying with G.S. 26.63 including all necessary fixing accessories and all in accordance with the manufacturer's instructions :-  |          | Supply<br>and<br>fix              |       |
|       | <i>Per square metre</i>   |          | A<br>\$                           |       |
| 23065 | Proprietary mat for erosion prevention/control.....   |          | 64.10                             | 23065 |
| 23066 | Take down and clear away ditto.....   |          | 20.70                             | 23066 |

| Item   |   |                | Item           |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
|--|---|----------------|----------------|--------------------------|--|--|--|-------------|---------------|----------------|----------------|---|---|---|---|----|----|----|----|-------|-------|--------|--------|
| <b>PART II - SLOPE TREATMENTS (CONT'D)</b>   |   |                |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| <b>DRAINAGE AND EROSION CONTROL (CONT'D)</b>   |   |                |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
|  |   | A<br>\$        |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23067  | Coarse granular filter (Filter B).....  | 312.80         | 23067          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23068  | Fine granular filter (Filter A).....  | 303.40         | 23068          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
|  |   | A<br>\$        |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23069  | Filter drainage pipe as detailed in Standard Drawing No. C2302, 50 mm diameter, length n.e. 3.00 m..... | 104.00         | 23069          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23070  | Ditto, for length 3.00 - 6.00 m.....  | 172.00         | 23070          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| <table border="1" style="margin: auto;"> <thead> <tr> <th colspan="4">Diameter of opening (mm)</th> </tr> <tr> <th>n.e.<br/>500</th> <th>500<br/>- 1000</th> <th>1000<br/>- 1500</th> <th>1500<br/>- 2000</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <th>\$</th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">37.80</td> <td style="text-align: center;">79.60</td> <td style="text-align: center;">121.00</td> <td style="text-align: center;">163.00</td> </tr> </tbody> </table> |   |                |                | Diameter of opening (mm) |  |  |  | n.e.<br>500 | 500<br>- 1000 | 1000<br>- 1500 | 1500<br>- 2000 | A | B | C | D | \$ | \$ | \$ | \$ | 37.80 | 79.60 | 121.00 | 163.00 |
| Diameter of opening (mm)   |   |                |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| n.e.<br>500  | 500<br>- 1000   | 1000<br>- 1500 | 1500<br>- 2000 |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| A  | B   | C              | D              |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| \$   | \$  | \$             | \$             |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 37.80  | 79.60   | 121.00         | 163.00         |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23071  | Form opening to rock mesh and/or erosion control mat on slope.....                                      |                | 23071          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| <b>GEOTECHNICAL INSTRUMENTATION AND SUNDRIES</b>   |   |                |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
|  |   | A<br>\$        |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23072  | Monitoring operation at each survey monitoring point.....   | 260.00         | 23072          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
|  |   | A<br>\$        |                |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23073  | Supply and installation of survey monitoring point.....   | 429.00         | 23073          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23074  | Dismantle and remove survey monitoring point, reinstatement of disturbed surfaces and making good.....  | 12.00          | 23074          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |
| 23075  | Monitoring operation at each standpipe piezometer.....  | 15.30          | 23075          |                          |  |  |  |             |               |                |                |   |   |   |   |    |    |    |    |       |       |        |        |

| Item  |   |   |   | Item  |
|-------|---|---|---|-------|
|       | <b>PART II - SLOPE TREATMENTS (CONT'D)</b>  |   |   |       |
|       | <b>GEOTECHNICAL INSTRUMENTATION AND SUNDRIES (CONT'D)</b>   |   |   |       |
|       | <i>Each</i>   | A<br>\$   |   |       |
| 23076 | Construct tree rings in sprayed concrete as detailed in Standard Drawing No. C2104,<br>inner ring diameter n.e. 800 mm.....                           | 293.00  |   | 23076 |
| 23077 | Ditto 800 - 1,200 mm.....   | 392.00  |   | 23077 |
| 23078 | Ditto 1,200 - 1,800 mm.....   | 588.00  |   | 23078 |
| 23079 | Ditto 1,800 - 2,400 mm.....   | 738.00  |   | 23079 |
| 23080 | Ditto 2,400 - 3,000 mm.....   | 978.00  |   | 23080 |
| 23081 | 150 mm Diameter perforated pipe planter holes not exceeding 600 mm long with top soil mix in chunam,<br>sprayed concrete or masonry facing slope..... | 52.20   |   | 23081 |
| 23082 | 300 mm Ditto.....   | 106.00  |   | 23082 |
|       | <i>Per square metre</i>   |   |   |       |
| 23083 | Carry out topographic survey.....<br>(Note : - This item will only be paid for, if ordered by the Maintenance Surveyor in writing.)                   | 3.30  |   | 23083 |
|       | <b>SAFETY FENCE</b>   |   |   |       |
|       | <i>Per linear metre</i>   |   |   |       |
|       |   | Erect,<br>maintain,<br>take down<br>and clear<br>away | Erect,<br>maintain<br>and left in<br>position |       |
|       |   | A<br>\$   | B<br>\$                                       |       |
| 23084 | Safety fence "Type A" as detailed in Drawing Nos. C2501/1 and C2501/2.....  | 2,053.00  | 1,692.10                                      | 23084 |
| 23085 | Safety fence "Type A with Highway barrier" as detailed in Drawing Nos. C2501/1, C2501/2 and H2112.....  | 2,333.60  | 2,145.20                                      | 23085 |
| 23086 | Safety fence "Type B" as detailed in Drawing Nos. C2502/1 and C2502/2.....  | 2,446.00  | 2,285.60                                      | 23086 |

## **Section 24**

### **PRESERVATION AND PROTECTION OF PRESERVED TREES**

## SECTION 24

### PRESERVATION AND PROTECTION OF PRESERVED TREES

#### SPECIAL CONDITIONS

|   |                |  |
|---|----------------|--|
| <b>Particular Specification</b>   | <b>SC24.01</b> | This Section shall be read and used in conjunction with the Particular Specification for Preservation and Protection of Existing Trees including Old and Valuable Trees and relevant Conditions of Contract adopted in the Contract.   |
| <b>Particular Preamble</b>  | <b>SC24.02</b> | The items in this Section are applicable to existing trees which are to be preserved and protected including Old and Valuable Trees (hereinafter referred to as "OVT") from the register at the website : <a href="http://www.lcsd.gov.hk/LEISURE/LP/gc/tree">http://www.lcsd.gov.hk/LEISURE/LP/gc/tree</a>  |
|   |                | <b>PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES</b>   |
| <b>Measurement of preservation and protection of preserved trees including Old and Valuable Trees</b> | <b>SC24.03</b> | The measurement for the items for the preservation and protection measures for Old and Valuable Trees shall be the duration in which preservation and protection measures for OVT are stated in the Works Order and provided in accordance with the requirements of the Contract. One item shall be measured for each OVT.   |
|   | <b>SC24.04</b> | The measurement for the item for the preservation and protection measures for preserved trees other than Old and Valuable Trees shall be the duration in which preservation and protection measures for preserved trees other than OVT as stated in the Works Order and provided in accordance with the requirements of the Contract. One item shall be measured for each tree.  |
| <b>Rates for preservation and protection of Old and Valuable Trees</b>                                | <b>SC24.05</b> | <p>The rates for preservation and protection of Old and Valuable Trees shall include for : -</p> <ul style="list-style-type: none"> <li>(a) All works, materials and services for preservation and protection of the OVT in accordance with the Contract.</li> <li>(b) Provision, installation, securing, maintenance, reinstatement and removal of identification, labelling or marking system for OVT.</li> <li>(c) Provision, installation, securing, maintenance, reinstatement and removal of temporary protective fencing/armouring/mulching for OVT.</li> <li>(d) Provision, installation, securing, maintenance, reinstatement and removal of physical support measures to protect the OVT from instability.</li> <li>(e) Provision, installation, securing, maintenance and reinstatement of measures to protect the OVT from reduction in ground level, including construction of retaining wall, precautionary measures during excavation and root cutting, and measures to maintain balanced moisture content after change in ground level.</li> </ul> |

## SPECIAL CONDITIONS

**PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES****Rates for preservation and protection of Old and Valuable Trees (Cont'd)****SC24.05 (Cont'd)**

- (f) Provision, installation, securing, maintenance and reinstatement of measures to protect the OVT from rise in ground level, including construction of dry well and soil aeration system.
- (g) Measures to protect the OVT from excavation, including submission of photographic records, precautionary measures during excavation, tunnelling of services and root cutting, and measures to maintain balanced moisture content after excavation.
- (h) Measures to protect the OVT from drilling, including precautionary measures during drilling and root cutting, and measures to maintain balanced moisture content after drilling.
- (i) Measures to control pest and disease for the OVT, including precautionary measures to prevent pest and disease attack and control measures to eradicate pest and disease from the infected trees.
- (j) Pruning of the OVT, including pre-pruning preparation, pruning operation, post-pruning treatment and reinstatement of affected areas.
- (k) Precautionary measures for the OVT as stated in the Contract.

**Rates for preservation and protection of preserved trees other than Old and Valuable Trees****SC24.06**

The rates for preservation and protection of preserved trees other than Old and Valuable Trees shall include for : -

- (a) All works, materials and services for preservation and protection of preserved trees other than OVT in accordance with the Contract.
- (b) Provision, installation, securing, maintenance, reinstatement and removal of identification labelling or marking systems for preserved trees other than OVT.
- (c) Provision, installation, securing, maintenance, reinstatement and removal of temporary protective fencing/armouring/mulching for preserved trees other than OVT.
- (d) Provision, installation, securing, maintenance, reinstatement and removal of physical support measures to protect the preserved trees other than OVT from instability.
- (e) Provision, installation, securing, maintenance and reinstatement of measures to protect the preserved trees other than OVT from reduction in ground level, including construction of retaining wall, precautionary measures during excavation and root cutting, and measures to maintain balanced moisture content after change in ground level.
- (f) Provision, installation, securing, maintenance and reinstatement of measures to protect the preserved trees other than OVT from rise in ground level, including construction of dry well and soil aeration system.

**SPECIAL CONDITIONS**

**PRESERVATION AND PROTECTION OF PRESERVED TREES INCLUDING OLD AND VALUABLE TREES**

**Rates for preservation and protection of preserved trees other than Old and Valuable Trees (Cont'd)**

**SC24.06 (Cont'd)**

- (g) Measures to protect the preserved trees other than OVT from excavation, including submission of photographic records, precautionary measures during excavation, tunnelling of services and root cutting, and measures to maintain balanced moisture content after excavation.
- (h) Measures to protect the preserved trees other than OVT from drilling, including precautionary measures during drilling and root cutting, and measures to maintain balanced moisture content after drilling.
- (i) Measures to control pest and disease for the preserved trees other than OVT, including precautionary measures to prevent pest and disease attack and control measures to eradicate pest and disease from infected trees.
- (j) Pruning of the preserved trees other than OVT, including pre-pruning preparation, pruning operation, post-pruning treatment and reinstatement of affected areas.
- (k) Precautionary measures for the preserved trees other than OVT as stated in the Contract.

**TREE SURVEY**

**Measurement of tree survey**

**SC24.07**

The item for tree survey of each existing tree including Old and Valuable Tree shall be measured for each tree to be surveyed as stated in the Works Order and required in the Contract.

**Measurement of reports**

**SC24.08**

The item for reports on photographic record of each preserved tree including Old and Valuable Tree shall be measured for each tree to be preserved as stated in the Works Order and required in the Contract.

**Rates for tree survey**

**SC24.09**

The rates for tree survey of each existing tree including Old and Valuable Tree shall include for :-

- (a) All works, materials and services for undertaking tree survey of existing trees including OVT in accordance with the Works Order.
- (b) Preparing, amending and submitting to the Maintenance Surveyor the updated survey record of the trees.
- (c) Provision and installation of identification labelling or marking systems for all existing trees including OVT earmarked to be felled under the Works Order.



### SPECIAL CONDITIONS

#### TREE SURVEY

|                          |                |   |
|--------------------------|----------------|---|
| <b>Rates for reports</b> | <b>SC24.10</b> | <p>The rates for reports on photographic record of each preserved tree including Old and Valuable Tree shall include for : -</p> <p>(a) All works, materials and services for preparation, submission, amendments and updating of reports on photographic record of preserved trees including OVT in accordance with the Works Order.</p> <p>(b) Taking updated photographs of preserved trees including OVT.</p> |
|--------------------------|----------------|---|

#### INDEPENDENT TREE SPECIALIST

|   |                |   |
|---|----------------|---|
| <b>Measurement of independent tree specialist</b> | <b>SC24.11</b> | <p>The measurement for the items for independent tree specialist (hereinafter referred to as ITS) shall be the duration of which the services of an ITS is instructed and stated in the Works Order and provided in accordance with the Contract.</p>   |
| <b>Rates for independent tree specialist</b>      | <b>SC24.12</b> | <p>The rates for "ITS" shall include for : -</p> <p>(a) All expenses and reimbursement in connection with the employment of the ITS.</p> <p>(b) Provision of services required from the ITS as stipulated in the Contract including conducting tree surveys, site surveys and soil tests, submitting reports and providing advice.</p> <p>(c) All works, materials and services for employment of the ITS and provision of the services required from the ITS in accordance with the Contract including payment of all fees and charges, provision of facilities and attendance on the ITS.</p> |

#### AFTERCARE TO OLD AND VALUABLE TREES

|   |                |  |
|---|----------------|--|
| <b>Measurement of aftercare to Old and Valuable Trees</b> | <b>SC24.13</b> | <p>The measurement for the items for "aftercare to Old and Valuable Trees" shall be made to the duration in which all requirements for providing aftercare to OVT as stated in the Works Order and provided in the Contract are complied with. One item shall be measured for each OVT.</p>  |
| <b>Rates for aftercare to each Old and Valuable Tree</b>  | <b>SC24.14</b> | <p>The rates for "aftercare to each Old and Valuable Tree" shall include for : -</p> <p>(a) All works, materials and services for providing aftercare to OVT in accordance with the Contract.</p> <p>(b) Tree maintenance work, work of repair to damage or health deterioration, or precautionary or mitigation measures against damage.</p> <p>(c) Removal of all debris and surplus materials off the Site.</p> <p>(d) Reinstatement of the affected areas.</p> |

| Item  |   | Item            |
|---|---|-----------------|
| <b>PRESERVATION AND PROTECTION OF PRESERVED TREES</b> |   |                 |
|   | <i>Per month</i>  | A<br>\$         |
| 24001   | Preservation and protection of each Old and Valuable Tree.....                              | 3,520.00 24001  |
| 24002   | Preservation and protection of each preserved tree other than Old and Valuable Tree.....    | 212.00 24002    |
| <b>TREE SURVEY</b>                                    |   |                 |
|   | <i>Per number</i>   | A<br>\$         |
| 24003   | Tree survey of each existing tree including Old and Valuable Tree.....                      | 113.00 24003    |
| 24004   | Reports on photographic record of each preserved tree other than Old and Valuable Tree..... | 113.00 24004    |
| 24005   | Reports on photographic record of each Old and Valuable Tree.....                           | 902.00 24005    |
| <b>INDEPENDENT TREE SPECIALIST</b>                    |   |                 |
|   | <i>Per number-month</i>   | A<br>\$         |
| 24006   | Independent tree specialist.....  | 22,600.00 24006 |
| <b>AFTERCARE TO OLD AND VALUABLE TREES</b>            |   |                 |
|   | <i>Per month</i>  | A<br>\$         |
| 24007   | Aftercare to each Old and Valuable Tree.....  | 1,582.00 24007  |

**Section 25**

**CONTROL TREATMENT ON PESTS, TERMITES AND  
RED IMPORTED FIRE ANTS**

## SECTION 25

### CONTROL TREATMENT ON PESTS, TERMITES AND RED IMPORTED FIRE ANTS

#### SPECIAL CONDITIONS

##### PART I - CONTROL TREATMENT ON PESTS AND TERMITES

|  |                |   |
|--|----------------|---|
| <b>Measurement of pest and termite control</b>   | <b>SC25.01</b> | Only the infested areas by pests and termites as directed by the Maintenance Surveyor shall be measured.  |
| <b>Measurement of termite treatment to existing trees including Old and Valuable Trees</b> | <b>SC25.02</b> | The items for provision of termite treatment to existing trees including Old and Valuable Tree (OVT) shall be measured based on each existing tree where termite infestation around the tree is confirmed by the Maintenance Surveyor.  |
| <b>Rates for pest and termite control</b>  | <b>SC25.03</b> | <p>The rates for pest and termite control shall include for : -</p> <ul style="list-style-type: none"> <li>(a) The application of an appropriate pesticide or insecticide approved by the Agriculture, Fisheries and Conservation Department ("AFCD") or any control treatment methods approved by the Maintenance Surveyor.</li> <li>(b) The employment of a pest control specialist approved by the Maintenance Surveyor.</li> <li>(c) Applying the pesticide or insecticide in strict accordance with the manufacturer's instructions.</li> </ul>  |
| <b>Rates for termite treatment in mounds and timber</b>                                    | <b>SC25.04</b> | <p>The rates for termite treatment in mounds and timber shall further include for : -</p> <ul style="list-style-type: none"> <li>(a) Carrying out the investigation for the presence of termites.</li> <li>(b) Preparing and drilling holes around termite mounds for the injection of the approved pesticide or insecticide.</li> <li>(c) Treatment services on the termite mounds.</li> <li>(d) Collection services of specimens of termites.</li> <li>(e) Eradication and removal of all termites and their queens.</li> <li>(f) Carrying out periodic inspection to ensure that the termite treatment is effective.</li> <li>(g) Provision of guarantee.</li> </ul> |

### SPECIAL CONDITIONS

#### PART I - CONTROL TREATMENT ON PESTS AND TERMITES

**Rates for termite treatment to existing trees including Old and Valuable Trees**

**SC25.05**

The rates for termite treatment to existing trees including Old and Valuable Trees (OVT) shall further include for : -

- (a) Carrying out the investigation for the presence of termites including the extent of affected soil around the tree.
- (b) Preparing and drilling holes in ground for installation of timber interceptor as in-ground bait station.
- (c) Installing of termite mud-tubes at infested area of above-ground bait station.
- (d) Working at any inclination of slopes if the trees are on slopes.
- (e) Eradication and removal of all termites and their queens.
- (f) Carrying out treatment services.
- (g) Carrying out periodic inspection to ensure that the termite treatment is effective.
- (h) Provision of guarantee.

#### PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS

**Particular Specification**

**SC25.06**

This Section shall be read and used in conjunction with the Particular Specification for Treatment Services on Red Imported Fire Ants and relevant Conditions of Contract adopted for the Contract.

**Particular Preamble**

**SC25.07**

A pest control specialist in controlling Red Imported Fire Ants ("RIFA") from the list provided by AFCD shall be employed to provide treatment services for the RIFA including their mounds. The services shall be ordered by the Maintenance Surveyor through the issue of relevant Works Orders under the Contract as and when required.

The updated list of the pesticides for RIFA treatment available from AFCD shall be referred when proposing pesticides for approval.

#### PROTECTION OF EXISTING PLANTING

**Measurement of treatment services on Red Imported Fire Ants**

**SC25.08**

The items for "maintain and protect all existing planting in the controlling area" shall be measured where treatment services are required to be carried out in planted area.

**Rates for treatment services on Red Imported Fire Ants**

**SC25.09**

The rates for "maintain and protect all existing planting in the controlling area" shall include for the following whenever maintenance or protection is not possible : -

- (a) Report to the Maintenance Surveyor with alternative proposal.
- (b) Resume the original condition including re-planting to the satisfaction of the Maintenance Surveyor.

### SPECIAL CONDITIONS

#### PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS

##### COLLECTION SERVICES OF THE SUSPECTED RED IMPORTED FIRE ANTS

**Measurement of collection services of the suspected Red Imported Fire Ants**

- SC25.10** The items for “mark, cordon off and isolate possible infested zone around single suspected RIFA mound” shall be measured once for a single suspect of RIFA in one location. If there are multiple suspected RIFA mounds in the same location, the “add to Item” shall be measured for each additional mound.
- SC25.11** The items for “collect specimen of suspected RIFA” shall be measured once for each Works Order as directed by the Maintenance Surveyor.
- SC25.12** The items for “add to Item for each additional specimen collection” shall only be measured as directed by the Maintenance Surveyor.
- SC25.13** The item for “reporting to relevant Government Authorities” shall be measured once only for the Works Order.

**Rates for collection services of the suspected Red Imported Fire Ants**

- SC25.14** The rates for “mark, cordon off and isolate possible infested zone” and “add to Item for each multiple suspected RIFA mound” shall include for : -
- (a) The provision of cordon line.
  - (b) Clear warning signs in both English and Chinese about the presence of suspected RIFA and the relevant pest control situation.
- SC25.15** The rates for “collect specimen of suspected RIFA” and “add to for each additional specimen collection” shall include for : -
- (a) Storage of specimen in an approved container and in 70% alcohol.
  - (b) Collection, handling and transporting all specimens of suspected RIFA to the Plant and Pesticides Regulatory Division of AFCD.
- SC25.16** The rates for “reporting to the relevant Government Authorities” shall include for : -
- (a) Completion and submission of necessary information in the appropriate forms to AFCD, Development Bureau and other relevant Government Authorities.

### SPECIAL CONDITIONS

#### PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS

##### CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS

|  |                |   |
|--|----------------|---|
| <b>Measurement of control services of the confirmed Red Imported Fire Ants</b> | <b>SC25.17</b> | The item for “submit a proposal of controlling RIFA” shall be measured once only for the Works Order of treatment services on RIFA.   |
|  | <b>SC25.18</b> | The item for “clear and remove mulch from site” shall be measured for the infested area of the site as directed by the Maintenance Surveyor.  |
|  | <b>SC25.19</b> | The items for “pest control over infested area” shall be measured for the infested area of the site as directed by the Maintenance Surveyor.  |
|  | <b>SC25.20</b> | The item for “pest control to confirmed RIFA mounds” shall be measured where RIFA mounds are confirmed and as directed by the Maintenance Surveyor.   |
|  | <b>SC25.21</b> | The item for “submit written report after each controlling service” shall be measured for each controlling service completed.   |
| <b>Rates for control services of the confirmed Red Imported Fire Ants</b>      | <b>SC25.22</b> | <p>The rates for “submit a proposal of controlling RIFA” shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Submission of proposal for controlling RIFA including but not limited to pest control methodology to individual mound treatment and/or over large infested area.</li> <li>(b) Submission of working programme including pest control schedule and surveillance programme schedule.</li> <li>(c) Submission of layout plan showing the location of pest control to be provided.</li> <li>(d) Submission of details of the pesticides to be applied including Material Safety Data Sheet, application procedures with precautionary measures and ecological information.</li> </ul> |
|  | <b>SC25.23</b> | <p>The rates for “clear and remove mulch from site” shall include for : -</p> <ul style="list-style-type: none"> <li>(a) Treating mulch with approved pest control methodology before removal.</li> <li>(b) Making good disturbed surfaces to match existing.</li> </ul>  |
|  | <b>SC25.24</b> | <p>The rates for “pest control over large infested area” shall include for : -</p> <ul style="list-style-type: none"> <li>(a) The application of a pest control methodology approved by the Maintenance Surveyor.</li> </ul>  |

**SPECIAL CONDITIONS**

**PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS**

**CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS**

**Rates for control services of the confirmed Red Imported Fire Ants (Cont'd)**

- SC25.25** The rates for “pest control up to five confirmed RIFA mounds” shall include for : -
- (a) The application of a pest control methodology approved by the Maintenance Surveyor.
  - (b) The application up to the first 5 number of confirmed RIFA mounds identified for the Works Order.

- SC25.26** The rates for “submit written report after each controlling service” shall include for : -
- (a) Reporting the effectiveness of each individual pest control.
  - (b) Reporting any new findings of RIFA mound.

**SURVEILLANCE MONITORING OF THE CONFIRMED RED IMPORTED FIRE ANTS**

**Measurement of surveillance monitoring of the confirmed Red Imported Fire Ants**

- SC25.27** The item for “carry out surveillance visit” shall be measured for the monitoring the effectiveness of RIFA eradication as directed by the Maintenance Surveyor.
- SC25.28** The item for “submit written report after each surveillance visit” shall be measured for each surveillance visit completed.

**Rates for surveillance monitoring of the confirmed Red Imported Fire Ants**

- SC25.29** The rates for “carry out surveillance visit up to five confirmed RIFA mound” shall include for : -
- (a) Carry out the visit to monitor the effectiveness of RIFA eradication up to the first 5 number of confirmed RIFA mounds.
- SC25.30** The rates for “submit written report after each surveillance visit” shall include for : -
- (a) Reporting the effectiveness of the RIFA eradication.
  - (b) Reporting any new findings of RIFA mound.



| Item   | Item      |
|--|-----------|
| <b>PART I - CONTROL TREATMENT ON PESTS AND TERMITES</b>  |           |
| <b>PEST CONTROL</b>  |           |
| <i>Per square metre</i>  |           |
|  | A<br>\$   |
| 25001  | 25001     |
| Provide pest/mosquito control over infested area for which the Contractor is not liable under his contractual obligations and when ordered by the Maintenance Surveyor.....  | 6.70      |
| <b>TERMITE CONTROL</b>   |           |
| <i>Per item</i>  |           |
|  | A<br>\$   |
| 25002  | 25002     |
| Provide termite treatment in mounds and to timber skirting, floor boards, wall linings, door frames and architraves, cupboards and wardrobes and all other surfaces within an infested premise of enclosed and covered internal floor area n.e. 100 m <sup>2</sup> .....   | 1,900.00  |
| 25003  | 25003     |
| Add to Item 25002 for each additional 10 m <sup>2</sup> or part thereof in area .....  | 226.00    |
| 25004  | 25004     |
| Provide termite treatment to each existing tree including Old and Valuable Tree including applying approved termite colony toxicant to the infested area around the tree, applying chemical bait to in-ground bait station in soil and above ground bait station around infested area, all in accordance with the manufacturer's instructions..... | 10,170.00 |
| <i>Per month</i>   |           |
| 25005  | 25005     |
| Provide regular inspection and monitoring services of the termite bait stations to each existing tree including Old and Valuable Tree including applying approved chemical bait as required and preparation and submission of all necessary information and reports.....   | 1,600.00  |
| <b>PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS</b>  |           |
| <b>PROTECTION OF EXISTING PLANTING</b>   |           |
| <i>Per item</i>  |           |
|  | A<br>\$   |
| 25006  | 25006     |
| Maintain and protect all existing planting in the controlling area.....  | 6,350.00  |
| <b>COLLECTION SERVICES OF THE SUSPECTED RED IMPORTED FIRE ANTS</b>   |           |
| <i>Each</i>  |           |
|  | A<br>\$   |
| 25007  | 25007     |
| Mark, cordon off and isolate possible infested zone around single suspected Red Imported Fire Ant mound.....   | 1,804.00  |
| 25008  | 25008     |
| Add to Item 25007 for each multiple suspected Red Imported Fire Ant mound.....   | 414.00    |
| 25009  | 25009     |
| Collect specimen of suspected Red Imported Fire Ant.....   | 1,130.00  |
| 25010  | 25010     |
| Add to Item 25009 for each additional specimen collection.....   | 643.00    |
| <i>Per item</i>  |           |
| 25011  | 25011     |
| Reporting to relevant Government Authorities.....  | 1,695.00  |

| Item   | Item   |
|--|--|
| <b>PART II - TREATMENT SERVICES ON RED IMPORTED FIRE ANTS (CONT'D)</b> |  |
| <b>CONTROL SERVICES OF THE CONFIRMED RED IMPORTED FIRE ANTS</b>        |  |
| <i>Per item</i>  |  |
| 25012  | Submit a proposal of controlling Red Imported Fire Ant..... 2,670.00 25012                         |
| <i>Per square metre</i>  |  |
| 25013  | Clear and remove mulch from Site..... 13.40 25013  |
| 25014  | Pest control over infested area..... 2.70 25014  |
| <i>Per item</i>  |  |
| 25015  | Pest control up to five confirmed Red Imported Fire Ant mounds..... 1,340.00 25015                 |
| <i>Each</i>  |  |
| 25016  | Add to Item 25015 for each subsequent confirmed Red Imported Fire Ant mound..... 267.30 25016      |
| <i>Per item</i>  |  |
| 25017  | Submit written report after each controlling service..... 1,340.00 25017                           |
| <b>SURVEILLANCE MONITORING OF THE CONFIRMED RED IMPORTED FIRE ANTS</b> |  |
| <i>Per item</i>  |  |
| 25018  | Carry out surveillance visit up to five confirmed Red Imported Fire Ant mounds..... 1,340.00 25018 |
| <i>Each</i>  |  |
| 25019  | Add to Item 25018 for each subsequent confirmed Red Imported Fire Ant mound..... 401.00 25019      |
| <i>Per item</i>  |  |
| 25020  | Submit written report after each surveillance visit..... 1,340.00 25020                            |

## **Section 61**

### **SITE SAFETY**

## SECTION 61

### SITE SAFETY

#### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Particular Specification</b>                  | <b>SC61.01</b> | This Section shall be read and used in conjunction with the Particular Specification for Site Safety and relevant Conditions of Contract adopted in the Contract.   |
| <b>Particular Preamble</b>                       | <b>SC61.02</b> | <p>Where no pre-priced rates are provided in this Section, the rates will be provided under individual Term Contract.</p> <p>For any rates to be provided and for pre-priced rates appearing in this Section, they shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in the upkeeping of safety and health in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods of measurement provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates.</p> |
|  |                | <b>SAFETY PLAN</b>  |
|  |                | <u>Complete Draft Safety Plan</u>   |
| <b>Measurement of complete draft Safety Plan</b> | <b>SC61.03</b> | The item for “complete draft Safety Plan” shall be measured and paid for when the draft Safety Plan has been submitted and the content is in order when confirmed by the Maintenance Surveyor in writing.   |
| <b>Rates for complete draft Safety Plan</b>      | <b>SC61.04</b> | <p>The rates for “complete draft Safety Plan” shall include for : -</p> <p>(a) Prepare and complete the draft Safety Plan incorporating the details required by the Contract.</p> <p>(b) Submit the draft Safety Plan to the Maintenance Surveyor.</p> <p>(c) Attend ad hoc meetings with the Maintenance Surveyor to discuss the draft Safety Plan.</p>  |
|  |                | <u>Complete Safety Plan</u>   |
| <b>Measurement of complete Safety Plan</b>       | <b>SC61.05</b> | The item for “complete Safety Plan” shall be measured and paid for when the Maintenance Surveyor is satisfied and confirmed in writing that the Safety Plan has been completed and it meets all requirements of the Contract at the time of its completion and copies distributed.  |

### SPECIAL CONDITIONS

**Rates for complete Safety Plan**

**SC61.06**

The rates for “complete Safety Plan” shall include for : -

- (a) Develop and complete the Safety Plan based on the draft Safety Plan and taking into account comments given by the Maintenance Surveyor or any other parties.
- (b) Distribute the Safety Plan to all relevant parties.

Updating of Safety Plan

**Measurement of updating of Safety Plan**

**SC61.07**

The item for “updating of Safety Plan” shall be measured for the period of time commencing from the completion of the Safety Plan until the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for the “updating of Safety Plan” for any period of time in which the Contractor fails to discharge any of its contractual obligations in respect of reviewing, revising updating the Safety Plan.

**Rates for updating of Safety Plan**

**SC61.08**

The rates for “updating of Safety Plan” shall include for : -

- (a) Review, update and revise the Safety Plan taking also into account of comments made on the Safety Plan by the Maintenance Surveyor and any other parties.
- (b) Update risk assessment for the work scheduled at least for the next two months.
- (c) Review and establish safety and health provisions, safe working procedures and method statements.
- (d) Update emergency and rescue procedures.
- (e) Distribute the revisions of the Safety Plan to all relevant parties.

**PROVIDE SAFETY OFFICER**

Provide Safety Officer

**Measurement of provide Safety Officer**

**SC61.09**

The item for “provide Safety Officer” shall be measured for the period commencing from the date of appointment of the Safety Officer as approved by the Maintenance Surveyor or the date on which the Safety Officer commences his duty on the Site whichever is the later.

No measurement shall be made for any Safety Officer employed by the Contractor over and above the minimum number of Safety Officers required under the Particular Specification for Site Safety.

No measurement shall be made after the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for any period of time in which the Safety Officer fails to discharge any of his duties.

### SPECIAL CONDITIONS

**Rates for provide  
Safety Officer**

**SC61.10**

The rates for “provide Safety Officer” shall include for : -

- (a) Submission to the Maintenance Surveyor for approval of the qualifications and experience of the proposed Safety Officer.
- (b) Provision of sufficient number of Safety Officers in accordance with the Particular Specification for Site Safety and supporting staff to the Safety Officer.
- (c) Performance of all duties of the Safety Officer.
- (d) Maintenance of the safety diary.

#### SITE SAFETY MANAGEMENT COMMITTEE

Attend Site Safety Management Committee

**Measurement  
of attend  
Site Safety  
Management  
Committee**

**SC61.11**

The measurement shall commence from the date of the first meeting of the Site Safety Management Committee until the substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for any month in which the Contractor fails to hold or attend any such Committee meeting in accordance with the Contract or fails to deal with any of the matters associated with such Committee in a satisfactory manner.

**Rates for  
attend  
Site Safety  
Management  
Committee**

**SC61.12**

The rates for “attend Site Safety Management Committee” shall include for : -

- (a) Attend Site Safety Management Committee meetings and complete the agenda of the meetings.
- (b) Arrange inspection of the Site by members of the Site Safety Management Committee before meetings.
- (c) Provide necessary assistance for the proper functioning of the Site Safety Management Committee.
- (d) Submission of a monthly safety report for consideration at the meeting.

#### SITE SAFETY COMMITTEE

Attend Site Safety Committee

**Measurement  
of attend  
Site Safety  
Committee**

**SC61.13**

The measurement shall commence from the date of the first meeting of the Site Safety Committee until the substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor.

No measurement shall be made for any month in which the Contractor fails to hold or attend any such Committee meeting in accordance with the Contract or fails to deal with any of the matters associated with such Committee in a satisfactory manner.

### SPECIAL CONDITIONS

**Rates for  
attend  
Site Safety  
Committee**

**SC61.14**

The rates for “attend Site Safety Committee” shall include for : -

- (a) Establish the Site Safety Committee.
- (b) Arrange and give adequate notice to relevant parties of the Site Safety Committee meeting to be held for that month.
- (c) Attend at Site Safety Committee meetings.
- (d) Completion and distribution of minutes of meetings.

#### ARRANGE AND ATTEND WEEKLY SAFETY WALK

##### Arrange and Attend Weekly Safety Walk

**Measurement of  
arrange and  
attend weekly  
safety walk**

**SC61.15**

Only those safety walks conducted in accordance with Particular Specification for Site Safety during the period between the date for the commencement of the Works and the date of substantial completion of the last Works Order or an earlier or later date notified by the Maintenance Surveyor shall be measured.

No measurement shall be made for the weekly safety walk when any one of the following events occurs during that week : -

- (i) Any Suspension Notice has been issued by the Labour Department pursuant to the Occupational Safety and Health Ordinance in respect of any activities on the Site until the notice has been revoked or the operation of that notice is suspended.
- (ii) The Maintenance Surveyor has suspended the progress of the Works or any part thereof due to any reason caused by any default on the part of the Contractor in failing to ensure safety and health.
- (iii) The Maintenance Surveyor has given written notification to the Contractor requiring the Contractor to rectify any failure in the proper and full implementation of the Safety Plan and the Contractor has failed to rectify within a reasonable time.

**Rates for  
arrange and  
attend weekly  
safety walk**

**SC61.16**

The rates for “arrange and attend weekly safety walk” shall include for : -

- (a) Arranging and giving adequate notice to relevant parties of the safety walk.
- (b) Using a comprehensive checklist during the walk to identify and record, and subsequently rectifying any deficiencies noted in the safety provisions.
- (c) Preparing reports on safety walks and safety inspections conducted.
- (d) Implementing and upkeeping all measures stipulated in the Safety Plan and maintaining the effectiveness of all such provisions for the duration of the Contract.

**SPECIAL CONDITIONS**

**Rates for  
arrange and  
attend weekly  
safety walk  
(Cont'd)**

**SC61.16  
(Cont'd)**

- (e) Safety inspections including, but not be limited to : -
- (i) scaffolding;
  - (ii) temporary electrical supply; and
  - (iii) site cleanliness;
- (f) Implementing the decisions and recommendations made by the Site Safety Management Committee on matters of safety and health.

**PROVIDE SAFETY TRAINING**Provide Trade Specific Advanced Safety Training to Skilled Workers

**Measurement  
of provide  
trade specific  
advanced safety  
training to  
skilled workers**

**SC61.17**

The item for “provide trade specific advanced safety training to skilled workers” shall be paid on a per worker basis subject to the production of a “Silver Card” issued by the Construction Industry Training Authority as evidence in accordance with Particular Specification for Site Safety. Payment shall only be made for attending the second day of the two-day trade specific advanced safety training course. No payment will be made if the second day of the course is attended : -

- (a) before the skilled worker starts works on Site; or
- (b) after the skilled worker has left the Site.

**Rates for  
provide trade  
specific advanced  
safety training to  
skilled workers**

**SC61.18**

The rates for “provide trade specific advanced safety training to skilled workers” shall include for : -

- (a) Arranging skilled workers to attend the “Silver Card” training course organised by the Construction Industry Training Authority or any other recognised courses notified by the Maintenance Surveyor.
- (b) Payment of the token allowance to skilled workers.
- (c) Preparation of training programme and records, and submission of certified monthly statements to the Maintenance Surveyor.
- (d) Administration in connection with (a), (b) and (c) above.

Provide Site Specific Safety Induction Training

**Measurement  
of provide  
site specific  
safety induction  
training**

**SC61.19**

The item for “provide site specific safety induction training” shall be measured on a per person per talk basis. Refresher talks required by the Contract shall also be measured.

Adjustment to payment or no payment will be made to the item for “provide site specific safety induction training” if the Maintenance Surveyor is dissatisfied with the frequency, arrangements, numbers certified, relevance or quality of such training and the Contractor cannot provide any justification acceptable to the Maintenance Surveyor.



**SPECIAL CONDITIONS**

**Rates for  
provide site  
specific safety  
induction training**

**SC61.20**

The rates for “provide site specific safety induction training” shall include for : -

- (a) Site specific safety induction talks conducted in accordance with Particular Specification for Site Safety.
- (b) The necessary facilities, trainers and demonstration equipment for compliance with (a) above.
- (c) Preparation of the training programme and records, submission of certified monthly statements to the Maintenance Surveyor.
- (d) Administration in connection with (a), (b) and (c) above.

Provide Tool Box Talks

**Measurement of  
provide tool  
box talks**

**SC61.21**

The item for “provide tool box talks” shall be measured on a per worker per talk basis on a frequency of one talk per worker every two weeks in accordance with Particular Specification for Site Safety. Adjustment to payment or no payment to be made to the item for “provide tool box talks” if the Maintenance Surveyor is dissatisfied with the frequency, arrangements, numbers certified, relevance or quality of such talks and the Contractor cannot provide any justification acceptable to the Maintenance Surveyor.

**Rates for  
provide tool  
box talks**

**SC61.22**

The rates for “provide tool box talks” shall include for : -

- (a) Tool box talks conducted in accordance with Particular Specification for Site Safety.
- (b) The necessary training of Safety Supervisors, foremen or gangers to conduct tool box talks.
- (c) Basing such talks on training kits published by the Hong Kong Construction Association Ltd. or other training kits of comparable standard approved by the Maintenance Surveyor.
- (d) Preparation of training programme and records, and submission of certified monthly statements to the Maintenance Surveyor.
- (e) Administration in connection with (a), (b), (c) and (d) above.

| Item  |   |        | Item    |
|---|---|--------|---------|
| <b>SCHEDULE FOR PAY FOR SAFETY SCHEME</b>   |   |        |         |
| (Note : - No pre-priced rates are provided in Items 61001 to 61007 inclusive in this Section. The rates of these items will be provided under individual Term Contract.                   |   |        |         |
| The rates set out in this Section will only be paid for, if ordered by the Maintenance Surveyor in writing and demonstrated compliance with the Particular Specification for Site Safety) |   |        |         |
|   |   |        | A<br>\$ |
| <i>Per item</i>   |   |        |         |
| 61001   | Complete draft Safety Plan.....   | -      | 61001   |
| 61002   | Complete Safety Plan.....   | -      | 61002   |
| <i>Per month</i>  |   |        |         |
| 61003   | Updating of Safety Plan.....  | -      | 61003   |
| <i>Per number-month</i>   |   |        |         |
| 61004   | Provide Safety Officer.....   | -      | 61004   |
| <i>Per month</i>  |   |        |         |
| 61005   | Attend Site Safety Management Committee.....                            | -      | 61005   |
| 61006   | Attend Site Safety Committee.....                                       | -      | 61006   |
| <i>Per number-week</i>  |   |        |         |
| 61007   | Arrange and attend weekly safety walk.....                              | -      | 61007   |
| <i>Per number</i>   |   |        |         |
| 61008   | Provide trade specific advanced safety training to skilled workers..... | 650.00 | 61008   |
| 61009   | Provide site specific induction training.....                           | 100.00 | 61009   |
| 61010   | Provide tool box talks.....   | 30.00  | 61010   |

## **Section 62**

### **SITE CLEANLINESS AND TIDINESS**

## SECTION 62

### SITE CLEANLINESS AND TIDINESS

#### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Particular Specification</b>        | <b>SC62.01</b> | <p>This Section shall be read and used in conjunction with the Particular Specification for Daily Cleaning and Weekly Tidying and relevant Conditions of Contract adopted for the Contract.</p>   |
| <b>Particular Preamble</b>             | <b>SC62.02</b> | <p>Pre-priced rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in the upkeep of site cleanliness and tidiness in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods of measurement provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates.</p>   |
| <b>Measurement of "Daily Cleaning"</b> | <b>SC62.03</b> | <p>The measurement of "Daily Cleaning" shall be made after cleaning and tidying up work of the Site of a Works Order for a Cleaning Day is carried out satisfactorily in accordance with Clause 1(c) "Daily Cleaning" of Particular Specification for Daily Cleaning and Weekly Tidying. The measurement of this item for a Cleaning Day shall be the area of the Public Cleaning Areas in a Works Order for that Cleaning Day. The daily cleaning for the areas of the Site other than the Public Cleaning Areas shall be deemed to be included in the rates of other items of work for such Works Order and shall not be measured for payment.</p> <p>The extent of the Public Cleaning Areas required for cleaning shall be determined by the Maintenance Surveyor's Representative for each Works Order.</p> <p>The Contractor shall not be entitled to any payment for the item for "Daily Cleaning" for a Works Order on a Cleaning Day if the performance of the Contractor on cleanliness and tidiness for any part of the Site including areas other than the Public Cleaning Areas of such Works Order for that Cleaning Day is not carried out to the satisfaction of the Maintenance Surveyor's Representative. For the avoidance of doubt, the measurement for "Daily Cleaning" for each Works Order on a Cleaning Day shall be either in full or none.</p> <p>The Contractor shall not be entitled to any payment for the item for "Daily Cleaning" for more than one day for the cleaning and tidying up work carried out by the Contractor in one Cleaning Day.</p> |
| <b>Rates for "Daily Cleaning"</b>      | <b>SC62.04</b> | <p>The item for "Daily Cleaning" shall include for : -</p> <ol style="list-style-type: none"> <li>(a) Daily cleaning on each Cleaning Day.</li> <li>(b) Development of inspection checklist for the daily cleaning, and its revision.</li> <li>(c) Assignment of person at supervisory level or higher responsible for the daily inspection and checking after the daily cleaning has been carried out on the Site.</li> </ol>  |

**SPECIAL CONDITIONS**

|  |                         |   |
|--|-------------------------|---|
| <b>Rates for "Daily Cleaning" (Cont'd)</b> | <b>SC62.04 (Cont'd)</b> | <p>(d) Completion of the inspection checklist and preparation of records and photographs for checking by the Maintenance Surveyor's Representative.</p> <p>(e) Inspection of the Site before any work commences to clear any rubbish and debris that may be littered by the public.</p>   |
| <b>Measurement of "Weekly Tidying"</b>     | <b>SC62.05</b>          | <p>The measurement of "Weekly Tidying" shall be made after the overall cleaning and tidying up work of the Site of a Works Order for a Cleaning Week Day is carried out satisfactorily in accordance with Clause 1(d) "Weekly Tidying" of Particular Specification for Daily Cleaning and Weekly Tidying. The measurement of this item for a satisfactory completed Cleaning Week Day shall be the area of the Public Cleaning Areas in a Works Order for that Cleaning Week Day. The weekly tidying for the areas of the Site other than the Public Cleaning Areas shall be deemed to be included in the rates of other items of work for such Works Order and shall not be measured for payment.</p> <p>The extent of the Public Cleaning Areas required for weekly tidying is identical to those defined for daily cleaning given in Special Conditions Clause SC62.03 herein.</p> <p>The Contractor shall not be entitled to any payment for the item for "Weekly Tidying" for a Works Order on a Cleaning Week Day if the Contractor fails to rectify the identified defects pursuant to Special Conditions Clause SC62.06(e) herein to the satisfaction of the Maintenance Surveyor's Representative before the end of the day (which is not a General Holiday) following the Cleaning Week Day. For the avoidance of doubt, the measurement for "Weekly Tidying" for each Works Order on a Cleaning Week Day shall be either in full or none.</p> <p>The Contractor shall not be entitled to any payment for the item for "Weekly Tidying" for more than one day for the cleaning and tidying up work and/or defects rectification carried out by the Contractor in one Cleaning Week Day.</p> |
| <b>Rates for "Weekly Tidying"</b>          | <b>SC62.06</b>          | <p>The item for "Weekly Tidying" shall include for : -</p> <p>(a) Weekly tidying of the Site on the Cleaning Week Day.</p> <p>(b) Development of inspection checklist for weekly tidying, and its revision.</p> <p>(c) Assignment of person at supervisory level or higher responsible for the inspection and checking after the weekly tidying has been carried out on the Site.</p> <p>(d) Completion of the inspection checklist and preparation of records and photographs for checking by the Maintenance Surveyor's Representative.</p> <p>(e) Rectification of defects identified by the assigned person as referred to in sub-clause (c) above and/or the Maintenance Surveyor's Representative.</p> <p>(f) Inspection of the Site before any work commences to clear any rubbish and debris that may be littered by the public.</p>  |

Item

Item

**SCHEDULE FOR PAY FOR SITE CLEANLINESS AND TIDINESS**

(Note :- The rates set out in this Section will only be paid for, if ordered by the Maintenance Surveyor in writing and demonstrated compliance with the Particular Specification for Site Cleanliness and Tidiness by the Contractor for these items.)

*Per m<sup>2</sup>- day*

A  
\$

|       |                     |      |       |
|-------|---------------------|------|-------|
| 62001 | Daily cleaning..... | 1.20 | 62001 |
| 62002 | Weekly tidying..... | 2.30 | 62002 |

**Section 63**

**TRIP TICKET SYSTEM**

## SECTION 63

### TRIP TICKET SYSTEM

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Particular Specification</b>   | <b>SC63.01</b> | This Section shall be read and used in conjunction with the Particular Specification for Trip Ticket System and relevant Conditions of Contract adopted for the Contract.   |
| <b>Particular Preamble</b>  | <b>SC63.02</b> | Pre-priced rates appearing in this Section shall be deemed to allow for the value of work in connection with meeting all statutory and contractual obligations in ensuring proper disposal of construction and demolition materials generated from the Site to designated disposal ground under the Contract or other disposal grounds approved or as directed by the Maintenance Surveyor, and any other related obligations, liabilities, risks and profit. In the event that the rates are insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Contract.  |
| <b>Measurement of complete site management plan for trip ticket system</b>          | <b>SC63.03</b> | The item for “complete site management plan for trip ticket system” shall be measured once for the whole Contract when the Maintenance Surveyor approves the site management plan.  |
| <b>Measurement of implementation of site management plan for trip ticket system</b> | <b>SC63.04</b> | <p>The measurement of the “implementation of site management plan for trip ticket system” shall be the period of time commencing from the date of approval by the Maintenance Surveyor of the site management plan until all construction and demolition materials have been removed from the Site, or an earlier or later date notified by the Maintenance Surveyor.</p> <p>No measurement shall be made for the “implementation of site management plan for trip ticket system” for any month during which there is any incident of improper disposal or major improper disposal as defined in Clauses 15 and 16 of the Particular Specification for Trip Ticket System, or late submission of the records as required in Clause 10 of the Particular Specification for Trip Ticket System, or there is no disposal of construction and demolition materials off the Site during the month.</p> |
| <b>Rates for complete site management plan for trip ticket system</b>               | <b>SC63.05</b> | <p>The item for “complete site management plan for trip ticket system” shall include for : -</p> <ol style="list-style-type: none"> <li>(a) Prepare the site management plan for trip ticket system to the satisfaction of the Maintenance Surveyor.</li> <li>(b) Distribute or inform all relevant parties details of the site management plan for trip ticket system.</li> <li>(c) Inform truck drivers engaged in the disposal of construction and demolition materials the requirements under the trip ticket system.</li> </ol>  |



**SPECIAL CONDITIONS**

**Rates for  
implementation of  
site management  
plan for trip ticket  
system**

**SC63.06**

The item for the “implementation of site management plan for trip ticket system” shall include for :-

- (a) Review, update and revise the site management plan for trip ticket system taking into account the comments made by the Maintenance Surveyor or any other parties.
- (b) Assign staff and provide / operate / maintain / remove video recording system and other necessary facilities/equipment for overseeing and implementation of site management plan for trip ticket system.
- (c) Implement measures to ensure that trucks carrying construction and demolition materials from the Site proceed to the disposal grounds designated in the Contract or directed or approved by the Maintenance Surveyor to his satisfaction.
- (d) Devise and implement appropriate measures to ensure that the sorted recyclable materials, which are sorted on the Site for the purpose of recycling such materials, are delivered to a proper recycling outlet for processing.
- (e) Compile, submit and maintain disposal records.
- (f) Investigate and report on incidents of improper disposal and non-compliance with the trip ticket system.
- (g) Monitor performance of trip ticket system and implement improvement measures.
- (h) Implement additional measures to control disposal of construction and demolition materials to alternative disposal ground which the Maintenance Surveyor has approved.
- (i) Distribute revisions of the site management plan for trip ticket system to all relevant parties including the truck drivers engaged in delivery of construction and demolition materials for disposal.
- (j) Other requirements for implementation of the trip ticket system as stipulated in the Particular Specification clauses for Trip Ticket System.

| Item   | Item                                 |
|--|--------------------------------------|
| <b>SCHEDULE FOR PAY FOR TRIP TICKET SYSTEM</b> |                                      |
| <i>Per item</i>                                |                                      |
| 63001  | 63001                                |
| Complete Site Management Plan.....             | A<br>\$<br>12,000.00<br><br>1,000.00 |
| <i>Per month</i>                               |                                      |
| 63002  | 63002                                |
| Implementation of Site Management Plan.....    |                                      |

**Section 64**

**MONITORING PAYMENT OF WAGES**

## SECTION 64

### MONITORING PAYMENT OF WAGES

#### SPECIAL CONDITIONS

|   |                |   |
|---|----------------|---|
| <b>Particular Specification</b>   | <b>SC64.01</b> | This Section shall be read and used in conjunction with the Particular Specification for Monitoring of Wage Payment to Site Personnel and relevant Conditions of Contract adopted for the Contract.   |
| <b>Measurement for operating monitoring system for payment of wages</b> | <b>SC64.02</b> | <p>The item for “operating monitoring system for payment of wages” shall be measured commencing from the date of approval by the Maintenance Surveyor of completion of establishment of monitoring system for payment of wages and the item for “providing Contractor’s Labour Officer” shall commence from the date the Contractor’s Labour Officer provided by the Contractor is approved by the Maintenance Surveyor and reports duty on Site. These items shall not be measured : -</p> <p>(a) Where the Works are not divided into Sections, between</p> <p style="margin-left: 40px;">(i) the end of the prescribed time or extended time for completion of the last Works Order except Establishment Works and Aftercare to Old and Valuable Trees due to extension of time which has been granted by the Maintenance Surveyor to the Contractor under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of General Conditions of Contract for Term Contracts for Building Works 2004 Edition ("GCC for TC") or Clause 50 (1)(b)(iv) to (viii) of General Conditions of Contract for Design and Build Contracts 1999 Edition ("GCC for D&amp;B Contracts"); and</p> <p style="margin-left: 40px;">(ii) the date of completion of the last Works Order except Establishment Works and Aftercare to Old and Valuable Trees certified by the Maintenance Surveyor in accordance with Clause 56 under GCC for TC or Clause 53 under GCC for D&amp;B Contracts.</p> |

For the purpose of calculating the extended time for completion of the Works due to extension of time granted by the Maintenance Surveyor under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC for TC or Clause 50 (1)(b)(iv) to (viii) of GCC for D&B Contracts, the periods of extended time for completion granted under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC for TC or Clause 50 (1)(b)(iv) to (viii) of GCC for D&B Contracts shall be summed and added to the end of the prescribed time for completion of the last Works Order.

## SPECIAL CONDITIONS

|   |                         |  |
|---|-------------------------|--|
| <b>Measurement for operating monitoring system for payment of wages (Cont'd)</b>    | <b>SC64.02 (Cont'd)</b> | <p>(b) Where the Works are divided into Sections, between</p> <p>(i) the end of the prescribed time or extended time for completion of the Section of the Works (excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees) due to extension of time which has been granted by the Maintenance Surveyor to the Contractor under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC for TC or Clause 50 (1)(b)(iv) to (viii) of GCC for D&amp;B Contracts, which happens to be the latest in time (for the purpose of calculating the extended time for completion of each Section of the Works due to extension of time granted by the Maintenance Surveyor under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC for TC or Clause 50 (1)(b)(iv) to (viii) of GCC for D&amp;B Contracts, the periods of extended time for completion granted under Clause 53 (1)(b)(iii), (iv), (vi), (vii) and (viii) of GCC for TC or Clause 50 (1)(b)(iv) to (viii) of GCC for D&amp;B Contracts for that Section of the Works shall be summed and added to the end of the prescribed time for completion of that Section of the Works); and</p> <p>(ii) the date of completion of whichever Section of the Works (excluding the Sections for Establishment Works and Aftercare for Old and Valuable Trees) certified by the Maintenance Surveyor in accordance with Clause 56 under GCC for TC or Clause 53 under GCC for D&amp;B Contracts which happens to be the latest in time.</p> <p>(c) After the expiry of the Maintenance Period (or where there is more than one such Maintenance Period, after the expiry of the last Maintenance Period other than the Maintenance Periods for Establishment Works and Aftercare for Old and Valuable Trees) where services are required as a consequence of the default of the Contractor.</p> |
| <b>Measurement and payment for operating monitoring system for payment of wages</b> | <b>SC64.03</b>          | No measurement and no payment shall be made for the item “operating monitoring system for payment of wages” for the period where there is any incident of non-compliance with respect to the submission of documents and records in accordance with Particular Specification “Section X” and payment for the item shall therefore be measured on a pro rata basis.   |
| <b>Rate for establishing monitoring system for payment of wages</b>                 | <b>SC64.04</b>          | <p>The item for “establishing monitoring system for payment of wages” is given as a pre-priced rate and shall include for : -</p> <p>(a) Preparation of the monitoring system for payment of wages to the satisfaction of the Maintenance Surveyor.</p> <p>(b) Setting-up the monitoring system for payment of wages and any modifications thereof.</p> <p>(c) Provision for collection and maintenance records of payment of wages to Site Personnel.</p> <p>(d) Opening of accounts in designated bank for relevant parties as required in Particular Specification Clauses X.5 (1) to (2).</p> <p>(e) Nomination of a Contractor’s Labour Officer as required in Particular Specification Clause Y.1.</p>   |

**SPECIAL CONDITIONS**

**Rate for  
establishing  
monitoring system  
for payment of  
wages  
(Cont'd)**

**SC64.04  
(Cont'd)**

- (f) Setting up the attendance recording system for accurate attendance records of Site Personnel and any modifications thereof.
- (g) Issuing identification cards to Site Personnel and self-employed workers and temporary cards to visitors.
- (h) Insurance for the self-employed workers.
- (i) Establishing a hotline in the Maintenance Surveyor's site office to receive enquiries from workers and Site Personnel on employment matters.
- (j) Advising Site Personnel of the monitoring system and the procedures for reporting wages arrears.

**Rate for  
operating  
monitoring  
system for  
payment of  
wages**

**SC64.05**

The item for "operating monitoring system for payment of wages" is given as a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. In addition, the rate shall also be deemed to include for : -

- (a) Operating and maintaining the attendance recording system to obtain accurate attendance records of Site Personnel.
- (b) Controlling the issue of identification cards to Site Personnel and self-employed workers.
- (c) Reviewing, updating and revising the monitoring system for payment of wages taking into account the comments made by the Maintenance Surveyor or any other parties.
- (d) Implementing measures to ensure that payments of wages to Site Personnel are consistent with the records of the attendance recording system.
- (e) Compiling, submitting and maintaining records of payment of wages and other monetary benefits to Site Personnel.
- (f) Observing all statutory and contractual obligations in ensuring proper payment of wages and other monetary benefits to Site Personnel, and any other related obligations, liabilities, risks and profit.
- (g) Providing all necessary assistance to the Labour Relations Officer in the discharge of his duties, functions and responsibilities.
- (h) Maintaining a hotline in the Maintenance Surveyor's site office.
- (i) Maintaining insurance for the self-employed workers.
- (j) Providing access and assistance to visitors as required under Particular Specification Clause Y.3 including the necessary insurance coverage.

**SPECIAL CONDITIONS****Rate for  
providing  
Contractor's  
Labour  
Officer****SC64.06**

The item for "Providing Contractor's Labour Officer" is given as a pre-priced rate. In the event that the rate is insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates. In addition, the rate shall include the costs and expenses of providing the Contractor's Labour Officer and supporting staff inclusive and without limitation to the following : -

- (a) Basic salary.
- (b) Gratuity.
- (c) Overtime payment.
- (d) Sundry allowance.
- (e) Housing allowance.
- (f) Travel allowance.
- (g) Leave allowance.
- (h) Education allowance.
- (i) Medical allowance.
- (j) Dental allowance.
- (k) Bonus.
- (l) Contribution to a registered mandatory provident fund scheme
- (m) All necessary levies, e.g. levy for Construction Industry Council
- (n) Insurances.
- (o) Fringe benefits.

| Item   | Item  |   |    |           |          |           |
|--|---|---|----|-----------|----------|-----------|
| <b>MONITORING PAYMENT OF WAGES</b>                       |   |   |    |           |          |           |
| <i>Per item</i>  |   |   |    |           |          |           |
| 64001  | 64001   |   |    |           |          |           |
| Establishing monitoring system for payment of wages..... | <table border="1"><tr><td>A</td></tr><tr><td>\$</td></tr><tr><td>10,000.00</td></tr><tr><td>9,000.00</td></tr><tr><td>12,000.00</td></tr></table> | A | \$ | 10,000.00 | 9,000.00 | 12,000.00 |
| A  |   |   |    |           |          |           |
| \$   |   |   |    |           |          |           |
| 10,000.00  |   |   |    |           |          |           |
| 9,000.00   |   |   |    |           |          |           |
| 12,000.00  |   |   |    |           |          |           |
| <i>Per month</i>   |   |   |    |           |          |           |
| 64002  | 64002   |   |    |           |          |           |
| Operating monitoring system for payment of wages.....    |   |   |    |           |          |           |
| 64003  | 64003   |   |    |           |          |           |
| Providing Contractor's Labour Officer.....               |   |   |    |           |          |           |



**Section 65**

**SUB-CONTRACTOR MANAGEMENT PLAN**

## SECTION 65

### SUB-CONTRACTOR MANAGEMENT PLAN

#### SPECIAL CONDITIONS

|  |                |   |
|--|----------------|---|
| <b>Particular Specification</b>  | <b>SC65.01</b> | This Section shall be read and used in conjunction with the Particular Specification for Management of Sub-contractors and relevant Conditions of Contract adopted for the Contract.  |
| <b>Particular Preamble</b>   | <b>SC65.02</b> | The pre-priced rates appearing in the items under this Section shall be deemed to have allowed for the value of work in connection with meeting all contractual obligations regarding the Sub-contractor Management Plan (SMP) in the execution of the Works and any other related obligations, liabilities, risks and profit. In the event that the rates have been insufficient or where there are any aspects where the methods provided hereunder do not measure any item or exclude the measurement of any item or part thereof, the difference in value shall be deemed to have been included in the Contract Percentages allowed for other Sections in the Schedule of Rates.  |
| <b>Measurement of complete Sub-contractor Management Plan and quarterly updating of Sub-contractor Management Plan</b> | <b>SC65.03</b> | <p>Measurement</p> <p>(a) The item for "complete Sub-contractor Management Plan" shall be measured and paid for when the SMP has been submitted, the content is in order and the Maintenance Surveyor is satisfied and confirmed in writing that it has been completed and it meets all requirements of the contract at the time of its completion.</p> <p>(b) The item for "quarterly updating of Sub-contractor Management Plan" shall be measured and paid for when the quarterly updated SMP has been submitted, the content is in order and the Maintenance Surveyor is satisfied and confirmed in writing that the SMP has been completed and meets all the requirements of the Contract at the time of its completion. The declaration referred to in the Particular Specification for Management of Sub-contractors Clause X.3(2) shall be considered as quarterly updating of the SMP. No measurement shall be made for Contractor's interim notification of major changes of sub-contractor management.</p> |
| <b>Rate for complete Sub-contractor Management Plan</b>  | <b>SC65.04</b> | <p>The item for "complete Sub-contractor Management Plan" shall include for : -</p> <p>(a) Develop and complete the SMP incorporating the details required by the Contract.</p> <p>(b) Submit the required copies of the SMP to the Maintenance Surveyor.</p>   |
| <b>Rate for quarterly updating of Sub-contractor Management Plan</b>   | <b>SC65.05</b> | <p>The item for "quarterly updating of Sub-contractor Management Plan" include for : -</p> <p>(a) Reviewing, updating and revising SMP taking into account the changes in the Contractor's sub-contracting arrangement during the period and/or comments made by the Maintenance Surveyor.</p> <p>(b) Submit the required copies of the quarterly updated SMP to the Maintenance Surveyor.</p>  |

| Item  | Item                                 |
|---|--------------------------------------|
| <b>SUB-CONTRACTOR MANAGEMENT PLAN</b>                     |                                      |
| <i>Per item</i>   |                                      |
| 65001   | 65001                                |
| Complete Sub-contractor Management Plan.....              | A<br>\$<br>15,000.00<br><br>2,000.00 |
| <i>Each</i>   |                                      |
| 65002   | 65002                                |
| Quarterly updating of Sub-contractor Management Plan..... |                                      |

**ANNEX 'A' -**

**DRAWING SCHEDULE AND DRAWINGS FOR**

**BUILDER'S WORKS**

## ANNEX 'A'

## DRAWING SCHEDULE AND DRAWINGS FOR BUILDER'S WORKS

| <u>Section</u> | <u>Drawing No./<br/>Reference</u> | <u>Title</u> |
|----------------|-----------------------------------|--------------|
|----------------|-----------------------------------|--------------|

**Section 06 - Masonry**

Note : The following drawing relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

General Specification for Building issued by Architectural Services Department

<http://www.archsd.gov.hk/en/publications-publicity/general-specification-for-building.aspx>

|                     |                         |
|---------------------|-------------------------|
| Page 10-5 of GS2012 | Types of Rubble Walling |
|---------------------|-------------------------|

**Section 10 - Steel and Metal Work**

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Architectural Services Department, Architectural Standard Drawings

<http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx>

|            |   |
|------------|---|
| 9711/A/A01 | Type A hoarding - corrugated steel fence – general plans          |
| 9711/A/A02 | Type A hoarding - corrugated steel fence – general notes          |
| 9711/A/A03 | Type A hoarding - corrugated steel fence – construction details 1 |
| 9711/A/A04 | Type A hoarding - corrugated steel fence – construction details 2 |
| 9711/A/A05 | Type A hoarding - corrugated steel fence – construction details 3 |
| 9711/A/S01 | Type A hoarding - corrugated steel fence – structural details 1   |
| 9711/A/S02 | Type A hoarding - corrugated steel fence – structural details 2   |
| 9711/A/S03 | Type A hoarding - corrugated steel fence – structural details 3   |
| 9711/A/S04 | Type A hoarding - corrugated steel fence – structural details 4   |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/B/A01                        | Type B hoarding - covered walkway – general plans  |
|   | 9711/B/A02                        | Type B hoarding - covered walkway – general notes  |
|   | 9711/B/A03                        | Type B hoarding - covered walkway – construction details 1                                 |
|   | 9711/B/A04                        | Type B hoarding - covered walkway – construction details 2                                 |
|   | 9711/B/A05                        | Type B hoarding - covered walkway – construction details 3                                 |
|   | 9711/B/A06                        | Type B hoarding - covered walkway – construction details 4                                 |
|   | 9711/B/A07                        | Type B hoarding - covered walkway – construction details 5                                 |
|   | 9711/B/S01                        | Type B hoarding - covered walkway – structural details 1                                   |
|   | 9711/B/S02                        | Type B hoarding - covered walkway – structural details 2                                   |
|   | 9711/B/S03                        | Type B hoarding - covered walkway – structural details 3                                   |
|   | 9711/B/S04                        | Type B hoarding - covered walkway – structural details 4                                   |
|   | 9711/B/S05                        | Type B hoarding - covered walkway – structural details 5                                   |
|   | 9711/C/A01                        | Type C hoarding - covered walkway with single deck catch platform - general plans          |
|   | 9711/C/A02                        | Type C hoarding - covered walkway with single deck catch platform - general notes          |
|   | 9711/C/A03                        | Type C hoarding - covered walkway with single deck catch platform - construction details 1 |
|   | 9711/C/A04                        | Type C hoarding - covered walkway with single deck catch platform - construction details 2 |
|   | 9711/C/A05                        | Type C hoarding - covered walkway with single deck catch platform - construction details 3 |
|   | 9711/C/A06                        | Type C hoarding - covered walkway with single deck catch platform - construction details 4 |
|   | 9711/C/A07                        | Type C hoarding - covered walkway with single deck catch platform - construction details 5 |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/C/S01                        | Type C hoarding - covered walkway with single deck catch platform - structural details 1   |
|   | 9711/C/S02                        | Type C hoarding - covered walkway with single deck catch platform - structural details 2   |
|   | 9711/C/S03                        | Type C hoarding - covered walkway with single deck catch platform - structural details 3   |
|   | 9711/C/S04                        | Type C hoarding - covered walkway with single deck catch platform - structural details 4   |
|   | 9711/C/S05                        | Type C hoarding - covered walkway with single deck catch platform - structural details 5   |
|   | 9711/D/A01                        | Type D hoarding - covered walkway with double deck catch platform - general plans          |
|   | 9711/D/A02                        | Type D hoarding - covered walkway with double deck catch platform - general notes          |
|   | 9711/D/A03                        | Type D hoarding - covered walkway with double deck catch platform - construction details 1 |
|   | 9711/D/A04                        | Type D hoarding - covered walkway with double deck catch platform - construction details 2 |
|   | 9711/D/A05                        | Type D hoarding - covered walkway with double deck catch platform - construction details 3 |
|   | 9711/D/A06                        | Type D hoarding - covered walkway with double deck catch platform - construction details 4 |
|   | 9711/D/A07                        | Type D hoarding - covered walkway with double deck catch platform - construction details 5 |
|   | 9711/D/S01                        | Type D hoarding - covered walkway with double deck catch platform - structural details 1   |
|   | 9711/D/S02                        | Type D hoarding - covered walkway with double deck catch platform - structural details 2   |
|   | 9711/D/S03                        | Type D hoarding - covered walkway with double deck catch platform - structural details 3   |
|   | 9711/D/S04                        | Type D hoarding - covered walkway with double deck catch platform - structural details 4   |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>  |
|---|-----------------------------------|---|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |   |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |   |
| Architectural Services Department, Architectural Standard Drawings  |                                   |   |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |   |
|   | 9711/D/S05                        | Type D hoarding - covered walkway with double deck catch platform - structural details 5    |
|   | 9711/E/A01                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – general plans          |
|   | 9711/E/A02                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – general notes          |
|   | 9711/E/A03                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – construction details 1 |
|   | 9711/E/A04                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – construction details 2 |
|   | 9711/E/A05                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – construction details 3 |
|   | 9711/E/S01                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – structural details 1   |
|   | 9711/E/S02                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – structural details 2   |
|   | 9711/E/S03                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – structural details 3   |
|   | 9711/E/S04                        | Type E hoarding– corrugated steel fence (surface– mounted footing) – structural details 4   |
|   | 9711/F/A01                        | Type F hoarding - covered walkway (surface– mounted footing) – general plans                |
|   | 9711/F/A02                        | Type F hoarding - covered walkway (surface– mounted footing) – general notes                |
|   | 9711/F/A03                        | Type F hoarding - covered walkway (surface– mounted footing) – construction details 1       |
|   | 9711/F/A04                        | Type F hoarding - covered walkway (surface– mounted footing) – construction details 2       |
|   | 9711/F/A05                        | Type F hoarding - covered walkway (surface– mounted footing) – construction details 3       |
|   | 9711/F/A06                        | Type F hoarding - covered walkway (surface– mounted footing) – construction details 4       |



| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/F/A07                        | Type F hoarding - covered walkway (surface– mounted footing) – construction details 5  |
|   | 9711/F/S01                        | Type F hoarding - covered walkway (surface– mounted footing) – structural details 1  |
|   | 9711/F/S02                        | Type F hoarding - covered walkway (surface– mounted footing) – structural details 2  |
|   | 9711/F/S03                        | Type F hoarding - covered walkway (surface– mounted footing) – structural details 3  |
|   | 9711/F/S04                        | Type F hoarding - covered walkway (surface– mounted footing) – structural details 4  |
|   | 9711/F/S05                        | Type F hoarding - covered walkway (surface– mounted footing) – structural details 5  |
|   | 9711/G1/A01                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – general notes                          |
|   | 9711/G1/A02                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – plans                                  |
|   | 9711/G1/A03                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – elevation                              |
|   | 9711/G1/A04                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – sections                               |
|   | 9711/G1/A05                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – construction details 1                 |
|   | 9711/G1/A06                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – construction details 2                 |
|   | 9711/G1/A07                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – construction details 3                 |
|   | 9711/G1/A08                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – construction details 4                 |
|   | 9711/G1/A09                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – sited on carriageway / narrow pavement |
|   | 9711/G1/S01                       | Type G1 hoarding - covered walkway with single deck catch platform (surface– mounted footing) – structural details 1                   |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/G1/S02                       | Type G1 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 2   |
|   | 9711/G1/S03                       | Type G1 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 3   |
|   | 9711/G1/S04                       | Type G1 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 4   |
|   | 9711/G1/S05                       | Type G1 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 5   |
|   | 9711/G2/A01                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – general notes          |
|   | 9711/G2/A02                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – plans                  |
|   | 9711/G2/A03                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – elevation              |
|   | 9711/G2/A04                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – sections               |
|   | 9711/G2/A05                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – construction details 1 |
|   | 9711/G2/A06                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – construction details 2 |
|   | 9711/G2/A07                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – construction details 3 |
|   | 9711/G2/A08                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – construction details 4 |
|   | 9711/G2/S01                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 1   |
|   | 9711/G2/S02                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 2   |
|   | 9711/G2/S03                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 3   |
|   | 9711/G2/S04                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 4   |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/G2/S05                       | Type G2 hoarding - covered walkway with single deck catch platform (surface- mounted footing) – structural details 5                   |
|   | 9711/H1/A01                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – general notes                          |
|   | 9711/H1/A02                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – plans                                  |
|   | 9711/H1/A03                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – elevation                              |
|   | 9711/H1/A04                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – sections                               |
|   | 9711/H1/A05                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 1                 |
|   | 9711/H1/A06                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 2                 |
|   | 9711/H1/A07                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 3                 |
|   | 9711/H1/A08                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 4                 |
|   | 9711/H1/A09                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – sited on carriageway / narrow pavement |
|   | 9711/H1/S01                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 1                   |
|   | 9711/H1/S02                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 2                   |
|   | 9711/H1/S03                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 3                   |
|   | 9711/H1/S04                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 4                   |
|   | 9711/H1/S05                       | Type H1 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 5                   |

| <u>Section</u>  | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b>   |                                   |  |
| Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -         |                                   |  |
| Architectural Services Department, Architectural Standard Drawings  |                                   |  |
| <a href="http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx">http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx</a> |                                   |  |
|   | 9711/H2/A01                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – general notes          |
|   | 9711/H2/A02                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – plans                  |
|   | 9711/H2/A03                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – elevation              |
|   | 9711/H2/A04                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – sections               |
|   | 9711/H2/A05                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 1 |
|   | 9711/H2/A06                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 2 |
|   | 9711/H2/A07                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 3 |
|   | 9711/H2/A08                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – construction details 4 |
|   | 9711/H2/S01                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 1   |
|   | 9711/H2/S02                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 2   |
|   | 9711/H2/S03                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 3   |
|   | 9711/H2/S04                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 4   |
|   | 9711/H2/S05                       | Type H2 hoarding - covered walkway with double deck catch platform (surface- mounted footing) – structural details 5   |

| <u>Section</u>                                    | <u>Drawing No./<br/>Reference</u> | <u>Title</u>   |
|---|-----------------------------------|--|
| <b>Section 10 - Steel and Metal Work (Cont'd)</b> |                                   |  |
| <b>Attached in this Annex 'A'</b>                 |                                   |  |
|   | PB(S)/97904/15B347<br>/D3/FP001   | Internal hoarding - front view                               |
|   | PB(S)/97904/15B347<br>/D3/FP002   | Internal hoarding - sections                                 |
|   | PB(S)/97904/15B347<br>/D3/SW001   | Internal hoarding - detail and sections                      |
|   | PB(S)/97904/15B347<br>/D3/SW002   | Internal hoarding - detail and sections                      |
|   | PB(S)/97904/15B347<br>/D3/SW003   | Internal hoarding - typical panel                            |
|   | PB(S)/97904/15B347<br>/D3/SW004   | Internal hoarding - typical panel                            |
|   | PB(S)/97904/15B347<br>/D3/SW005   | Internal hoarding - detail and sections of steel box         |
|   | PB(S)/97904/15B347<br>/D3/SW006   | Internal hoarding - door frame and door panel                |
|   | PB(S)/97904/15B347<br>/D3/SW007   | Internal hoarding - door frame and door panel                |
|   | Total 16 pages                    | Construction Industry Logo Guidelines issued in January 2011 |

**Section 11 - Plastering and Finishes**

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Highways Department Standard Drawings - Section 5 Landscape Hard Works

[http://www.hyd.gov.hk/en/publications\\_and\\_publicity/publications/technical\\_document/index.html](http://www.hyd.gov.hk/en/publications_and_publicity/publications/technical_document/index.html)

|        |  |
|--------|--|
| H 5136 | Laying paving units with geogrid                                       |
| H 5137 | Permanent reinstatement of pavement - laying paving units with geogrid |

| <u>Section</u> | <u>Drawing No./<br/>Reference</u> | <u>Title</u> |
|----------------|-----------------------------------|--------------|
|----------------|-----------------------------------|--------------|

**Section 12 - Roadwork and Cable Duct**

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Highways Department Standard Drawings - Section 1 Roads

[http://www.hyd.gov.hk/en/publications\\_and\\_publicity/publications/technical\\_document/index.html](http://www.hyd.gov.hk/en/publications_and_publicity/publications/technical_document/index.html)

|        |  |
|--------|--|
| H 1101 | Typical bituminous pavement construction |
| H 1102 | Typical concrete pavement construction   |
| H 1118 | Precast concrete kerbs (Sheet 1 of 2)    |
| H 1119 | Precast concrete kerbs (Sheet 2 of 2)    |

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Architectural Services Department, Structural Standard Drawings

<http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx>

|        |   |
|--------|---|
| SD/026 | Typical detail of external driveway and carpark ground slab on grade (5 of 5) |
|--------|---|

**Section 23 - Geotechnical Works**

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Civil Engineering and Development Department Standard Drawings

[http://www.cedd.gov.hk/eng/publications/standards\\_handbooks\\_cost/stan\\_drawing.html](http://www.cedd.gov.hk/eng/publications/standards_handbooks_cost/stan_drawing.html)

|         |   |
|---------|---|
| C2104/1 | Tree Ring (sheet 1 of 2)                    |
| C2104/2 | Tree Ring (sheet 2 of 2)                    |
| C2106/1 | Typical details of soil nail (Sheet 1 of 8) |
| C2106/2 | Typical details of soil nail (Sheet 2 of 8) |
| C2106/3 | Typical details of soil nail (Sheet 3 of 8) |
| C2106/4 | Typical details of soil nail (Sheet 4 of 8) |
| C2106/5 | Typical details of soil nail (Sheet 5 of 8) |
| C2106/6 | Typical details of soil nail (Sheet 6 of 8) |
| C2106/7 | Typical details of soil nail (Sheet 7 of 8) |
| C2106/8 | Typical details of soil nail (Sheet 8 of 8) |
| C2202   | Typical arrangement of rock dowel           |
| C2205   | Fixing of wire mesh to rock face            |

| <u>Section</u> | <u>Drawing No./<br/>Reference</u> | <u>Title</u> |
|----------------|-----------------------------------|--------------|
|----------------|-----------------------------------|--------------|

**Section 23 - Geotechnical Works (Cont'd)**

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Civil Engineering and Development Department Standard Drawings (Cont'd)

[http://www.cedd.gov.hk/eng/publications/standards\\_handbooks\\_cost/stan\\_drawing.html](http://www.cedd.gov.hk/eng/publications/standards_handbooks_cost/stan_drawing.html)

|         |  |
|---------|--|
| C2302   | Filter blanket for fill slope and filling details at slope crest |
| C2403   | Typical arrangement of raking drains                             |
| C2404   | Relief drain details   |
| C2501/1 | Temporary safety fence Type A (sheet 1 of 2)                     |
| C2501/2 | Temporary safety fence Type A (sheet 2 of 2)                     |
| C2502/1 | Temporary safety fence Type B (sheet 1 of 2)                     |
| C2502/2 | Temporary safety fence Type B (sheet 2 of 2)                     |

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Highways Department Standard Drawings - Section 2 Street Furniture

[http://www.hyd.gov.hk/en/publications\\_and\\_publicity/publications/technical\\_document/index.html](http://www.hyd.gov.hk/en/publications_and_publicity/publications/technical_document/index.html)

|       |                                 |
|-------|---------------------------------|
| H2112 | Beam barriers - Corrugated beam |
|-------|---------------------------------|

Note : The following drawings relevant to this Section of the Schedule can be viewed on the internet website via the pathway referred therein : -

Architectural Services Department, Architectural Standard Drawings

<http://www.archsd.gov.hk/en/publications-publicity/miscellaneous.aspx>

|                 |   |
|-----------------|---|
| 7116_01 (09/00) | Display sign for man-made slopes / retaining walls (1 of 5) |
| 7116_02 (09/00) | Display sign for man-made slopes / retaining walls (2 of 5) |
| 7116_03 (09/00) | Display sign for man-made slopes / retaining walls (3 of 5) |
| 7116_04 (09/00) | Display sign for man-made slopes / retaining walls (4 of 5) |
| 7116_05 (09/00) | Display sign for man-made slopes / retaining walls (5 of 5) |

**Attached in this Annex 'A'**

Issued in SE Instruction No. 04/2012 by Structural Engineering Branch, Architectural Services Department

|           |  |
|-----------|--|
| R1043/3   | Soil nail (double corrosion protection with wire for TDR)    |
| R1043/3-1 | Soil nail (double corrosion protection without wire for TDR) |







NOTES :

- FOR GENERAL NOTES, SEE DRAWING PB(S)/97904/158347/03/FP001.

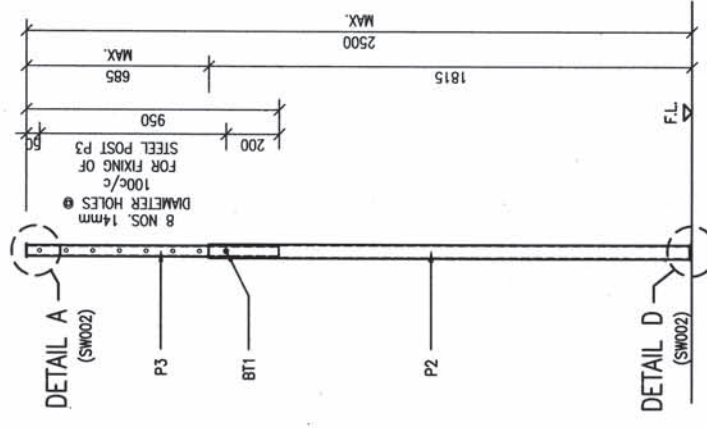
| no.      | date | description   |
|----------|------|---|
| REVISION |      |   |
| drawn    |      | C. W. WONG <i>CW</i>  |
| checked  |      | S. Y. CHAN <i>SY</i>  |
| approved |      | <i>Y. Y. LEUNG</i> 24/6/2016<br><i>Y. F. CHEUNG</i> 20/6/2016 |

|              |  |
|--------------|--|
| contract no. |  |
| file no.     |  |
| project no.  |  |

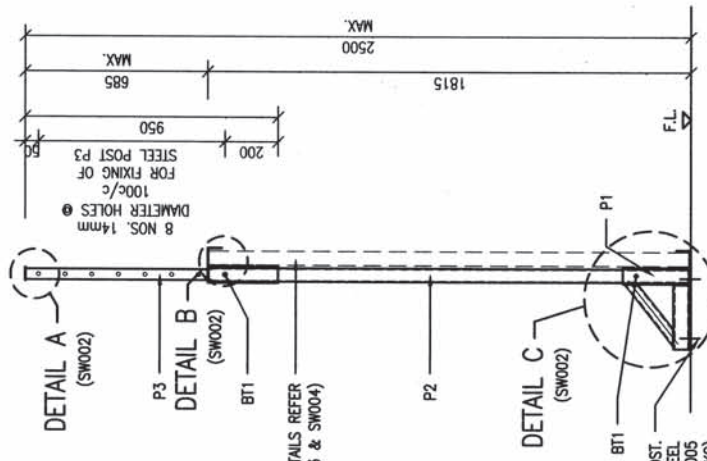
|               |                   |
|---------------|-------------------|
| contract      | INTERNAL HOARDING |
| drawing title | SECTIONS          |

|             |                             |       |        |
|-------------|-----------------------------|-------|--------|
| drawing no. | PB(S)/97904/158347/03/FP002 | scale | 1 : 20 |
|-------------|-----------------------------|-------|--------|

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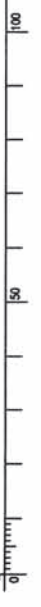


**SEC. B - B**  
 (STEEL POST AT CORNER)



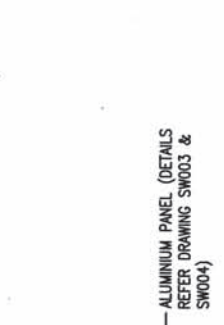
**SEC. A - A**

ANCHOR BOLT FIXING FOR BASE FRAME AT ALTERNATE POST.  
 IF ANCHOR BOLT FIXING IS NOT APPLICABLE, PROVIDE STEEL  
 BOX FILLED WITH SAND BAGS REFER DRAWING SW005  
 (SAND BAGS TOTAL WEIGHT = 75KG)

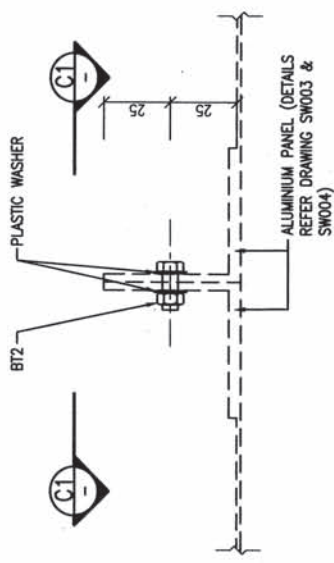


NOTES :

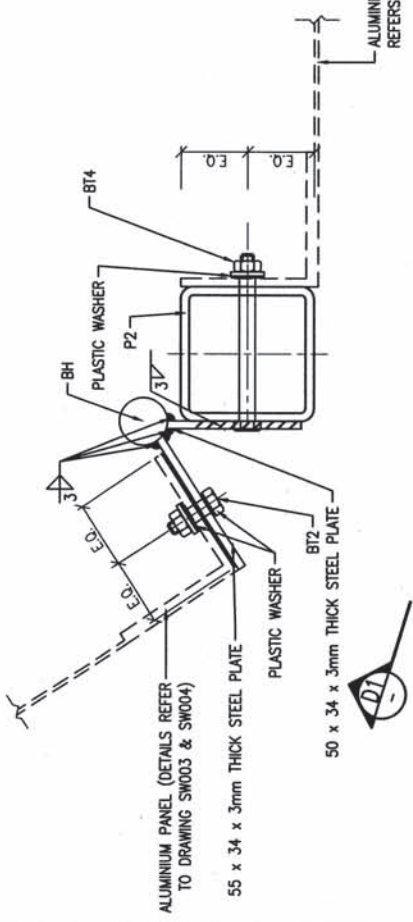
- FOR GENERAL NOTES, SEE DRAWING PB(S)/97904/158347/03/FP001.



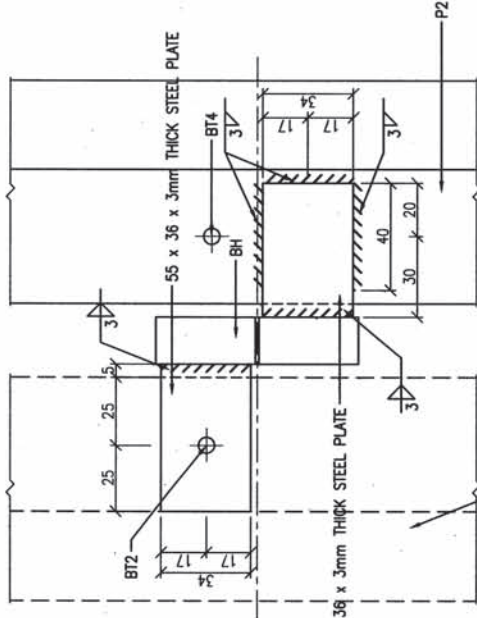
SEC. C1 - C1



SEC. C - C



SEC. D - D



SEC. D1 - D1

| no.                                  | date  | description   |
|--------------------------------------|-------|---|
| REVISION                             |       |   |
| drawn                                |       | C. W. WONG <i>Cw</i>  |
| checked                              |       | S. Y. CHAN <i>yc</i>  |
| approved                             |       | <i>Alley 24/6/2016</i><br>Project Engineer (H. Y. LEUNG)<br><i>20/6/2016</i><br>Project Engineer (Y. F. CHEUNG) |
| contract no.                         |       |   |
| file no.                             |       |   |
| project no.                          |       |   |
| contract<br>INTERNAL HOARDING        |       |   |
| drawing title<br>DETAIL AND SECTIONS |       |   |
| drawing no.                          | scale |   |
| PB(S)/97904/158347/03/SW001          | 1 : 2 |   |

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SERVICES  
DEPARTMENT





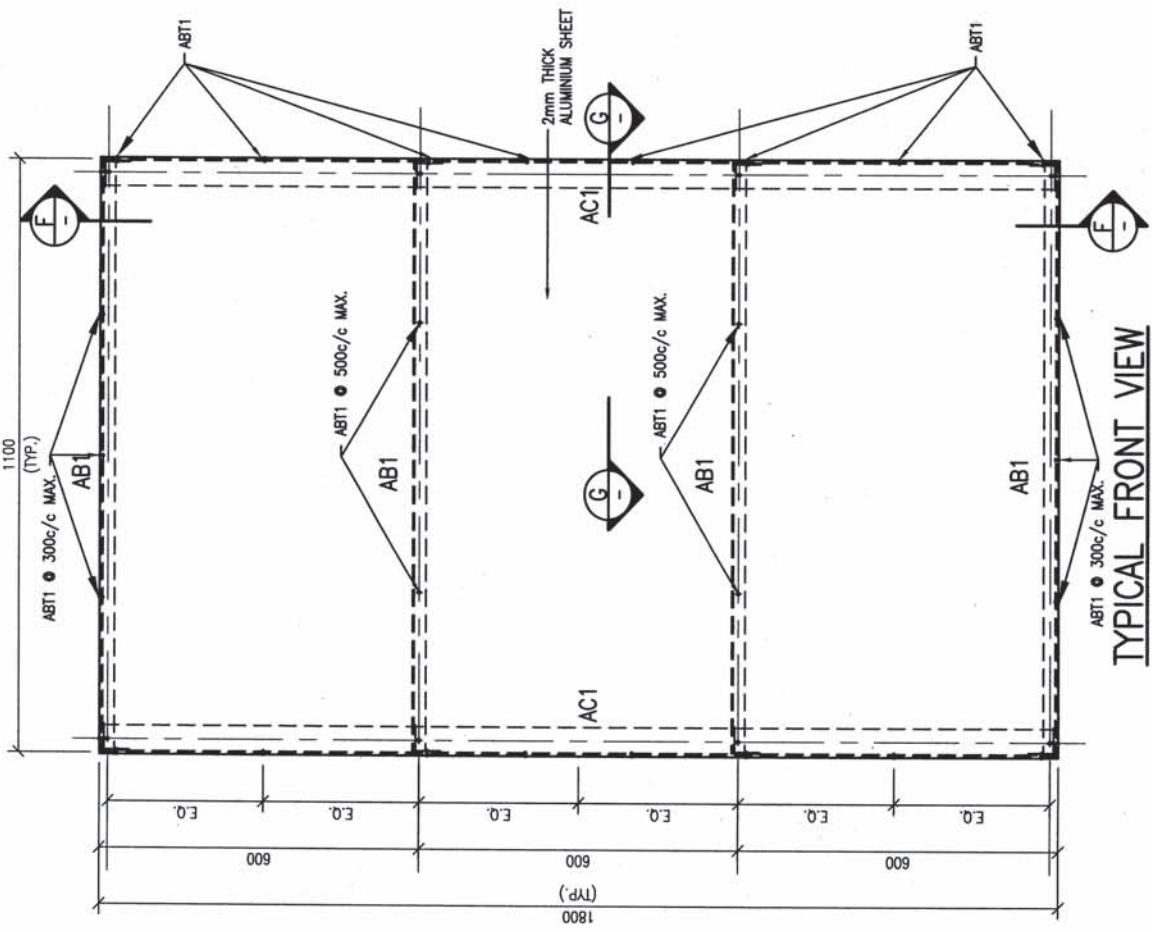
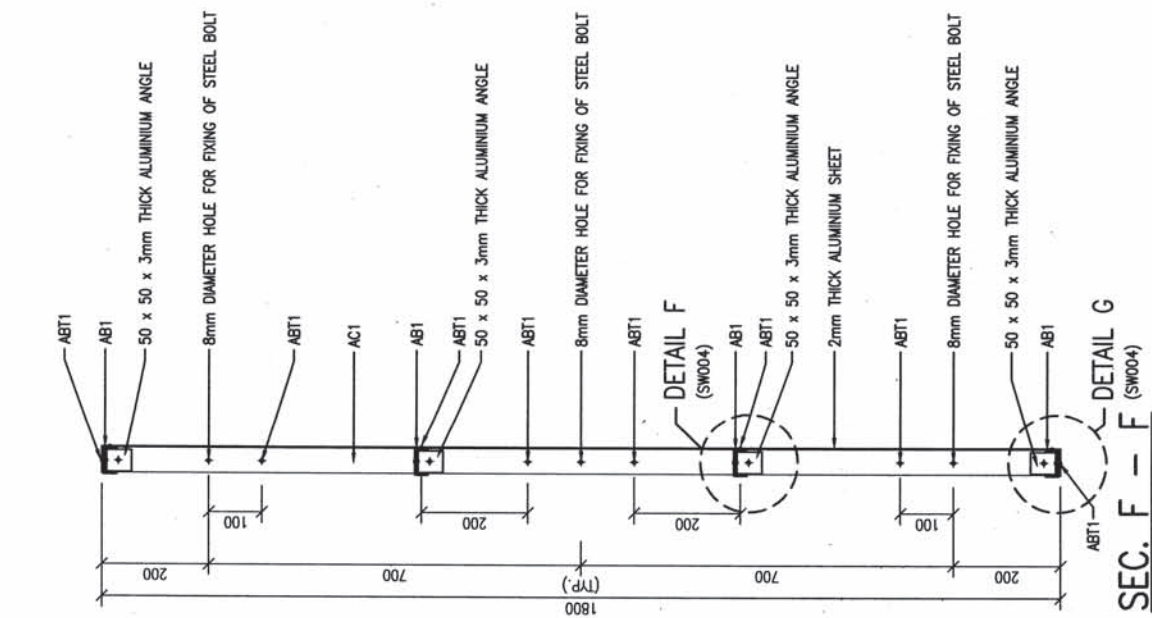


NOTES :  
1. FOR GENERAL NOTES, SEE DRAWING PB(S)/97904/158347/03/FP001.

| no.  | date | description                  |
|--|------|------------------------------|
| REVISION   |      |                              |
| drawn  |      | C. W. WONG                   |
| checked  |      | S. Y. CHAN                   |
| approved   |      | <i>[Signature]</i> 24/6/2016 |
| Design Engineer (R. Y. LEUNG)<br>Project Engineer (Y. F. CHEUNG) |      |                              |
| contract no.   |      |                              |
| file no.   |      |                              |
| project no.  |      |                              |
| contract   |      | INTERNAL HOARDING            |
| drawing title  |      | TYPICAL PANEL                |
| drawing no.  |      |                              |
| scale  |      | 1 : 5<br>1 : 10              |

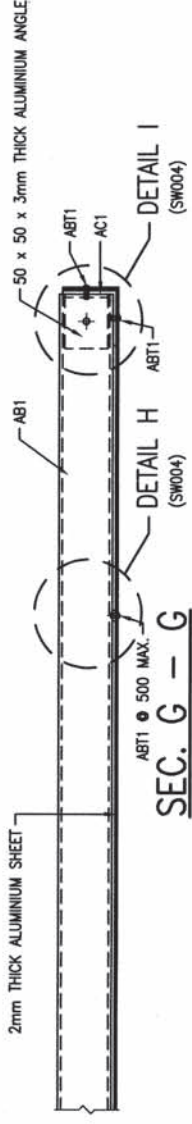
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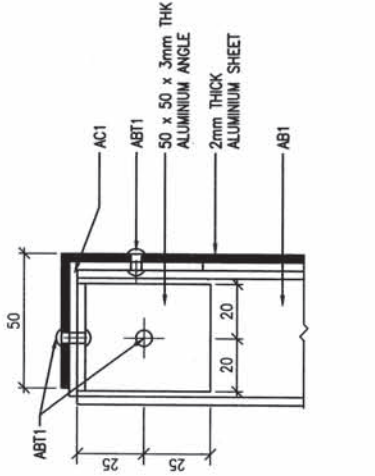
**MEMBER SCHEDULE**

| MEMBER MARK | SIZE OF ALUMINIUM MEMBER              |
|-------------|---------------------------------------|
| AB1         | 50 x 25 x 3mm THICK ALUMINIUM CHANNEL |
| AC1         | 50 x 50 x 3mm THICK ALUMINIUM ANGLE   |
| ABT1        | 4mm DIAMETER THICK ALUMINIUM RIVET    |

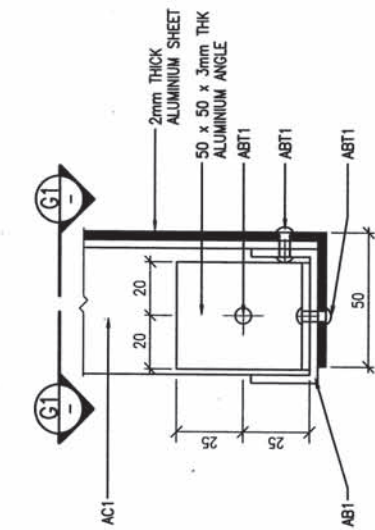


NOTES :

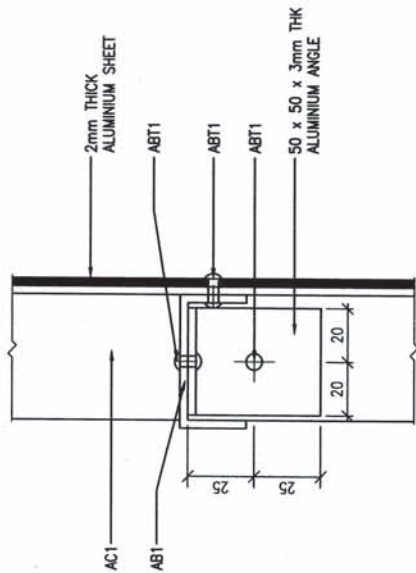
1. FOR GENERAL NOTES, SEE DRAWING PB(S)/97904/158347/03/FP001.



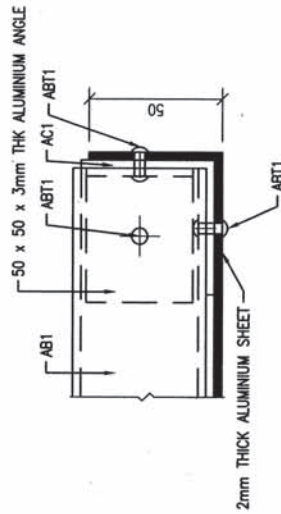
SEC. G1 - G1



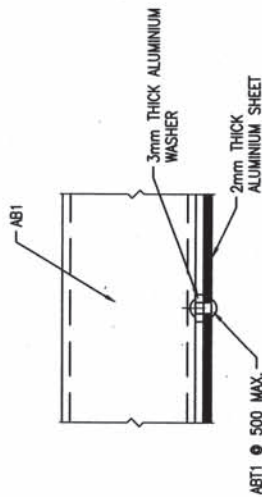
DETAIL G



DETAIL F



DETAIL J



DETAIL H

| no.           | date                               | description |
|---------------|------------------------------------|-------------|
| REVISION      |                                    |             |
| drawn         | C. W. WONG                         | <i>CW</i>   |
| checked       | S. Y. CHAN                         | <i>SY</i>   |
| approved      | <i>[Signature]</i>                 | 24/6/2016   |
|               | Mr. Thomas Ng<br>(H. Y. LEUNG)     | 28/6/2016   |
|               | Project Engineer<br>(Y. F. CHEUNG) |             |
| contract no.  |                                    |             |
| file no.      |                                    |             |
| project no.   |                                    |             |
| contract      | INTERNAL HOARDING                  |             |
| drawing title | TYPICAL PANEL                      |             |
| drawing no.   | PB(S)/97904/158347/03/SW004        |             |
| scale         | 1 : 2                              |             |

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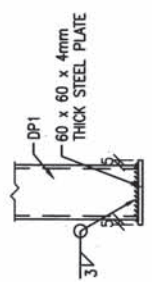
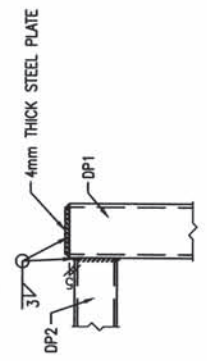
NOTES :  
 1. FOR GENERAL NOTES, SEE DRAWING  
 PB(S)/97904/15B347/D3/FP001.

| no.   | date | description                  |
|---|------|------------------------------|
| REVISION  |      |                              |
| drawn   |      | C. W. WONG                   |
| checked   |      | S. Y. CHAN                   |
| approved  |      | <i>[Signature]</i> 24/6/2016 |
| Head Structural Engineer<br>(M. Y. LEUNG)<br>Project Engineer<br>(Y. F. CHEUNG) |      |                              |
| contract no.  |      |                              |
| file no.  |      |                              |
| project no.   |      |                              |

|                             |                           |
|-----------------------------|---------------------------|
| contract                    | INTERNAL HOARDING         |
| drawing title               | DOOR FRAME AND DOOR PANEL |
| drawing no.                 | scale                     |
| PB(S)/97904/15B347/D3/SW006 | 1 : 5<br>1 : 10           |

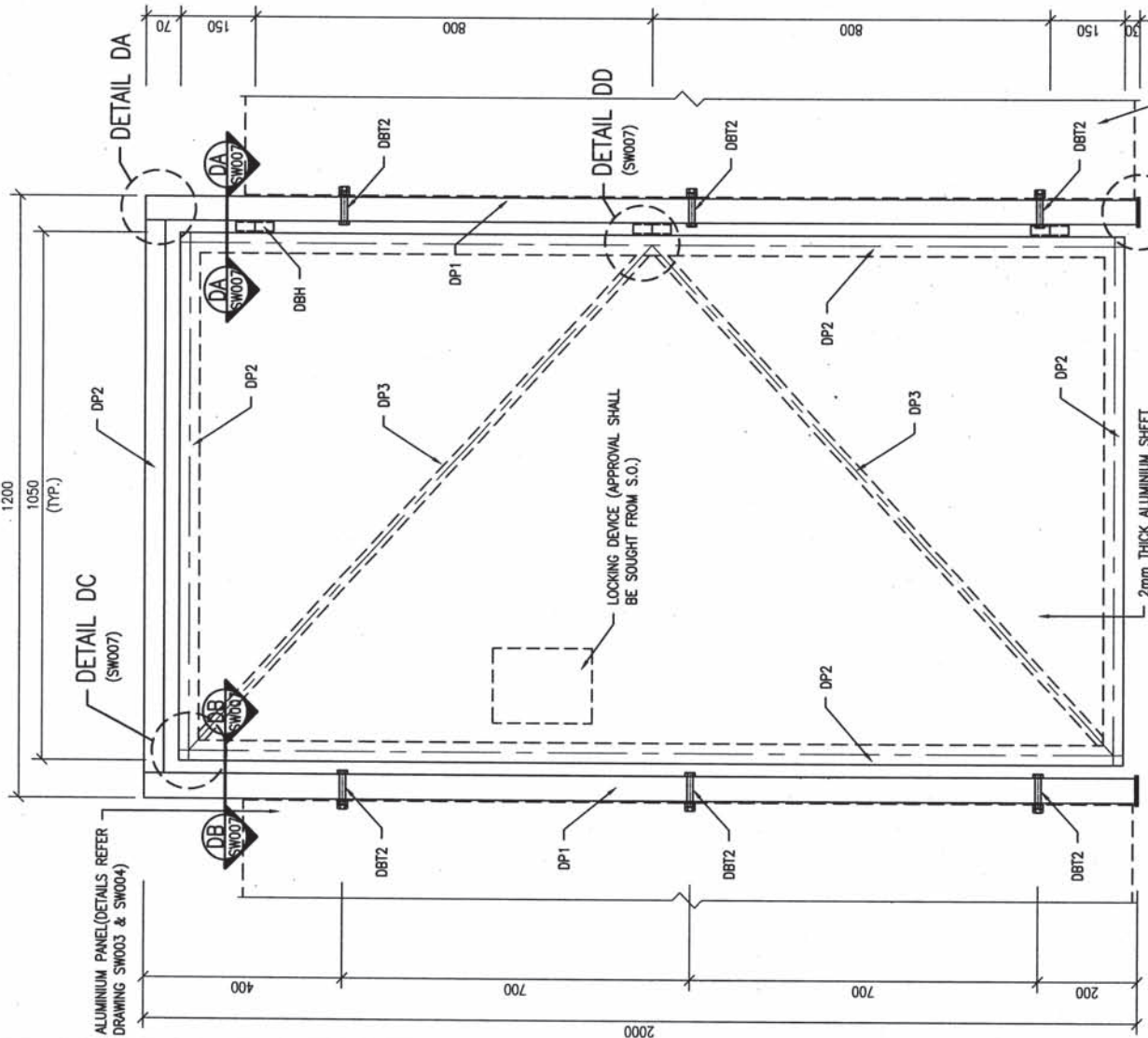
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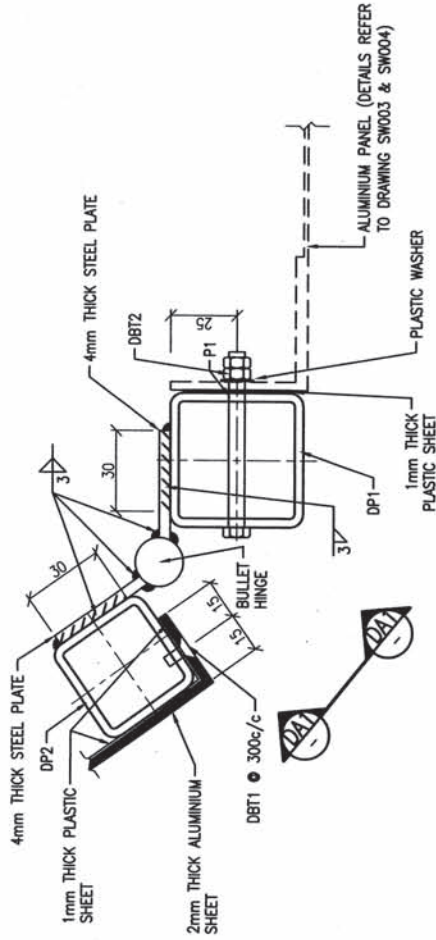
**MEMBER SCHEDULE**

| MEMBER MARK | SIZE OF STEEL MEMBER                           |
|-------------|--|
| DP1         | 50 x 50 x 3.2mm THICK SHS                      |
| DP2         | 40 x 40 x 3.2mm THICK SHS                      |
| DP3         | 20 x 20 x 2.6mm THICK SHS                      |
| DBH         | GMS BULLET HINGE (MIN. 9mm DIAMETER STEEL PIN) |
| DBT1        | 4mm COUNTER SUNKED BOLT                        |
| DBT2        | GRADE 4.6 M6 STEEL THROUGH BOLT                |

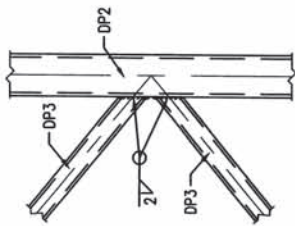


NOTES :

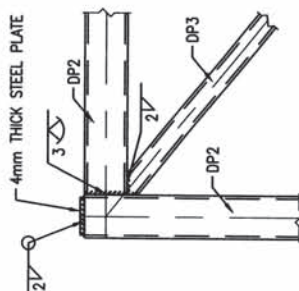
1. FOR GENERAL NOTES, SEE DRAWING PB(S)/97904/15B347/D3/FP001.



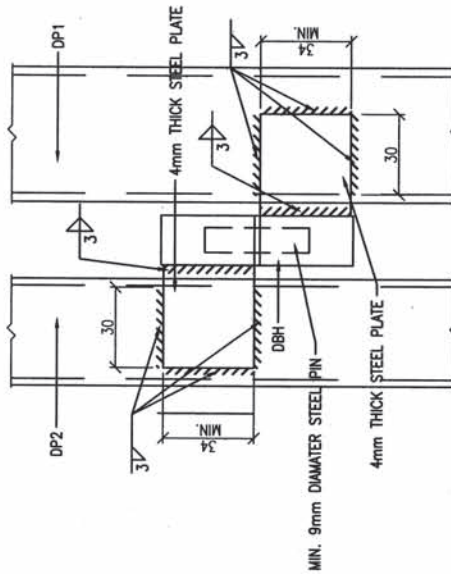
**SEC. DA - DA**  
(1 : 2)



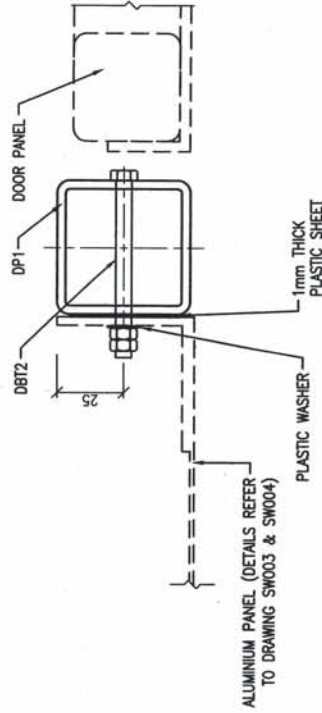
**DETAIL DD**  
(ALUMINIUM SHEET NOT SHOWN FOR CLARITY)  
(1 : 5)



**DETAIL DC**  
(ALUMINIUM SHEET NOT SHOWN FOR CLARITY)  
(1 : 5)



**SEC. DA1 - DA1**  
(ALUMINIUM SHEET NOT SHOWN FOR CLARITY)  
(1 : 2)



**SEC. DB - DB**  
(1 : 2)

| no.                         | date | description                  |
|-----------------------------|------|------------------------------|
| REVISION                    |      |                              |
| drawn                       |      | C. W. WONG                   |
| checked                     |      | S. Y. CHAN                   |
| approved                    |      | <i>[Signature]</i> 24/6/2016 |
| Author (Project Engineer)   |      | (K. Y. LEUNG)                |
| Project Engineer            |      | (Y. F. CHEUNG)               |
| contract no.                |      |                              |
| file no.                    |      |                              |
| project no.                 |      |                              |
| contract                    |      | INTERNAL HOARDING            |
| drawing title               |      | DOOR FRAME AND DOOR PANEL    |
| drawing no.                 |      |                              |
| scale                       |      | 1 : 2                        |
| PB(S)/97904/15B347/D3/SW007 |      |                              |

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# CONSTRUCTION INDUSTRY LOGO GUIDELINES

January 2011

# Contents

|                                     |    |
|-------------------------------------|----|
| <b>The Logo</b>                     |    |
| (Primary Version) (Not Applicable)  | 1  |
| (Secondary Version)                 | 2  |
| (English Version)                   | 3  |
| (Chinese Version)                   | 4  |
| (Linear Version) (Not Applicable)   | 5  |
| <b>Brand Visual Elements</b>        | 6  |
| <b>Pattern</b>                      | 7  |
| <b>Colours</b>                      | 8  |
| <b>Colour Usage</b>                 | 9  |
| Colour Usage (Examples-1)           | 10 |
| Colour Usage (Examples-2)           | 11 |
| <b>Minimum Clear Space And Size</b> | 12 |
| <b>Incorrect Usage</b>              | 13 |
| <b>Typeface</b>                     | 14 |
| <b>Construction Ratio</b>           | 15 |

## The logo (Secondary Version)

The Construction Industry (CI) logo (secondary version) is the optional version. It is composed of three elements: the picture mark, the word mark and the slogan with white background. It should be used whenever meeting to certain marketing purposes.



Construction Industry Logo Guidelines 2

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## The logo (English Version)

The Construction Industry (CI) logo (English version) is the optional version. It should be used whenever meeting to certain marketing purposes.

English version (primary)



Picture mark

Word mark

English version (secondary)



Word mark

Stagen

Picture mark

## The logo (Chinese Version)

The Construction Industry (CI) logo (Chinese version) is the optional version. It should be used whenever meeting to certain marketing purposes.

Chinese version (primary)



Picture mark

Word mark

Chinese version (secondary)



Picture mark

Word mark

Slogan

## Brand Visual Elements

The Construction Industry (CI) brand includes various visual elements: the picture mark, the Chinese name, the English name and the slogan. They can be used separately whenever under certain graphical parameters or meeting certain marketing purposes. Please see (Applications) for reference.



Picture mark

建造業

Chinese name

CONSTRUCTION INDUSTRY

English name

專業團隊 · 優質建造

Professional Corps · Quality Construction

Slogan

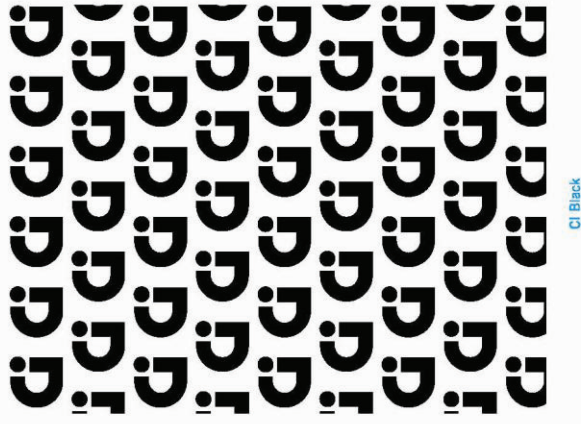
Construction Industry Logo Guidelines 6

### CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

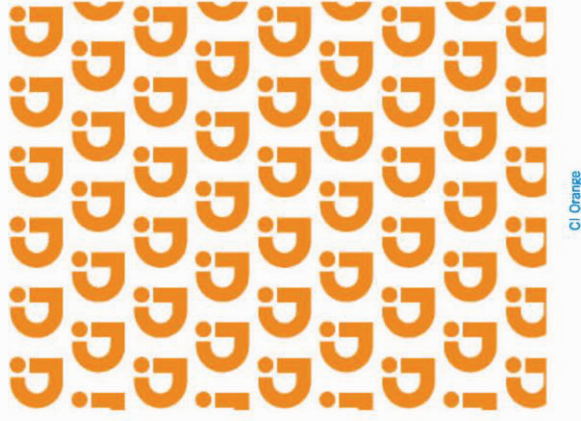
This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Pattern

The CI pattern is designed to enrich the visual identity of the Construction Industry brand. It could be used as background in CI Black or CI Orange and with their tints. It could be enlarged or reduced in size. The principle is to give a harmony impression as a whole. Please see (Applications) for reference.



CI Black



CI Orange

Construction Industry Logo Guidelines 7

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Colours

The Construction Industry (CI) logo is composed of Construction Industry (CI) Green, CI Orange and CI Black. It can be reproduced in process colour and pantone colour for printing. RGB for computer screen display and British Standard BS5252 for constructional related use.



CI Orange



Process: 60M, 100Y  
RGB: 245R, 130G, 32B  
Pantone: 151  
British Standard BS5252: 06 E 53

CI Green



Process: 100C, 100Y, 35K  
RGB: 0R, 121G, 58B  
Pantone: 3415  
British Standard BS5252: 14 E 56

CI Black



Process: 100K  
RGB: 0R, 0G, 0B  
Pantone: Black  
British Standard BS5252: 00 E 53

Construction Industry Logo Guidelines 8

### CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.



## Colour Usage

Apart from full colour logo, the CI logo can be reproduced in other colour options due to printing restrictions or certain marketing purposes required. The guidelines specified below is applicable to all versions of the CI logo, picture mark, Chinese/English name, slogan and pattern. Please see (Applications) for reference.



Single colour versions (positive black) can be applied if full colour logo cannot be used due to printing restrictions.



Special effects may be applied when it is necessary to present a premium look for the CI logo on packaging, souvenirs, etc. The logo can be created in special colours or coating (e.g. gold, silver and bronze).



Single colour versions (reversed white) can be applied if full colour logo cannot be used due to printing restrictions.



It is not suggested to apply special colours and effects (e.g. gold, silver and bronze coating) on the CI logo (secondary version) due to poor readability or slogan.



CI Orange and white on CI Green background can be applied for occasional and special use.



CI Orange, CI Green and white on dark background can be applied for occasional and special use.

Construction Industry Logo Guidelines 9

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Colour Usage (Examples-1)

The following examples are for demonstration only. The principle is to give a harmony impression and clarity of the logo as a whole.



Construction Industry Logo Guidelines 10

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Colour Usage (Examples-2)

The following examples are for demonstration only. The principle is to give a harmony impression and clarity of the logo as a whole.



Construction Industry Logo Guidelines 11

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Minimum Clear Space and Size

In order to preserve the visual clarity and integrity of the CI logo, always follow the minimum clear space guidelines which is the area surrounding the CI logo and is defined by "X" on this page.

Minimum size regulation protects legibility of the CI logo. Never reproduce the picture mark smaller than the size specified below.



Minimum clear space



Minimum clear space



Minimum size



Minimum size

Construction Industry Logo Guidelines 12

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Incorrect Usage

The CI logo should be kept in its original form, colour and principles in any cases. In order to preserve the aesthetic and clarity of the CI logo, please refer to the following examples which demonstrate the incorrect usages of the CI logo.



Do not change the relative size of the logo elements.



Do not distort the logo elements in any way.



Do not reposition the logo elements.



Do not drop shadow or add glowing on the logo.



Do not reproduce in colours other than those specified.



Do not nest the logo with other typefaces.



Do not use borders or frames of any kind around the logo.



Do not outline the logo.



Do not change the original colour brightness.



Do not place the logo on a background which does not give a harmony or clarity as a whole.



Do not use the logo on busy images or photographic backgrounds that do not offer sufficient contrast.

Construction Industry Logo Guidelines 13

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Typeface

The primary English and Chinese typeface are Trade Gothic family and 蒙納黑體 respectively. These fonts should be used for print, web-based and all other productions applications by design consultants and printers.

The secondary English and Chinese typeface are Arial family and 黑體 respectively. These fonts should be used for PC applications.

### Primary English Typeface (Printing and web-based Use)

#### Trade Gothic family:

Trade Gothic® Std Light

Trade Gothic® Std Light Oblique

Trade Gothic® Std Roman

Trade Gothic® Std Oblique

Trade Gothic® Std Bold No. 2

Trade Gothic® Std Bold No. 2 Oblique

### Secondary English Typeface (PC Use)

#### Arial family:

Arial Regular

Arial Italic

Arial Bold

Arial Bold Italic

### Primary Chinese Typeface (Printing and web-based Use)

#### 蒙納黑體：

正線體

中黑體

黑體

粗黑體

### Secondary Chinese Typeface (PC Use)

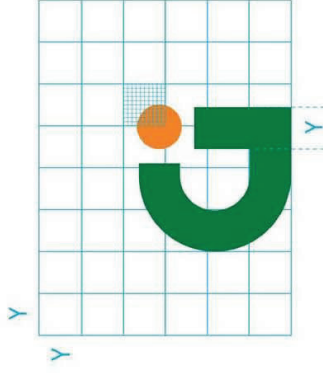
黑體

Construction Industry Logo Guidelines 14

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.

## Construction Industry Logo



Picture mark

$3.5Y(w) \times 3.7Y(h)$   
(To the nearest 1 decimal place)

Construction Industry Logo Guidelines 15

### CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

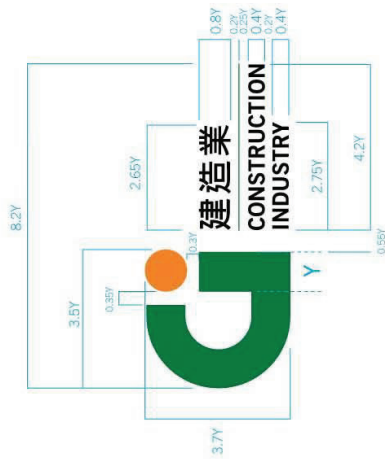
This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.



# Supplement to Construction Industry (CI) Logo Guidelines dated January 2011

## Relative Ratio

In order to preserve the visual clarity and the original form of the CI logo, always follow the relative size of the logo elements which is defined by "Y" on this page.



Picture mark + Work mark

Total size in ratio: 8.2Y(w) x 3.7Y(h)  
(To the nearest 2 decimal places)



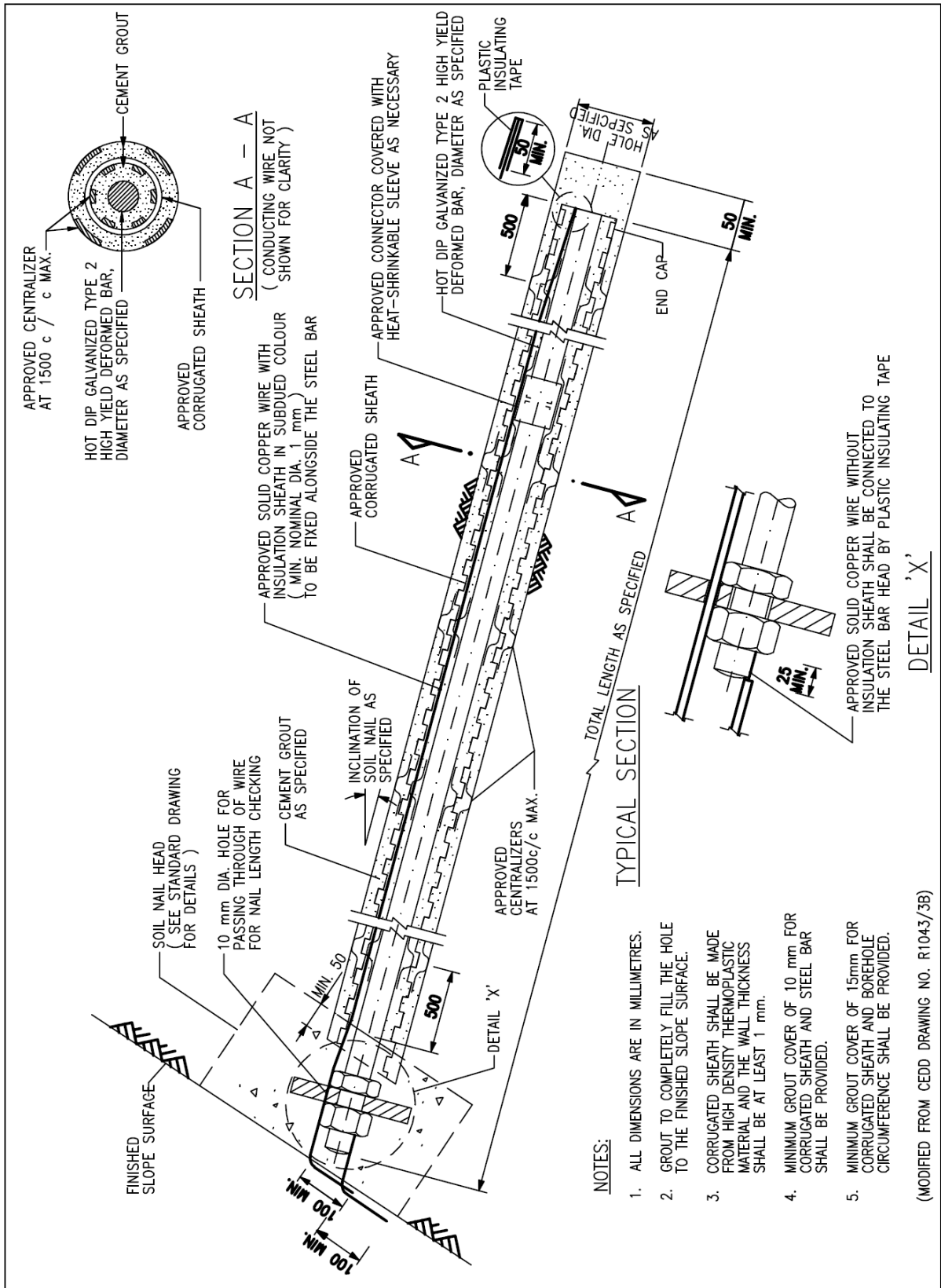
Picture mark + Work mark + Slogan

Total size in ratio: 10.56Y(w) x 3.7Y(h)  
(To the nearest 2 decimal places)

## CONSTRUCTION INDUSTRY (CI) LOGO DESIGN

This CI logo shall be displayed alternately with the departmental logo on the hoardings installed. The Contractor shall confirm with the Supervising Officer on the space, size, colours and details of the logo.





APPROVED CENTRALIZER AT 1500 c / c MAX.

HOT DIP GALVANIZED TYPE 2 HIGH YIELD DEFORMED BAR, DIAMETER AS SPECIFIED

APPROVED CORRUGATED SHEATH

**SECTION A - A**  
(CONDUCTING WIRE NOT SHOWN FOR CLARITY)

APPROVED SOLID COPPER WIRE WITH INSULATION SHEATH IN SUBDUED COLOUR (MIN. NOMINAL DIA. 1 mm) TO BE FIXED ALONGSIDE THE STEEL BAR

APPROVED CORRUGATED SHEATH

APPROVED CONNECTOR COVERED WITH HEAT-SHRINKABLE SLEEVE AS NECESSARY

HOT DIP GALVANIZED TYPE 2 HIGH YIELD DEFORMED BAR, DIAMETER AS SPECIFIED

PLASTIC INSULATING TAPE

END CAP

**TYPICAL SECTION**


APPROVED SOLID COPPER WIRE WITHOUT INSULATION SHEATH SHALL BE CONNECTED TO THE STEEL BAR HEAD BY PLASTIC INSULATING TAPE

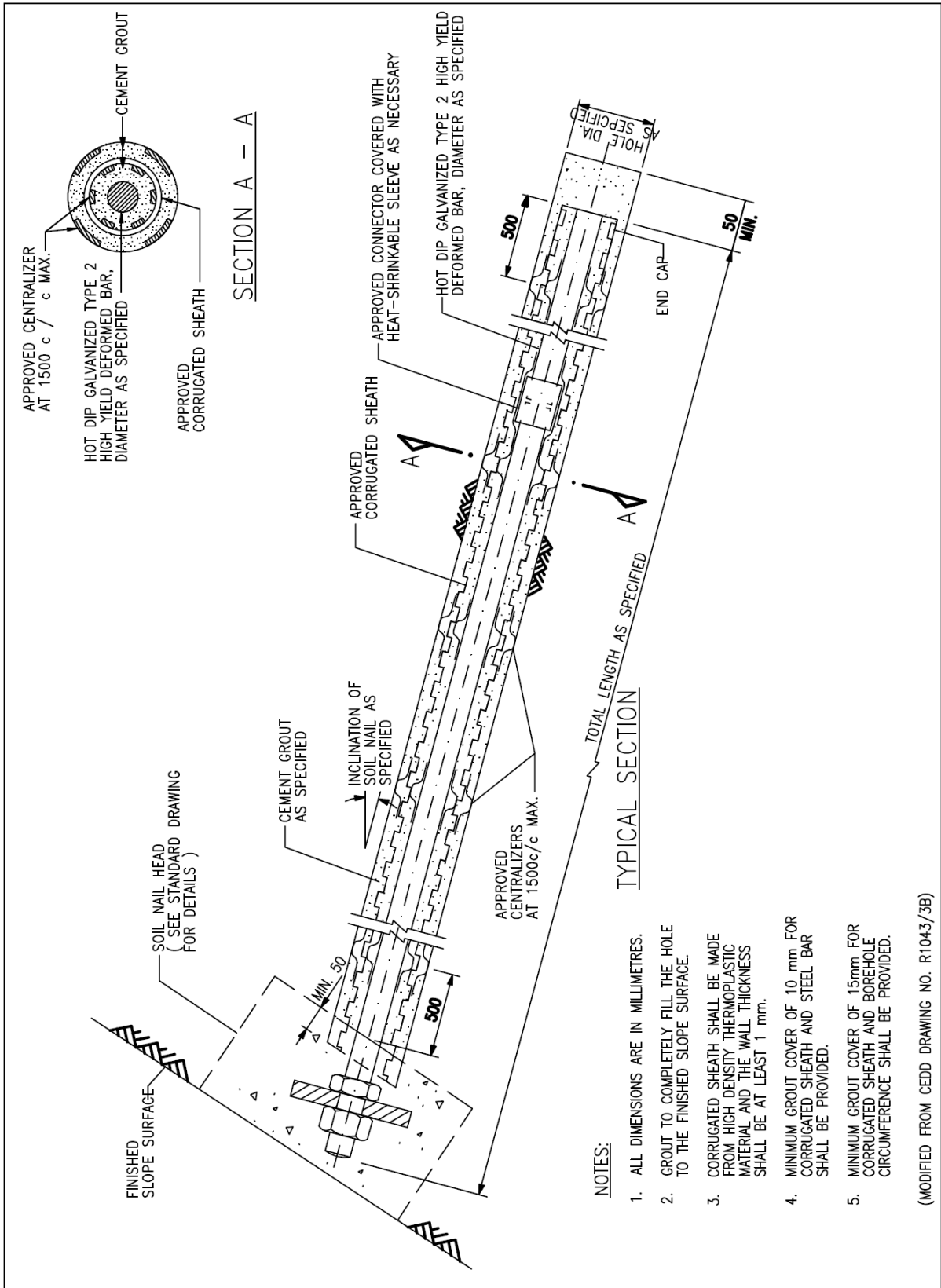
**DETAIL 'X'**

**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. GROUT TO COMPLETELY FILL THE HOLE TO THE FINISHED SLOPE SURFACE.
3. CORRUGATED SHEATH SHALL BE MADE FROM HIGH DENSITY THERMOPLASTIC MATERIAL AND THE WALL THICKNESS SHALL BE AT LEAST 1 mm.
4. MINIMUM GROUT COVER OF 10 mm FOR CORRUGATED SHEATH AND STEEL BAR SHALL BE PROVIDED.
5. MINIMUM GROUT COVER OF 15mm FOR CORRUGATED SHEATH AND BOREHOLE CIRCUMFERENCE SHALL BE PROVIDED.

(MODIFIED FROM CEDD DRAWING NO. R1043/3B)


|   |                            |   |                           |
|---|----------------------------|---|---------------------------|
| <p>title<br/><b>SOIL NAIL (DOUBLE CORROSION PROTECTION WITH WIRE FOR TDR)</b></p> | <p>date<br/>April 2012</p> | <p>drawing no.<br/><b>R1043/3</b></p>   | <p>scale<br/>AS SHOWN</p> |
| <p>office<br/><b>STRUCTURAL ENGINEERING BRANCH</b></p>                            |                            |  <p><b>ARCHITECTURAL SERVICES DEPARTMENT</b></p> |                           |



**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. GROUT TO COMPLETELY FILL THE HOLE TO THE FINISHED SLOPE SURFACE.
3. CORRUGATED SHEATH SHALL BE MADE FROM HIGH DENSITY THERMOPLASTIC MATERIAL AND THE WALL THICKNESS SHALL BE AT LEAST 1 mm.
4. MINIMUM GROUT COVER OF 10 mm FOR CORRUGATED SHEATH AND STEEL BAR SHALL BE PROVIDED.
5. MINIMUM GROUT COVER OF 15mm FOR CORRUGATED SHEATH AND BOREHOLE CIRCUMFERENCE SHALL BE PROVIDED.

(MODIFIED FROM CEDD DRAWING NO. R1043/3B)

|  |  |                                 |                   |
|--|--|---------------------------------|-------------------|
| title<br><b>SOIL NAIL (DOUBLE CORROSION PROTECTION WITHOUT WIRE FOR TDR)</b> | date<br>April 2012   | drawing no.<br><b>R1043/3-1</b> | scale<br>AS SHOWN |
| office<br><b>STRUCTURAL ENGINEERING BRANCH</b>                               |  <b>ARCHITECTURAL SERVICES DEPARTMENT</b> |                                 |                   |

**ANNEX 'B' -**

**GROUPING OF PLANT MATERIALS**

## ANNEX 'B' - GROUPING OF PLANT MATERIALS

## Trees – Grouping

(1) Group A consists of : -

|   |           |
|---|-----------|
| <i>Acacia auriculiformis</i>                | 耳果相思      |
| <i>Acacia confusa</i>                       | 台灣相思      |
| <i>Acacia mangium</i>                       | 大葉相思      |
| <i>Bauhinia purpurea</i>                    | 紅花羊蹄甲     |
| <i>Bauhinia variegata</i>                   | 宮粉羊蹄甲     |
| <i>Bischofia polycarpa</i>                  | 重陽木       |
| <i>Bombax ceiba</i>                         | 木棉        |
| <i>Cassia fistula</i>                       | 豬腸豆       |
| <i>Senna surattensis</i>                    | 黃槐        |
| <i>Casuarina equisetifolia</i>              | 木麻黃       |
| <i>Delonix regia</i>                        | 鳳凰木       |
| <i>Elaeocarpus h inanensis</i>              | 水石榕       |
| <i>Erythrina corallodendron</i>             | 龍牙花       |
| <i>Erythrina variegata</i>                  | 刺桐        |
| <i>Eucalyptus camaldulensis</i>             | 赤桉        |
| <i>Eucalyptus citriodora</i>                | 檸檬桉       |
| <i>Eucalyptus robusta</i>                   | 大葉桉       |
| <i>Eucalypt s tere icornis</i>              | 細葉桉       |
| <i>Eucalyptus torelliana</i>                | 毛葉桉(紅毛桉)  |
| <i>Ficus altissima</i>                      | 高山榕       |
| <i>Ficus benjamina</i>                      | 垂榕        |
| <i>Ficus binnendijkii 'Alii'</i>            | 長葉榕       |
| <i>Ficus elastica</i>                       | 印度榕(印度橡樹) |
| <i>Ficus rumphii</i>                        | 心葉榕(假菩提樹) |
| <i>Ficus wightiana</i>                      | 雷州榕       |
| <i>Lagerstroemia speciosa</i>               | 洋紫薇(大花紫薇) |
| <i>Lophostemon conf rtus</i>                | 紅膠木       |
| <i>Melaleuca cajuputi subsp. cumingiana</i> | 白千層       |
| <i>Mesua ferrea</i>                         | 鐵力木       |
| <i>Michelia x alba</i>                      | 白蘭        |
| <i>Peltophorum pterocarpum</i>              | 雙翼豆       |
| <i>Plumeria obtusa</i>                      | 鈍葉雞蛋花     |
| <i>Plumeria rubra</i>                       | 雞蛋花       |
| <i>Salix babylonica</i>                     | 垂柳        |
| <i>Spathodea campanulata</i>                | 火焰木       |
| <i>Syzygium cumini</i>                      | 海南蒲桃      |
| <i>Syzygium jambos</i>                      | 蒲桃        |
| <i>Terminalia catappa</i>                   | 欖仁樹       |
| <i>Terminalia mantaly</i>                   | 細葉欖仁      |

**Trees – Grouping (Cont'd)**

(2) Group B consists of : -

|   |              |
|---|--------------|
| <i>Aleurites moluccana</i>                    | 石栗           |
| <i>Alnus japonica</i>                         | 赤楊           |
| <i>Bauhinia variegata</i> var. <i>candida</i> | 白花羊蹄甲        |
| <i>Callistemon rigidus</i>                    | 紅千層          |
| <i>Callistemon viminalis</i>                  | 串錢柳          |
| <i>Camptotheca acuminata</i>                  | 喜樹           |
| <i>Cananga odorata</i>                        | 依蘭(依蘭香)      |
| <i>Senna siamea</i>                           | 鐵刀木          |
| <i>Senna spectabilis</i>                      | 美國槐          |
| <i>Ceiba pentandra</i>                        | 吉貝(爪哇木棉)     |
| <i>Chorisia speciosa</i>                      | 美人樹          |
| <i>Chukrasia tabularia</i>                    | 麻棟           |
| <i>Crateva trifoliata</i>                     | 鈍葉魚木         |
| <i>Crateva unilocularis</i>                   | 樹頭菜          |
| <i>Dracontomelon duperreanum</i>              | 人面子          |
| <i>Elaeocarpus apiculatus</i>                 | 尖葉杜英         |
| <i>Elaeocarpus balansae</i>                   | 大葉杜英         |
| <i>Elaeocarpus decipiens</i>                  | 杜英           |
| <i>Elaeocarpus sylvestris</i>                 | 山杜英(膽八樹)     |
| <i>Erythrina crista-galli</i>                 | 雞公花          |
| <i>Erythrina speciosa</i>                     | 象牙花          |
| <i>Erythrina variegata</i> 'Parcellii'        | 花葉刺桐         |
| <i>Eucalyptus calophylla</i>                  | 美葉桉          |
| <i>Ficus benjamina</i> 'Variegata'            | 花葉垂榕         |
| <i>Ficus religiosa</i>                        | 菩提樹          |
| <i>Firmiana simplex</i>                       | 梧桐           |
| <i>Glochidion hirsutum</i>                    | 厚葉算盤子        |
| <i>Grevillea banksii</i>                      | 紅花銀樺         |
| <i>Grevillea robusta</i>                      | 銀樺           |
| <i>Jacaranda mimosifolia</i>                  | 藍花楹          |
| <i>Khaya senegalensis</i>                     | 非洲桃花心木(非洲棟)  |
| <i>Koelreuteria bipinnata</i>                 | 複羽葉欒樹        |
| <i>Koelreuteria elegans</i>                   | 台灣欒樹         |
| <i>Ligustrum amamianum</i>                    | 台灣女貞         |
| <i>Machilus chekiangensis</i>                 | 浙江潤楠(長序潤楠)   |
| <i>Machilus gamblei</i>                       | 黃心樹(芳槁潤楠)    |
| <i>Machilus pauhoi</i>                        | 刨花潤楠         |
| <i>Magnolia grandiflora</i>                   | 荷花玉蘭(洋玉蘭)    |
| <i>Melia azedarach</i>                        | 棟(苦棟)(森樹)    |
| <i>Melicope pteleifolia</i>                   | 密茛萸(三椏苦)     |
| <i>Michelia champaca</i>                      | 黃蘭           |
| <i>Michelia macclurei</i>                     | 展毛含笑         |
| <i>Nauclea orientalis</i>                     | 東方烏檀         |
| <i>Pandanus tectorius</i>                     | 露兜樹          |
| <i>Pterocarpus indicus</i>                    | 紫檀(牛血樹)      |
| <i>Pterocarya stenoptera</i>                  | 楓楊           |
| <i>Schefflera actinophylla</i>                | 羅傘樹(澳洲大葉鴨腳木) |
| <i>Schima wallichii</i>                       | 紅荷(峨眉木荷)     |

**Trees – Grouping (Cont'd)**

(2) Group B consists of : - (Cont'd)

|                              |              |
|------------------------------|--------------|
| <i>Tabebuia chrysantha</i>   | 黃鐘木(黃花風鈴木)   |
| <i>Tabebuia impetiginosa</i> | 紅花風鈴木        |
| <i>Tabebuia rosea</i>        | 洋紅風鈴木(玫瑰風鈴木) |
| <i>Tamarindus indica</i>     | 酸豆(羅望子)      |
| <i>Tectona grandis</i>       | 柚木           |
| <i>Tipuana tipu</i>          | 大班木          |
| <i>Toona sinensis</i>        | 香椿           |
| <i>Vernicia fordii</i>       | 油桐(三年桐)      |

(3) Group C consists of : -

|  |         |
|--|---------|
| <i>Adenanthera microsperma</i>                     | 海紅豆     |
| <i>Albizia saman</i>                               | 雨豆樹     |
| <i>Alstonia scholaris</i>                          | 糖膠樹     |
| <i>Artocarpus altilis</i>                          | 麩包樹     |
| <i>Artocarpus macrocarpus</i>                      | 菠蘿密     |
| <i>Bauhinia tomentosa</i>                          | 黃花羊蹄甲   |
| <i>Bixa orellana</i>                               | 紅木(胭脂木) |
| <i>Brachychiton acerifolius</i>                    | 槭葉蘋婆    |
| <i>Cassia javanica</i>                             | 爪哇決明    |
| <i>Cassia javanica</i> var. <i>indochinensis</i>   | 節果決明    |
| <i>Dillenia indica</i>                             | 第倫桃     |
| <i>Dracaena draco</i>                              | 龍血樹(龍樹) |
| <i>Elaeocarpus angustifolius</i>                   | 圓果杜英    |
| <i>Erythrina caffra</i>                            | 南非刺桐    |
| <i>Firmiana simplex</i>                            | 梧桐      |
| <i>Garcinia spicata</i>                            | 福木      |
| <i>Garcinia subelliptica</i>                       | 菲島福木    |
| <i>Osmanthus fragrans</i>                          | 桂花(木犀)  |
| <i>Paulownia fortunei</i>                          | 泡桐      |
| <i>Paulownia tomentosa</i>                         | 毛泡桐     |
| <i>Salix babylonica</i> var. <i>Glandulopilosa</i> | 腺毛垂柳    |
| <i>Sophora japonica</i>                            | 槐       |
| <i>Swietenia mahogany</i>                          | 桃花心木    |
| <i>Xanthostemon chrysanthus</i>                    | 金蒲桃     |

(4) Group D consists of : -

|                                 |          |
|---------------------------------|----------|
| <i>Albizia lebbbeck</i>         | 大葉合歡     |
| <i>Bischofia javanica</i>       | 秋楓       |
| <i>Bridelia tomentosa</i>       | 土密樹      |
| <i>Broussonetia papyrifera</i>  | 構樹       |
| <i>Canarium album</i>           | 白欖       |
| <i>Castanopsis fissa</i>        | 裂豆錐栗(鰲蒴) |
| <i>Celtis sinensis</i>          | 朴樹       |
| <i>Celtis timorensis</i>        | 假玉桂      |
| <i>Cerbera manghas</i>          | 海杧果      |
| <i>Choerospondias axillaris</i> | 南酸棗(酸棗)  |
| <i>Cinnamomum burmannii</i>     | 陰香       |
| <i>Cinnamomum camphora</i>      | 樟樹       |
| <i>Cinnamomum parthenoxylon</i> | 黃樟       |

**Trees – Grouping (Cont'd)**

(4) Group D consists of : - (Cont'd)

|  |            |
|--|------------|
| <i>Cleistocalyx operculatus</i>                | 水翁         |
| <i>Diospyros morrisiana</i>                    | 羅浮柿        |
| <i>Elaeocarpus chinensis</i>                   | 中華杜英(野杜英)  |
| <i>Ficus hirta</i>                             | 粗葉榕(牛奶仔)   |
| <i>Ficus hispida</i>                           | 對葉榕(牛乳樹)   |
| <i>Ficus microcarpa</i>                        | 細葉榕        |
| <i>Ficus pandurata</i>                         | 琴葉榕        |
| <i>Ficus superba</i> var. <i>japonica</i>      | 筆管榕        |
| <i>Ficus variegata</i> var. <i>chlorocarpa</i> | 青果榕        |
| <i>Ficus virens</i> var. <i>sublanceolata</i>  | 大葉榕        |
| <i>Gordonia axillaris</i>                      | 大頭茶        |
| <i>Hibiscus tiliaceus</i>                      | 黃槿         |
| <i>Ilex rotunda</i>                            | 鐵冬青        |
| <i>Ilex rotunda</i> var. <i>microcarpa</i>     | 小果鐵冬青      |
| <i>Liquidambar formosana</i>                   | 楓香(楓樹)     |
| <i>Lithocarpus glaber</i>                      | 柯          |
| <i>Litsea glutinosa</i>                        | 潺槁樹        |
| <i>Litsea monopetala</i>                       | 假柿樹        |
| <i>Macaranga tanarius</i>                      | 血桐         |
| <i>Mallotus paniculatus</i>                    | 白楸         |
| <i>Microcos paniculata</i>                     | 破布葉(布渣葉)   |
| <i>Myrica rubra</i>                            | 楊梅         |
| <i>Phyllanthus emblica</i>                     | 油甘子        |
| <i>Pongamia pinnata</i>                        | 水黃皮        |
| <i>Rhus hypoleuca</i>                          | 白背鹽膚木(白背漆) |
| <i>Rhus succedanea</i>                         | 木蠟樹(野漆樹)   |
| <i>Sapindus saponaria</i>                      | 無患子(木患子)   |
| <i>Sapium discolor</i>                         | 山烏柏        |
| <i>Sapium sebiferum</i>                        | 烏柏         |
| <i>Schefflera heptaphylla</i>                  | 鵝掌柴(鴨腳木)   |
| <i>Schima superba</i>                          | 木荷(荷樹)     |
| <i>Sterculia lanceolata</i>                    | 假蘋婆        |
| <i>Syzygium levinei</i>                        | 山蒲桃(李萬蒲桃)  |
| <i>Thespesia populnea</i>                      | 繖楊(恒春黃槿)   |

(5) Group E consists of : -

|                                   |            |
|-----------------------------------|------------|
| <i>Alangium chinense</i>          | 八角楓        |
| <i>Aporosa dioica</i>             | 銀柴(大沙葉)    |
| <i>Archidendron clypearia</i>     | 猴耳環        |
| <i>Bauhinia blakeana</i>          | 洋紫荊        |
| <i>Camellia oleifera</i>          | 油茶         |
| <i>Castanopsis fabri</i>          | 羅浮錐(白櫟)    |
| <i>Cordia dichotoma</i>           | 破布木        |
| <i>Cratoxylum cochinchinense</i>  | 黃牛木        |
| <i>Cryptocarya chinensis</i>      | 厚殼桂        |
| <i>Cryptocarya concinna</i>       | 黃果厚殼桂(黃果桂) |
| <i>Cyclobalanopsis championii</i> | 嶺南青岡       |
| <i>Cyclobalanopsis edithiae</i>   | 華南青岡       |

**Trees – Grouping (Cont'd)**

(5) Group E consists of : - (Cont'd)

|   |            |
|---|------------|
| <i>Cyclobalanopsis myrsinifolia</i>       | 小葉青岡       |
| <i>Cyclobalanopsis neglecta</i>           | 竹葉青岡       |
| <i>Dalbergia balansae</i>                 | 南嶺黃檀       |
| <i>Endospermum chinense</i>               | 黃桐         |
| <i>Garcinia oblongifolia</i>              | 嶺南山竹子(黃牙果) |
| <i>Homalium cochinchinensis</i>           | 天料木        |
| <i>Machilus breviflora</i>                | 短序潤楠(短花楠)  |
| <i>Machilus thunbergii</i>                | 紅楠         |
| <i>Machilus velutina</i>                  | 絨毛潤楠       |
| <i>Ormosia emarginata</i>                 | 凹葉紅豆       |
| <i>Oroxylum indicum</i>                   | 木蝴蝶(千層紙)   |
| <i>Osmanthus marginatus (O. sinensis)</i> | 月桂         |
| <i>Pistacia chinensis</i>                 | 黃連木        |
| <i>Prunus phaeosticta</i>                 | 腺葉桂櫻       |
| <i>Pyrus calleryana</i>                   | 豆梨         |
| <i>Reevesia thyrsoidea</i>                | 梭羅樹        |
| <i>Symplocos glauca</i>                   | 羊舌樹        |
| <i>Syzygium hancei</i>                    | 韓氏蒲桃(紅鱗蒲桃) |
| <i>Tetradium glabrifolium</i>             | 棟葉吳茱萸      |
| <i>Tutcheria spectabilis</i>              | 石筆木        |
| <i>Ulmus parvifolia</i>                   | 榔榆         |
| <i>Viburnum odoratissimum</i>             | 珊瑚樹        |

(6) Group F consists of : -

|                              |              |
|------------------------------|--------------|
| <i>Ailanthus fordii</i>      | 福氏臭椿         |
| <i>Aquilaria sinensis</i>    | 土沉香(牙香樹、白木香) |
| <i>Camellia crapnelliana</i> | 紅皮糙果茶(克氏茶)   |
| <i>Camellia granthamiana</i> | 大苞山茶(葛量洪茶)   |
| <i>Litsea cubeba</i>         | 木薑子(山蒼樹)     |
| <i>Rhodoleia championii</i>  | 紅花荷(吊鐘王)     |

(7) Group G consists of other tree species : -



**Conifers – Grouping and Sizes**

(i) The overall heights and groups are as follows:

|         | Small Conifer<br>(overall height in mm) | Large Conifer<br>(overall height in mm) | Extra-large Conifer<br>(overall height in mm) |
|---------|---|---|---|
| Group A | Upto 1500                               | 1501-2700                               | Exceeding 2700                                |
| Group B | Upto 1500                               | 1501-2100                               | Exceeding 2100                                |
| Group C | Upto 1500                               | 1501-1800                               | Exceeding 1800                                |
| Group D | Upto 1500                               | 1501-2100                               | Exceeding 2100                                |

(ii) Conifers are divided into 4 groups by species:

Group A consists of:

|                                |          |
|--------------------------------|----------|
| <i>Araucaria cunninghamii</i>  | 南洋杉(花旗杉) |
| <i>Araucaria heterophylla</i>  | 異葉南洋杉    |
| <i>Cunninghamia lanceolata</i> | 杉木       |
| <i>Cupressus funebris</i>      | 柏木(垂柏)   |
| <i>Glyptostrobus pensilis</i>  | 水松       |
| <i>Keteleeria fortunei</i>     | 油杉       |
| <i>Taxodium distichum</i>      | 落羽杉      |

Group B consists of:

|                                |     |
|--------------------------------|-----|
| <i>Podocarpus macrophyllus</i> | 羅漢松 |
| <i>Thuja orientalis</i>        | 側柏  |

Group C consists of:

|  |    |
|--|----|
| <i>Juniperus chinensis</i>             | 圓柏 |
| <i>Juniperus chinensis cv. Kaizuca</i> | 龍柏 |
| <i>Nageia nagi</i>                     | 竹柏 |

Group D consists of other conifer species:

**Palms and Cycas – Grouping and Sizes**

(i) The overall heights and groups are as follows:

|         | Small Palm<br>(overall height<br>in mm) | Medium Palm<br>(overall height<br>in mm) | Large Palm<br>(overall height<br>in mm) | Extra-large Palm<br>(overall height<br>in mm) |
|---------|---|--|---|---|
| Group A | 300-500                                 | 501-1000                                 | 1001-1500                               | Exceeding 1500                                |
| Group B | 500-1000                                | 1001-1500                                | 1501-2500                               | Exceeding 2500                                |
| Group C | 500-1000                                | 1001-2000                                | 2001-3000                               | Exceeding 3000                                |
| Group D | 2000-3000                               | 3001-4000                                | 4001-5000                               | Exceeding 5000                                |
| Group E | 500-1000                                | 1001-1500                                | NA                                      | NA  |
| Group F | 500-1000                                | 1001-2000                                | 2001-3000                               | Exceeding 3000                                |

(ii) Palms are divided into 6 groups by species:

Group A consists of:

*Cycas revoluta*  
*Zamia furfuracea*

蘇鐵(鳳尾松)  
美葉蘇鐵(牙買加蘇鐵)

Group B consists of:

*Arenga pinnata*  
*Elaeis guineensis*  
*Hyophorbe lagenicaulis*  
*Hyophorbe verschaffeltii*  
*Livistona chinensis*  
*Neodypsis decaryi*  
*Phoenix canariensis*  
*Phoenix dactylifera*  
*Phoenix hanceana*  
*Phoenix sylvestris*  
*Ravenala madagascariensis*  
*Trachycarpus fortunei*  
*Washingtonia robusta*

桃椰(莎木)  
油棕(油椰子)  
酒瓶椰子  
棍棒椰子  
蒲葵  
三角椰子  
加拿利海棗  
棗椰子(海棗)  
刺葵(鳳凰棕)  
銀海棗  
旅人蕉  
棕櫚  
華盛頓葵

**Palms and Cycas – Grouping and Sizes (Cont'd)**

(ii) Palms are divided into 6 groups by species: (Cont'd)

Group C consists of:

|                                   |             |
|-----------------------------------|-------------|
| <i>Bismarckia nobilis</i>         | 霸王棕         |
| <i>Caryota mitis</i>              | 短穗魚尾葵(小魚尾葵) |
| <i>Caryota ochlandra</i>          | 魚尾葵         |
| <i>Chrysalidocarpus lutescens</i> | 散尾葵         |
| <i>Phoenix roebelenii</i>         | 日本葵         |

Group D consists of:

|                                   |          |
|-----------------------------------|----------|
| <i>Archontophoenix alexandrae</i> | 假檳榔      |
| <i>Areca triandra</i> Roxb        | 三药檳榔     |
| <i>Butia capitata</i> Becc.       | 布迪椰子     |
| <i>Cocos nucifera</i>             | 椰子       |
| <i>Roystonea regia</i>            | 王棕(大王椰子) |
| <i>Syagrus romanzoffiana</i>      | 金山葵(皇后葵) |
| <i>Wodyetia bifurcata</i>         | 狐尾椰子     |

Group E consists of:

|                                 |             |
|---------------------------------|-------------|
| <i>Chamaedorea elegans</i>      | 袖珍椰子葵       |
| <i>Chamaedorea erumpens</i>     | 竹莖椰子        |
| <i>Chamaedorea humilis</i>      | 叢櫚(歐洲扇棕)    |
| <i>Pritchardia gaudichaudii</i> | 夏威夷椰子       |
| <i>Rhapis excelsa</i>           | 棕竹          |
| <i>Rhapis gracilis</i>          | 窄葉棕竹        |
| <i>Rhapis humilis</i>           | 細葉拐仔棕(觀音棕竹) |

Group F consists of Other palm species

**ANNEX 'C' -**

**TABLES OF METAL WEIGHTS, ETC.**

## ANNEX 'C' - TABLES OF METAL WEIGHTS, ETC.

| <u>Table</u> | <u>Page</u>   |
|--------------|---|
| 1            | Metric/Imperial equivalents..... C/2  |
| 2            | Mass (Weight) of wire..... C/3  |
| 3            | Mass (Weight) of sheet lead..... C/4  |
| 4            | Mass (Weight) of sheet zinc..... C/4  |
| 5            | Mass (Weight) of sheet metal..... C/5 - C/6   |
| 6            | Mass (Weight) of metal plates..... C/7  |
| 7            | Mass (Weight) of mild steel round bars..... C/8   |
| 8            | Mass (Weight) of rolled steel square bars..... C/8                                      |
| 9            | Mass (Weight) of rolled steel flat bars..... C/9  |
| 10           | Mass (Weight) of black bolts and nuts..... C/10   |
| 11           | Mass (Weight) of steel cup-headed rivets..... C/11                                      |
| 12           | Mass (Weight) of rolled steel equal angles..... C/12                                    |
| 13           | Mass (Weight) of rolled steel unequal angles..... C/12                                  |
| 14           | Mass (Weight) of rolled steel universal beams..... C/13 - C/14                          |
| 15           | Mass (Weight) of rolled steel universal columns..... C/15                               |
| 16           | Mass (Weight) of rolled steel universal bearing piles..... C/16                         |
| 17           | Mass (Weight) of rolled steel joists with taper flanges..... C/17                       |
| 18           | Mass (Weight) of rolled steel structural tees cut from universal beams..... C/18 - C/19 |
| 19           | Mass (Weight) of rolled steel structural tees cut from universal columns..... C/20      |
| 20           | Mass (Weight) of rolled steel parallel flange channels..... C/21                        |
| 21           | Mass (Weight) of rolled steel equal flange tees with radiused root and toes..... C/21   |
| 22           | Mass (Weight) of rolled steel circular hollow sections..... C/22                        |
| 23           | Mass (Weight) of rolled steel square hollow sections..... C/23                          |
| 24           | Mass (Weight) of rolled steel rectangular hollow sections..... C/24                     |
| 25           | Mass (Weight) of solid aluminium round bars..... C/25                                   |
| 26           | Mass (Weight) of solid aluminium square bars..... C/25                                  |
| 27           | Mass (Weight) of solid aluminium flats..... C/26  |
| 28           | Mass (Weight) of aluminium equal angles..... C/27                                       |
| 29           | Mass (Weight) of aluminium unequal angles..... C/27                                     |
| 30           | Mass (Weight) of aluminium channels..... C/28   |
| 31           | Mass (Weight) of aluminium tee sections..... C/29                                       |
| 32           | Mass (Weight) of aluminium round hollow tubes..... C/30                                 |
| 33           | Mass (Weight) of aluminium square hollow sections..... C/31                             |
| 34           | Mass (Weight) of aluminium rectangular hollow sections..... C/31                        |
| 35           | Mass (Weight) of stainless steel flat bars..... C/32                                    |
| 36           | Mass (Weight) of stainless steel angles..... C/32                                       |
| 37           | Mass (Weight) of stainless steel channels..... C/32                                     |
| 38           | Mass (Weight) of stainless steel round tubes..... C/32                                  |
| 39           | Mass (Weight) of stainless steel square hollow sections..... C/32                       |
| 40           | Mass (Weight) of stainless steel rectangular hollow sections..... C/32                  |
| 41           | Standard BRC fabrics square meshes..... C/33  |
| 42           | Standard BRC fabrics rectangular meshes..... C/33                                       |
| 43           | Mass (Weight) of steel sheet piles..... C/34  |
| 44           | Mass (Weight) of steel chequer plate..... C/34  |

**TABLE 1**  
**METRIC/IMPERIAL EQUIVALENTS**

| Metric sizes<br>or dimensions<br>(millimetres) | Imperial<br>equivalents<br>(inches) |
|--|-------------------------------------|
| 3  | 1/8                                 |
| 6  | 1/4                                 |
| 10   | 3/8                                 |
| 13   | 1/2                                 |
| 16   | 5/8                                 |
| 19   | 3/4                                 |
| 22   | 7/8                                 |
| 25   | 1                                   |
| 32   | 1-1/4                               |
| 35   | 1-3/8                               |
| 38   | 1-1/2                               |
| 44   | 1-3/4                               |
| 51   | 2                                   |
| 57   | 2-1/4                               |
| 64   | 2-1/2                               |
| 70   | 2-3/4                               |
| 76   | 3                                   |
| 83   | 3-1/4                               |
| 89   | 3-1/2                               |
| 95   | 3-3/4                               |
| 100  | 4                                   |
| 125  | 5                                   |
| 150  | 6                                   |
| 175  | 7                                   |
| 200  | 8                                   |
| 225  | 9                                   |
| 250  | 10                                  |
| 275  | 11                                  |
| 300  | 12                                  |
| 450  | 18                                  |
| 600  | 24                                  |
| 750  | 30                                  |
| 900  | 36                                  |
| 1,200  | 48                                  |

Examples : -

1. An imperial sized scantling measuring 2" x 3" shall be paid for as a 50 x 75 mm scantling.
2. An imperial sized tower bolt measuring 9" long shall be paid for as a 225 mm long tower bolt.

TABLE 2

## MASS (WEIGHT) OF WIRE

| Preferred diameter (mm) | S.W.G. | Gauge diameter (mm) | kg/100 m    |             |
|-------------------------|--------|---------------------|-------------|-------------|
|                         |        |                     | Steel       | Copper      |
|                         | 40     | 0.122               | 0.01        | 0.01        |
| <b>0.125</b>            |        |                     | <b>0.01</b> | <b>0.01</b> |
|                         | 39     | 0.132               | 0.01        | 0.01        |
|                         | 38     | 0.152               | 0.01        | 0.02        |
| <b>0.160</b>            |        |                     | <b>0.02</b> | <b>0.02</b> |
|                         | 37     | 0.173               | 0.02        | 0.02        |
|                         | 36     | 0.193               | 0.02        | 0.02        |
| <b>0.200</b>            |        |                     | <b>0.02</b> | <b>0.02</b> |
|                         | 35     | 0.213               | 0.03        | 0.03        |
|                         | 34     | 0.234               | 0.03        | 0.04        |
| <b>0.250</b>            |        |                     | <b>0.04</b> | <b>0.04</b> |
|                         | 33     | 0.254               | 0.04        | 0.04        |
|                         | 32     | 0.274               | 0.05        | 0.05        |
|                         | 31     | 0.295               | 0.05        | 0.06        |
| <b>0.300</b>            |        |                     | <b>0.06</b> | <b>0.06</b> |
|                         | 30     | 0.315               | 0.06        | 0.07        |
|                         | 29     | 0.345               | 0.07        | 0.08        |
|                         | 28     | 0.376               | 0.09        | 0.09        |
| <b>0.400</b>            |        |                     | <b>0.10</b> | <b>0.11</b> |
|                         | 27     | 0.417               | 0.11        | 0.11        |
|                         | 26     | 0.457               | 0.13        | 0.14        |
| <b>0.500</b>            |        |                     | <b>0.15</b> | <b>0.17</b> |
|                         | 25     | 0.508               | 0.16        | 0.17        |
|                         | 24     | 0.559               | 0.19        | 0.21        |
| <b>0.600</b>            |        |                     | <b>0.22</b> | <b>0.24</b> |
|                         | 23     | 0.610               | 0.23        | 0.25        |
| <b>0.700</b>            |        |                     | <b>0.30</b> | <b>0.32</b> |
|                         | 22     | 0.711               | 0.31        | 0.33        |
| <b>0.800</b>            |        |                     | <b>0.39</b> | <b>0.42</b> |
|                         | 21     | 0.813               | 0.41        | 0.44        |
| <b>0.900</b>            |        |                     | <b>0.50</b> | <b>0.54</b> |
|                         | 20     | 0.914               | 0.52        | 0.55        |

| Preferred diameter (mm) | S.W.G. | Gauge diameter (mm) | kg/100 m     |              |
|-------------------------|--------|---------------------|--------------|--------------|
|                         |        |                     | Steel        | Copper       |
| <b>1.000</b>            |        |                     | <b>0.62</b>  | <b>0.66</b>  |
|                         | 19     | 1.016               | 0.64         | 0.68         |
| <b>1.200</b>            |        |                     | <b>0.89</b>  | <b>0.95</b>  |
|                         | 18     | 1.219               | 0.92         | 0.98         |
|                         | 17     | 1.422               | 1.25         | 1.34         |
| <b>1.600</b>            |        |                     | <b>1.58</b>  | <b>1.69</b>  |
|                         | 16     | 1.626               | 1.63         | 1.75         |
|                         | 15     | 1.829               | 2.06         | 2.21         |
| <b>2.000</b>            |        |                     | <b>2.47</b>  | <b>2.64</b>  |
|                         | 14     | 2.032               | 2.55         | 2.73         |
|                         | 13     | 2.337               | 3.37         | 3.61         |
| <b>2.500</b>            |        |                     | <b>3.85</b>  | <b>4.13</b>  |
|                         | 12     | 2.642               | 4.31         | 4.62         |
|                         | 11     | 2.946               | 5.35         | 5.74         |
| <b>3.000</b>            |        |                     | <b>5.55</b>  | <b>5.95</b>  |
|                         | 10     | 3.251               | 6.52         | 6.99         |
|                         | 9      | 3.658               | 8.25         | 8.85         |
| <b>4.000</b>            |        |                     | <b>9.87</b>  | <b>10.58</b> |
|                         | 8      | 4.064               | 10.19        | 10.92        |
|                         | 7      | 4.470               | 12.32        | 13.21        |
|                         | 6      | 4.877               | 14.67        | 15.73        |
| <b>5.000</b>            |        |                     | <b>15.42</b> | <b>16.53</b> |
|                         | 5      | 5.385               | 17.89        | 19.17        |
|                         | 4      | 5.893               | 21.42        | 22.96        |
| <b>6.000</b>            |        |                     | <b>22.20</b> | <b>23.80</b> |
|                         | 3      | 6.401               | 25.27        | 27.09        |
|                         | 2      | 7.010               | 30.31        | 32.49        |
|                         | 1      | 7.620               | 35.81        | 38.39        |
| <b>8.000</b>            |        |                     | <b>39.47</b> | <b>42.32</b> |

Note : -

For mass of iron wire, multiply the mass of steel wire by 0.991.

For mass of brass wire, multiply the mass of steel wire by 1.072.

TABLE 3

## MASS (WEIGHT) OF SHEET LEAD

| Code number | Thickness (mm) | kg/m <sup>2</sup> * | Colour marking |
|-------------|----------------|---------------------|----------------|
| 3           | 1.25           | 14.18               | green          |
| 4           | 1.80           | 20.41               | blue           |
| 5           | 2.24           | 25.40               | red            |
| 6           | 2.50           | 28.36               | black          |
| 7           | 3.15           | 35.72               | white          |
| 8           | 3.55           | 40.26               | orange         |

\* Basic value : 11,450 kg/m<sup>3</sup>

TABLE 4

## MASS (WEIGHT) OF SHEET ZINC

| Metric thickness | Zinc gauge | Gauge thickness (mm) | kg/m <sup>2</sup> * |
|------------------|------------|----------------------|---------------------|
|                  | 1          | 0.102                | 0.73                |
|                  | 2          | 0.152                | 1.09                |
|                  | 3          | 0.178                | 1.28                |
|                  | 4          | 0.203                | 1.46                |
| <b>0.25</b>      |            |                      | <b>1.80</b>         |
|                  | 5          | 0.254                | 1.83                |
|                  | 6          | 0.273                | 1.97                |
| <b>0.30</b>      |            |                      | <b>2.16</b>         |
|                  | 7          | 0.330                | 2.38                |
|                  | 8          | 0.381                | 2.74                |
| <b>0.40</b>      |            |                      | <b>2.88</b>         |
|                  | 9          | 0.432                | 3.11                |
|                  | 10         | 0.483                | 3.48                |
| <b>0.50</b>      |            |                      | <b>3.60</b>         |
|                  | 11         | 0.559                | 4.02                |
| <b>0.60</b>      |            |                      | <b>4.32</b>         |
|                  | 12         | 0.635                | 4.57                |
| <b>0.70</b>      |            |                      | <b>5.04</b>         |
|                  | 13         | 0.711                | 5.12                |
|                  | 14         | 0.787                | 5.67                |
| <b>0.80</b>      |            |                      | <b>5.76</b>         |
| <b>0.90</b>      |            |                      | <b>6.48</b>         |
|                  | 15         | 0.914                | 6.58                |
| <b>1.00</b>      |            |                      | <b>7.20</b>         |
|                  | 16         | 1.041                | 7.50                |
|                  | 17         | 1.168                | 8.41                |
| <b>1.20</b>      |            |                      | <b>8.64</b>         |
|                  | 18         | 1.295                | 9.32                |
|                  | 19         | 1.448                | 10.43               |
| <b>1.60</b>      | 20         | 1.600                | <b>11.52</b>        |
|                  | 21         | 1.778                | 12.80               |
| <b>2.00</b>      |            |                      | <b>14.40</b>        |

\* Basic value : 7,200 kg/m<sup>3</sup>



TABLE 5

## MASS (WEIGHT) OF SHEET METAL

| Metric thickness (mm) | S.W.G. | Gauge thickness (mm) | kg/m <sup>2</sup> * |                 |              |             |
|-----------------------|--------|----------------------|---------------------|-----------------|--------------|-------------|
|                       |        |                      | Steel               | Stainless steel | Copper       | Aluminium   |
|                       | 34     | 0.234                | 1.84                | 1.84            | 2.09         | 0.63        |
| <b>0.25</b>           |        |                      | <b>1.96</b>         | <b>1.97</b>     | <b>2.23</b>  | <b>0.68</b> |
|                       | 33     | 0.254                | 1.99                | 2.00            | 2.27         | 0.69        |
|                       | 32     | 0.274                | 2.15                | 2.16            | 2.45         | 0.74        |
|                       | 31     | 0.295                | 2.31                | 2.32            | 2.64         | 0.80        |
| <b>0.30</b>           |        |                      | <b>2.35</b>         | <b>2.36</b>     | <b>2.68</b>  | <b>0.81</b> |
|                       | 30     | 0.315                | 2.47                | 2.48            | 2.82         | 0.85        |
|                       | 29     | 0.345                | 2.71                | 2.72            | 3.08         | 0.93        |
|                       | 28     | 0.376                | 2.95                | 2.96            | 3.36         | 1.02        |
| <b>0.40</b>           |        |                      | <b>3.14</b>         | <b>3.15</b>     | <b>3.58</b>  | <b>1.08</b> |
|                       | 27     | 0.417                | 3.27                | 3.29            | 3.73         | 1.13        |
|                       | 26     | 0.457                | 3.58                | 3.60            | 4.08         | 1.24        |
| <b>0.50</b>           |        |                      | <b>3.92</b>         | <b>3.94</b>     | <b>4.47</b>  | <b>1.35</b> |
|                       | 25     | 0.508                | 3.98                | 4.00            | 4.54         | 1.38        |
|                       | 24     | 0.559                | 4.38                | 4.41            | 5.00         | 1.51        |
| <b>0.60</b>           |        |                      | <b>4.71</b>         | <b>4.73</b>     | <b>5.36</b>  | <b>1.62</b> |
|                       | 23     | 0.610                | 4.78                | 4.81            | 5.45         | 1.65        |
| <b>0.70</b>           |        |                      | <b>5.49</b>         | <b>5.52</b>     | <b>6.26</b>  | <b>1.89</b> |
|                       | 22     | 0.711                | 5.58                | 5.60            | 6.35         | 1.92        |
| <b>0.80</b>           |        |                      | <b>6.27</b>         | <b>6.30</b>     | <b>7.15</b>  | <b>2.17</b> |
|                       | 21     | 0.813                | 6.38                | 6.41            | 7.27         | 2.20        |
| <b>0.90</b>           |        |                      | <b>7.06</b>         | <b>7.09</b>     | <b>8.04</b>  | <b>2.44</b> |
|                       | 20     | 0.914                | 7.17                | 7.20            | 8.17         | 2.47        |
| <b>1.00</b>           |        |                      | <b>7.84</b>         | <b>7.88</b>     | <b>8.94</b>  | <b>2.71</b> |
|                       | 19     | 1.016                | 7.97                | 8.01            | 9.08         | 2.75        |
| <b>1.20</b>           |        |                      | <b>9.41</b>         | <b>9.46</b>     | <b>10.73</b> | <b>3.25</b> |
|                       | 18     | 1.219                | 9.56                | 9.61            | 10.90        | 3.30        |
|                       | 17     | 1.422                | 11.15               | 11.21           | 12.71        | 3.85        |
| <b>1.60</b>           |        |                      | <b>12.55</b>        | <b>12.61</b>    | <b>14.30</b> | <b>4.33</b> |
|                       | 16     | 1.626                | 12.75               | 12.81           | 14.53        | 4.40        |
|                       | 15     | 1.829                | 14.34               | 14.41           | 16.35        | 4.95        |
| <b>2.00</b>           |        |                      | <b>15.69</b>        | <b>15.76</b>    | <b>17.88</b> | <b>5.41</b> |
|                       | 14     | 2.032                | 15.94               | 16.01           | 18.16        | 5.50        |
|                       | 13     | 2.337                | 18.33               | 18.42           | 20.89        | 6.33        |
| <b>2.50</b>           |        |                      | <b>19.61</b>        | <b>19.70</b>    | <b>22.35</b> | <b>6.77</b> |
|                       | 12     | 2.642                | 20.72               | 20.82           | 23.61        | 7.15        |
|                       | 11     | 2.946                | 23.11               | 23.22           | 26.33        | 7.97        |

TABLE 5 (CONT'D)

## MASS (WEIGHT) OF SHEET METAL (CONT'D)

| Metric thickness (mm) | S.W.G. | Gauge thickness (mm) | kg/m <sup>2</sup> * |                 |              |              |
|-----------------------|--------|----------------------|---------------------|-----------------|--------------|--------------|
|                       |        |                      | Steel               | Stainless steel | Copper       | Aluminium    |
| <b>3.00</b>           |        |                      | <b>23.53</b>        | <b>23.64</b>    | <b>26.81</b> | <b>8.12</b>  |
|                       | 10     | 3.251                | 25.50               | 25.62           | 29.06        | 8.80         |
|                       | 9      | 3.658                | 28.69               | 28.83           | 32.70        | 9.90         |
| <b>4.00</b>           |        |                      | <b>31.37</b>        | <b>31.52</b>    | <b>35.75</b> | <b>10.83</b> |
|                       | 8      | 4.064                | 31.87               | 32.03           | 36.32        | 11.00        |
|                       | 7      | 4.470                | 35.06               | 35.23           | 39.95        | 12.10        |
|                       | 6      | 4.877                | 38.25               | 38.44           | 43.59        | 13.20        |
| <b>5.00</b>           |        |                      | <b>39.22</b>        | <b>39.41</b>    | <b>44.69</b> | <b>13.54</b> |
|                       | 5      | 5.385                | 42.23               | 42.44           | 48.13        | 14.58        |
|                       | 4      | 5.893                | 46.22               | 46.44           | 52.67        | 15.95        |
| <b>6.00</b>           |        |                      | <b>47.06</b>        | <b>47.29</b>    | <b>53.63</b> | <b>16.24</b> |
|                       | 3      | 6.401                | 50.20               | 50.45           | 57.21        | 17.33        |
|                       | 2      | 7.010                | 54.98               | 55.25           | 62.66        | 18.98        |
|                       | 1      | 7.620                | 59.76               | 60.05           | 68.11        | 20.63        |
| <b>8.00</b>           |        |                      | <b>62.74</b>        | <b>63.05</b>    | <b>71.50</b> | <b>21.66</b> |

\* Basic value :      Mild steel                              7,843      kg/m<sup>3</sup>  
                                  Stainless steel                              7,881      kg/m<sup>3</sup>  
                                  Copper    8,938      kg/m<sup>3</sup>  
                                  Aluminium                                      2,707      kg/m<sup>3</sup>

For mass of iron sheeting, multiply the mass of steel sheeting by 0.991.

For mass of brass sheeting, multiply the mass of steel sheeting by 1.072.

For mass of sheeting galvanized on both sides, add 0.730 kg/m<sup>2</sup>.

TABLE 6

## MASS (WEIGHT) OF METAL PLATES

| Metric thickness (mm) | Imperial thickness (inches) | Metric equivalents (mm) | kg/m <sup>2</sup> * |                 |               |              |
|-----------------------|-----------------------------|-------------------------|---------------------|-----------------|---------------|--------------|
|                       |                             |                         | Steel               | Stainless steel | Copper        | Aluminium    |
|                       | 1/16                        | 1.59                    | 12.47               | 12.53           | 14.21         | 4.30         |
| <b>1.60</b>           |                             |                         | <b>12.55</b>        | <b>12.61</b>    | <b>14.30</b>  | <b>4.33</b>  |
| <b>2.00</b>           |                             |                         | <b>15.69</b>        | <b>15.76</b>    | <b>17.88</b>  | <b>5.41</b>  |
| <b>3.00</b>           |                             |                         | <b>23.53</b>        | <b>23.64</b>    | <b>26.81</b>  | <b>8.12</b>  |
|                       | 1/8                         | 3.18                    | 24.94               | 25.06           | 28.42         | 8.61         |
| <b>4.00</b>           |                             |                         | <b>31.37</b>        | <b>31.52</b>    | <b>35.75</b>  | <b>10.83</b> |
|                       | 3/16                        | 4.76                    | 37.33               | 37.51           | 42.54         | 12.89        |
| <b>5.00</b>           |                             |                         | <b>39.22</b>        | <b>39.41</b>    | <b>44.69</b>  | <b>13.54</b> |
| <b>6.00</b>           |                             |                         | <b>47.06</b>        | <b>47.29</b>    | <b>53.63</b>  | <b>16.24</b> |
|                       | 1/4                         | 6.35                    | 49.80               | 50.04           | 56.76         | 17.19        |
| <b>8.00</b>           |                             |                         | <b>62.74</b>        | <b>63.05</b>    | <b>71.50</b>  | <b>21.66</b> |
|                       | 3/8                         | 9.53                    | 74.74               | 75.11           | 85.18         | 25.80        |
| <b>10.00</b>          |                             |                         | <b>78.43</b>        | <b>78.81</b>    | <b>89.38</b>  | <b>27.07</b> |
| <b>12.00</b>          |                             |                         | <b>94.12</b>        | <b>94.57</b>    | <b>107.26</b> | <b>32.48</b> |
|                       | 1/2                         | 12.70                   | 99.61               | 100.09          | 113.51        | 34.38        |
| <b>15.00</b>          |                             |                         | <b>117.65</b>       | <b>118.22</b>   | <b>134.07</b> | <b>40.61</b> |
|                       | 5/8                         | 15.88                   | 124.55              | 125.15          | 141.94        | 42.99        |
| <b>18.00</b>          |                             |                         | <b>141.17</b>       | <b>141.86</b>   | <b>160.88</b> | <b>48.73</b> |
|                       | 3/4                         | 19.05                   | 149.41              | 150.13          | 170.27        | 51.57        |
| <b>20.00</b>          |                             |                         | <b>156.86</b>       | <b>157.62</b>   | <b>178.76</b> | <b>54.14</b> |
|                       | 7/8                         | 22.23                   | 174.35              | 175.19          | 198.69        | 60.18        |
| <b>25.00</b>          |                             |                         | <b>196.08</b>       | <b>197.03</b>   | <b>223.45</b> | <b>67.68</b> |
|                       | 1                           | 25.40                   | 199.21              | 200.18          | 227.03        | 68.76        |

\* Basic value :      Mild steel                      7,843      kg/m<sup>3</sup>  
                                  Stainless steel                      7,881      kg/m<sup>3</sup>  
                                  Copper                                      8,938      kg/m<sup>3</sup>  
                                  Aluminium                              2,707      kg/m<sup>3</sup>

For mass of iron sheeting, multiply the mass of steel sheeting by 0.991.

For mass of brass sheeting, multiply the mass of steel sheeting by 1.072.

For mass of sheeting galvanized on both sides, add 0.730 kg/m<sup>2</sup>.

TABLE 7

MASS (WEIGHT) OF  
MILD STEEL ROUND BARS

| Preferred metric diameter (mm)<br>BS 4449 : 2005 + A3 : 2016 | Imperial sizes (inches) | Metric equivalents of imperial sizes (mm) | kg/m*       |
|--|-------------------------|---|-------------|
| <b>6</b>   |                         |   | <b>0.22</b> |
|  | 1/4                     | 6.350                                     | 0.25        |
| <b>8</b>   |                         |   | <b>0.40</b> |
|  | 3/8                     | 9.525                                     | 0.56        |
| <b>10</b>  |                         |   | <b>0.62</b> |
| <b>12</b>  |                         |   | <b>0.89</b> |
|  | 1/2                     | 12.700                                    | 0.99        |
|  | 5/8                     | 15.875                                    | 1.55        |
| <b>16</b>  |                         |   | <b>1.58</b> |
|  | 3/4                     | 19.050                                    | 2.24        |
| <b>20</b>  |                         |   | <b>2.47</b> |
|  | 7/8                     | 22.225                                    | 3.04        |
| <b>25</b>  |                         |   | <b>3.85</b> |
|  | 1                       | 25.400                                    | 3.98        |
|  | 1-1/8                   | 28.575                                    | 5.03        |
|  | 1-1/4                   | 31.750                                    | 6.21        |
| <b>32</b>  |                         |   | <b>6.31</b> |
|  | 1-3/8                   | 34.925                                    | 7.52        |
|  | 1-1/2                   | 38.100                                    | 8.95        |
| <b>40</b>  |                         |   | <b>9.86</b> |
|  | 1-5/8                   | 41.275                                    | 10.50       |
|  | 1-3/4                   | 44.450                                    | 12.18       |
|  | 1-7/8                   | 47.625                                    | 13.98       |
|  | 2                       | 50.800                                    | 15.90       |

TABLE 8

MASS (WEIGHT) OF  
ROLLED STEEL SQUARE BARS

| Recommended metric size (mm)<br>BS EN 10059 : 2005 | Imperial sizes (inches) | Metric equivalents of imperial sizes (mm) | kg/m*        |
|--|-------------------------|---|--------------|
|  | 1/4                     | 6.350                                     | 0.32         |
|  | 5/16                    | 7.938                                     | 0.49         |
|  | 3/8                     | 9.525                                     | 0.71         |
| <b>10</b>  |                         |   | <b>0.78</b>  |
|  | 7/16                    | 11.112                                    | 0.97         |
| <b>12</b>  |                         |   | <b>1.13</b>  |
|  | 1/2                     | 12.700                                    | 1.26         |
| <b>14</b>  |                         |   | <b>1.54</b>  |
|  | 9/16                    | 14.288                                    | 1.60         |
|  | 5/8                     | 15.875                                    | 1.98         |
| <b>16</b>  |                         |   | <b>2.01</b>  |
|  | 11/16                   | 17.462                                    | 2.39         |
| <b>18</b>  |                         |   | <b>2.54</b>  |
|  | 3/4                     | 19.050                                    | 2.85         |
| <b>20</b>  |                         |   | <b>3.14</b>  |
|  | 13/16                   | 20.638                                    | 3.34         |
|  | 7/8                     | 22.225                                    | 3.87         |
|  | 15/16                   | 23.812                                    | 4.45         |
| <b>25</b>  |                         |   | <b>4.91</b>  |
|  | 1                       | 25.400                                    | 5.06         |
| <b>28</b>  |                         |   | <b>6.15</b>  |
|  | 1-1/8                   | 28.575                                    | 6.40         |
|  | 1-1/4                   | 31.750                                    | 7.91         |
| <b>32</b>  |                         |   | <b>8.04</b>  |
|  | 1-3/8                   | 34.925                                    | 9.57         |
| <b>35</b>  |                         |   | <b>9.62</b>  |
|  | 1-1/2                   | 38.100                                    | 11.38        |
| <b>40</b>  |                         |   | <b>12.60</b> |
|  | 1-5/8                   | 41.275                                    | 13.36        |
|  | 1-3/4                   | 44.450                                    | 15.50        |
|  | 1-7/8                   | 47.625                                    | 17.80        |
|  | 2                       | 50.800                                    | 20.24        |

\* Basic value : Mild steel 7,843 kg/m<sup>3</sup>

For mass of cast iron bars, multiply the mass of steel bars by 0.919.

For mass of wrought iron bars, multiply the mass of steel bars by 0.991.

For mass of brass bars, multiply the mass of steel bars by 1.072.

For mass of copper bars, multiply the mass of steel bars by 1.134.

TABLE 9

## MASS (WEIGHT) OF ROLLED STEEL FLAT BARS

| Width<br>(mm) | kg/m*          |      |       |       |       |       |       |       |       |       |       |        |        |        |
|---------------|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
|               | Thickness (mm) |      |       |       |       |       |       |       |       |       |       |        |        |        |
|               | 1              | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 20    | 30     | 40     | 50     |
| 5             | 0.04           | 0.08 | 0.12  | 0.16  | 0.20  | 0.24  | 0.27  | 0.31  | 0.35  | 0.39  | 0.78  | 1.18   | 1.57   | 1.96   |
| 10            | 0.08           | 0.16 | 0.24  | 0.31  | 0.39  | 0.47  | 0.55  | 0.63  | 0.71  | 0.78  | 1.57  | 2.35   | 3.14   | 3.92   |
| 15            | 0.12           | 0.24 | 0.35  | 0.47  | 0.59  | 0.71  | 0.82  | 0.94  | 1.06  | 1.18  | 2.35  | 3.53   | 4.71   | 5.88   |
| 20            | 0.16           | 0.31 | 0.47  | 0.63  | 0.78  | 0.94  | 1.10  | 1.25  | 1.41  | 1.57  | 3.14  | 4.71   | 6.27   | 7.84   |
| 25            | 0.20           | 0.39 | 0.59  | 0.78  | 0.98  | 1.18  | 1.37  | 1.57  | 1.76  | 1.96  | 3.92  | 5.88   | 7.84   | 9.80   |
| 30            | 0.24           | 0.47 | 0.71  | 0.94  | 1.18  | 1.41  | 1.65  | 1.88  | 2.12  | 2.35  | 4.71  | 7.06   | 9.41   | 11.76  |
| 35            | 0.27           | 0.55 | 0.82  | 1.10  | 1.37  | 1.65  | 1.92  | 2.20  | 2.47  | 2.75  | 5.49  | 8.24   | 10.98  | 13.73  |
| 40            | 0.31           | 0.63 | 0.94  | 1.25  | 1.57  | 1.88  | 2.20  | 2.51  | 2.82  | 3.14  | 6.27  | 9.41   | 12.55  | 15.69  |
| 45            | 0.35           | 0.71 | 1.06  | 1.41  | 1.76  | 2.12  | 2.47  | 2.82  | 3.18  | 3.53  | 7.06  | 10.59  | 14.12  | 17.65  |
| 50            | 0.39           | 0.78 | 1.18  | 1.57  | 1.96  | 2.35  | 2.75  | 3.14  | 3.53  | 3.92  | 7.84  | 11.76  | 15.69  | 19.61  |
| 55            | 0.43           | 0.86 | 1.29  | 1.73  | 2.16  | 2.59  | 3.02  | 3.45  | 3.88  | 4.31  | 8.63  | 12.94  | 17.25  | 21.57  |
| 60            | 0.47           | 0.94 | 1.41  | 1.88  | 2.35  | 2.82  | 3.29  | 3.76  | 4.24  | 4.71  | 9.41  | 14.12  | 18.82  | 23.53  |
| 65            | 0.51           | 1.02 | 1.53  | 2.04  | 2.55  | 3.06  | 3.57  | 4.08  | 4.59  | 5.10  | 10.20 | 15.29  | 20.39  | 25.49  |
| 70            | 0.55           | 1.10 | 1.65  | 2.20  | 2.75  | 3.29  | 3.84  | 4.39  | 4.94  | 5.49  | 10.98 | 16.47  | 21.96  | 27.45  |
| 75            | 0.59           | 1.18 | 1.76  | 2.35  | 2.94  | 3.53  | 4.12  | 4.71  | 5.29  | 5.88  | 11.76 | 17.65  | 23.53  | 29.41  |
| 80            | 0.63           | 1.25 | 1.88  | 2.51  | 3.14  | 3.76  | 4.39  | 5.02  | 5.65  | 6.27  | 12.55 | 18.82  | 25.10  | 31.37  |
| 85            | 0.67           | 1.33 | 2.00  | 2.67  | 3.33  | 4.00  | 4.67  | 5.33  | 6.00  | 6.67  | 13.33 | 20.00  | 26.67  | 33.33  |
| 90            | 0.71           | 1.41 | 2.12  | 2.82  | 3.53  | 4.24  | 4.94  | 5.65  | 6.35  | 7.06  | 14.12 | 21.18  | 28.23  | 35.29  |
| 95            | 0.75           | 1.49 | 2.24  | 2.98  | 3.73  | 4.47  | 5.22  | 5.96  | 6.71  | 7.45  | 14.90 | 22.35  | 29.80  | 37.25  |
| 100           | 0.78           | 1.57 | 2.35  | 3.14  | 3.92  | 4.71  | 5.49  | 6.27  | 7.06  | 7.84  | 15.69 | 23.53  | 31.37  | 39.22  |
| 110           | 0.86           | 1.73 | 2.59  | 3.45  | 4.31  | 5.18  | 6.04  | 6.90  | 7.76  | 8.63  | 17.25 | 25.88  | 34.51  | 43.14  |
| 120           | 0.94           | 1.88 | 2.82  | 3.76  | 4.71  | 5.65  | 6.59  | 7.53  | 8.47  | 9.41  | 18.82 | 28.23  | 37.65  | 47.06  |
| 130           | 1.02           | 2.04 | 3.06  | 4.08  | 5.10  | 6.12  | 7.14  | 8.16  | 9.18  | 10.20 | 20.39 | 30.59  | 40.78  | 50.98  |
| 140           | 1.10           | 2.20 | 3.29  | 4.39  | 5.49  | 6.59  | 7.69  | 8.78  | 9.88  | 10.98 | 21.96 | 32.94  | 43.92  | 54.90  |
| 150           | 1.18           | 2.35 | 3.53  | 4.71  | 5.88  | 7.06  | 8.24  | 9.41  | 10.59 | 11.76 | 23.53 | 35.29  | 47.06  | 58.82  |
| 160           | 1.25           | 2.51 | 3.76  | 5.02  | 6.27  | 7.53  | 8.78  | 10.04 | 11.29 | 12.55 | 25.10 | 37.65  | 50.20  | 62.74  |
| 170           | 1.33           | 2.67 | 4.00  | 5.33  | 6.67  | 8.00  | 9.33  | 10.67 | 12.00 | 13.33 | 26.67 | 40.00  | 53.33  | 66.67  |
| 180           | 1.41           | 2.82 | 4.24  | 5.65  | 7.06  | 8.47  | 9.88  | 11.29 | 12.71 | 14.12 | 28.23 | 42.35  | 56.47  | 70.59  |
| 190           | 1.49           | 2.98 | 4.47  | 5.96  | 7.45  | 8.94  | 10.43 | 11.92 | 13.41 | 14.90 | 29.80 | 44.71  | 59.61  | 74.51  |
| 200           | 1.57           | 3.14 | 4.71  | 6.27  | 7.84  | 9.41  | 10.98 | 12.55 | 14.12 | 15.69 | 31.37 | 47.06  | 62.74  | 78.43  |
| 210           | 1.65           | 3.29 | 4.94  | 6.59  | 8.24  | 9.88  | 11.53 | 13.18 | 14.82 | 16.47 | 32.94 | 49.41  | 65.88  | 82.35  |
| 220           | 1.73           | 3.45 | 5.18  | 6.90  | 8.63  | 10.35 | 12.08 | 13.80 | 15.53 | 17.25 | 34.51 | 51.76  | 69.02  | 86.27  |
| 230           | 1.80           | 3.61 | 5.41  | 7.22  | 9.02  | 10.82 | 12.63 | 14.43 | 16.24 | 18.04 | 36.08 | 54.12  | 72.16  | 90.19  |
| 240           | 1.88           | 3.76 | 5.65  | 7.53  | 9.41  | 11.29 | 13.18 | 15.06 | 16.94 | 18.82 | 37.65 | 56.47  | 75.29  | 94.12  |
| 250           | 1.96           | 3.92 | 5.88  | 7.84  | 9.80  | 11.76 | 13.73 | 15.69 | 17.65 | 19.61 | 39.22 | 58.82  | 78.43  | 98.04  |
| 260           | 2.04           | 4.08 | 6.12  | 8.16  | 10.20 | 12.24 | 14.27 | 16.31 | 18.35 | 20.39 | 40.78 | 61.18  | 81.57  | 101.96 |
| 270           | 2.12           | 4.24 | 6.35  | 8.47  | 10.59 | 12.71 | 14.82 | 16.94 | 19.06 | 21.18 | 42.35 | 63.53  | 84.70  | 105.88 |
| 280           | 2.20           | 4.39 | 6.59  | 8.78  | 10.98 | 13.18 | 15.37 | 17.57 | 19.76 | 21.96 | 43.92 | 65.88  | 87.84  | 109.80 |
| 290           | 2.27           | 4.55 | 6.82  | 9.10  | 11.37 | 13.65 | 15.92 | 18.20 | 20.47 | 22.74 | 45.49 | 68.23  | 90.98  | 113.72 |
| 300           | 2.35           | 4.71 | 7.06  | 9.41  | 11.76 | 14.12 | 16.47 | 18.82 | 21.18 | 23.53 | 47.06 | 70.59  | 94.12  | 117.65 |
| 310           | 2.43           | 4.86 | 7.29  | 9.73  | 12.16 | 14.59 | 17.02 | 19.45 | 21.88 | 24.31 | 48.63 | 72.94  | 97.25  | 121.57 |
| 320           | 2.51           | 5.02 | 7.53  | 10.04 | 12.55 | 15.06 | 17.57 | 20.08 | 22.59 | 25.10 | 50.20 | 75.29  | 100.39 | 125.49 |
| 330           | 2.59           | 5.18 | 7.76  | 10.35 | 12.94 | 15.53 | 18.12 | 20.71 | 23.29 | 25.88 | 51.76 | 77.65  | 103.53 | 129.41 |
| 340           | 2.67           | 5.33 | 8.00  | 10.67 | 13.33 | 16.00 | 18.67 | 21.33 | 24.00 | 26.67 | 53.33 | 80.00  | 106.66 | 133.33 |
| 350           | 2.75           | 5.49 | 8.24  | 10.98 | 13.73 | 16.47 | 19.22 | 21.96 | 24.71 | 27.45 | 54.90 | 82.35  | 109.80 | 137.25 |
| 360           | 2.82           | 5.65 | 8.47  | 11.29 | 14.12 | 16.94 | 19.76 | 22.59 | 25.41 | 28.23 | 56.47 | 84.70  | 112.94 | 141.17 |
| 370           | 2.90           | 5.80 | 8.71  | 11.61 | 14.51 | 17.41 | 20.31 | 23.22 | 26.12 | 29.02 | 58.04 | 87.06  | 116.08 | 145.10 |
| 380           | 2.98           | 5.96 | 8.94  | 11.92 | 14.90 | 17.88 | 20.86 | 23.84 | 26.82 | 29.80 | 59.61 | 89.41  | 119.21 | 149.02 |
| 390           | 3.06           | 6.12 | 9.18  | 12.24 | 15.29 | 18.35 | 21.41 | 24.47 | 27.53 | 30.59 | 61.18 | 91.76  | 122.35 | 152.94 |
| 400           | 3.14           | 6.27 | 9.41  | 12.55 | 15.69 | 18.82 | 21.96 | 25.10 | 28.23 | 31.37 | 62.74 | 94.12  | 125.49 | 156.86 |
| 410           | 3.22           | 6.43 | 9.65  | 12.86 | 16.08 | 19.29 | 22.51 | 25.73 | 28.94 | 32.16 | 64.31 | 96.47  | 128.63 | 160.78 |
| 420           | 3.29           | 6.59 | 9.88  | 13.18 | 16.47 | 19.76 | 23.06 | 26.35 | 29.65 | 32.94 | 65.88 | 98.82  | 131.76 | 164.70 |
| 430           | 3.37           | 6.74 | 10.12 | 13.49 | 16.86 | 20.23 | 23.61 | 26.98 | 30.35 | 33.72 | 67.45 | 101.17 | 134.90 | 168.62 |
| 440           | 3.45           | 6.90 | 10.35 | 13.80 | 17.25 | 20.71 | 24.16 | 27.61 | 31.06 | 34.51 | 69.02 | 103.53 | 138.04 | 172.55 |
| 450           | 3.53           | 7.06 | 10.59 | 14.12 | 17.65 | 21.18 | 24.71 | 28.23 | 31.76 | 35.29 | 70.59 | 105.88 | 141.17 | 176.47 |
| 460           | 3.61           | 7.22 | 10.82 | 14.43 | 18.04 | 21.65 | 25.25 | 28.86 | 32.47 | 36.08 | 72.16 | 108.23 | 144.31 | 180.39 |
| 470           | 3.69           | 7.37 | 11.06 | 14.74 | 18.43 | 22.12 | 25.80 | 29.49 | 33.18 | 36.86 | 73.72 | 110.59 | 147.45 | 184.31 |
| 480           | 3.76           | 7.53 | 11.29 | 15.06 | 18.82 | 22.59 | 26.35 | 30.12 | 33.88 | 37.65 | 75.29 | 112.94 | 150.59 | 188.23 |
| 490           | 3.84           | 7.69 | 11.53 | 15.37 | 19.22 | 23.06 | 26.90 | 30.74 | 34.59 | 38.43 | 76.86 | 115.29 | 153.72 | 192.15 |
| 500           | 3.92           | 7.84 | 11.76 | 15.69 | 19.61 | 23.53 | 27.45 | 31.37 | 35.29 | 39.22 | 78.43 | 117.65 | 156.86 | 196.08 |

\* Basic value : Mild steel 7,843 kg/m<sup>3</sup>

For mass of cast iron bars, multiply the mass of steel bars by 0.919.

For mass of wrought iron bars, multiply the mass of steel bars by 0.991.

For mass of brass bars, multiply the mass of steel bars by 1.072.

For mass of copper bars, multiply the mass of steel bars by 1.134.

For mass of lead bars, multiply the mass of steel bars by 1.454.

TABLE 10

## MASS (WEIGHT) OF BS 4190 ISO METRIC BLACK BOLTS WITH NUTS

| Length under head (mm)      | Approximate mass in kilogrammes per 1,000 bolts complete including hexagon head and one nut each |       |        |        |        |        |        |          |          |          |          |
|-----------------------------|--|-------|--------|--------|--------|--------|--------|----------|----------|----------|----------|
|                             | Nominal size of bolt   |       |        |        |        |        |        |          |          |          |          |
|                             | M6   | M8    | M10    | M12    | M16    | M20    | M24    | M30      | M36      | M42      | M48      |
| 25                          | 8.97   | 18.70 | 36.60  | 52.50  | -      | -      | -      | -        | -        | -        | -        |
| 30                          | 10.10  | 20.70 | 39.10  | 56.10  | 107.00 | 186.00 | -      | -        | -        | -        | -        |
| 35                          | 11.20  | 22.70 | 42.20  | 59.70  | 114.00 | 196.00 | -      | -        | -        | -        | -        |
| 40                          | 12.30  | 24.70 | 45.30  | 64.10  | 121.00 | 207.00 | 347.00 | -        | -        | -        | -        |
| 45                          | 13.40  | 26.70 | 48.40  | 68.50  | 128.00 | 217.00 | 362.00 | -        | -        | -        | -        |
| 50                          | 14.50  | 28.70 | 51.50  | 72.90  | 136.00 | 227.00 | 377.00 | -        | -        | -        | -        |
| 55                          | 15.60  | 30.70 | 54.60  | 77.30  | 144.00 | 238.00 | 392.00 | -        | -        | -        | -        |
| 60                          | 16.70  | 32.70 | 57.70  | 81.70  | 152.00 | 251.00 | 407.00 | -        | -        | -        | -        |
| 65                          | 17.80  | 34.70 | 60.80  | 86.10  | 160.00 | 264.00 | 422.00 | -        | -        | -        | -        |
| 70                          | 18.90  | 36.70 | 63.90  | 90.50  | 168.00 | 277.00 | 440.00 | -        | -        | -        | -        |
| 75                          | 20.00  | 38.70 | 67.00  | 95.00  | 176.00 | 290.00 | 458.00 | -        | -        | -        | -        |
| 80                          | 21.10  | 40.70 | 70.10  | 100.00 | 182.00 | 303.00 | 476.00 | 853.00   | -        | -        | -        |
| 90                          | -  | 44.70 | 76.30  | 109.00 | 198.00 | 329.00 | 511.00 | 908.00   | -        | -        | -        |
| 100                         | -  | 48.70 | 82.50  | 118.00 | 214.00 | 355.00 | 547.00 | 963.00   | 1,520.00 | -        | -        |
| 110                         | -  | -     | 88.70  | 127.00 | 230.00 | 381.00 | -      | -        | -        | -        | -        |
| 120                         | -  | -     | 94.90  | 136.00 | 246.00 | 407.00 | 618.00 | 1,070.00 | 1,680.00 | 2,450.00 | -        |
| 130                         | -  | -     | 101.00 | 145.00 | 262.00 | 433.00 | -      | -        | -        | -        | -        |
| 140                         | -  | -     | 107.00 | 154.00 | 278.00 | 459.00 | 689.00 | 1,180.00 | 1,840.00 | 2,670.00 | -        |
| 150                         | -  | -     | 113.00 | 163.00 | 294.00 | 485.00 | 725.00 | 1,230.00 | 1,920.00 | 2,780.00 | 3,860.00 |
| 160                         | -  | -     | 119.00 | 172.00 | 310.00 | 501.00 | 760.00 | 1,290.00 | 2,000.00 | 2,890.00 | 4,000.00 |
| 170                         | -  | -     | 125.00 | 181.00 | 326.00 | 527.00 | -      | -        | -        | -        | -        |
| 180                         | -  | -     | 131.00 | 190.00 | 342.00 | 553.00 | 831.00 | 1,400.00 | 2,160.00 | 3,110.00 | 4,280.00 |
| 190                         | -  | -     | 137.00 | 199.00 | 358.00 | 579.00 | -      | -        | -        | -        | -        |
| 200                         | -  | -     | 143.00 | 208.00 | 374.00 | 605.00 | 902.00 | 1,510.00 | 2,320.00 | 3,330.00 | 4,560.00 |
| Add for extra nut per 1,000 | 2.32   | 4.82  | 10.90  | 15.90  | 30.80  | 60.30  | 103.00 | 216.00   | 369.00   | 610.00   | 924.00   |

Note : -

For mass of stainless steel bolts, multiply by the mass of black bolts by factor : 7881/7843

TABLE 11

## MASS (WEIGHT) OF STEEL CUP-HEADED RIVETS

| Length under head (mm)                             | Approximate mass in kilogrammes per 1,000 |       |        |        |        |        |          |
|--|---|-------|--------|--------|--------|--------|----------|
|  | Diameter of rivet (mm)                    |       |        |        |        |        |          |
|  | 10  | 12    | 16     | 20     | 22     | 24     | 27       |
| 25   | 21.50                                     | 31.90 | -      | -      | -      | -      | -        |
| 30   | 24.60                                     | 36.30 | 71.00  | 125.00 | -      | -      | -        |
| 35   | 27.70                                     | 40.80 | 78.80  | 137.00 | -      | -      | -        |
| 40   | 30.80                                     | 45.20 | 86.70  | 149.00 | 186.00 | 238.00 | -        |
| 45   | 33.80                                     | 49.70 | 94.60  | 162.00 | 201.00 | 255.00 | -        |
| 50   | 36.90                                     | 54.10 | 103.00 | 174.00 | 216.00 | 273.00 | -        |
| 55   | 40.00                                     | 58.50 | 110.00 | 186.00 | 231.00 | 291.00 | -        |
| 60   | 43.10                                     | 63.00 | 118.00 | 199.00 | 246.00 | 309.00 | 386.00   |
| 65   | 46.20                                     | 67.40 | 126.00 | 211.00 | 261.00 | 326.00 | 408.00   |
| 70   | 49.30                                     | 71.80 | 134.00 | 223.00 | 276.00 | 344.00 | 431.00   |
| 75   | 52.30                                     | 76.30 | 142.00 | 236.00 | 291.00 | 362.00 | 453.00   |
| 80   | 55.40                                     | 80.70 | 150.00 | 248.00 | 306.00 | 380.00 | 476.00   |
| 90   | -   | 89.60 | 166.00 | 273.00 | 335.00 | 415.00 | 521.00   |
| 100  | -   | 98.50 | 181.00 | 297.00 | 365.00 | 451.00 | 566.00   |
| 110  | -   | -     | 197.00 | 322.00 | 395.00 | 486.00 | 611.00   |
| 120  | -   | -     | 213.00 | 347.00 | 425.00 | 522.00 | 656.00   |
| 130  | -   | -     | -      | 371.00 | 455.00 | 557.00 | 700.00   |
| 140  | -   | -     | -      | 396.00 | 485.00 | 593.00 | 745.00   |
| 150  | -   | -     | -      | -      | 514.00 | 628.00 | 790.00   |
| 160  | -   | -     | -      | -      | 554.00 | 664.00 | 835.00   |
| 170  | -   | -     | -      | -      | 574.00 | 699.00 | 880.00   |
| 180  | -   | -     | -      | -      | 604.00 | 735.00 | 925.00   |
| 190  | -   | -     | -      | -      | -      | 770.00 | 970.00   |
| 200  | -   | -     | -      | -      | -      | 806.00 | 1,050.00 |
| Approx. mass in kg of 1,000 heads                  | 6.10                                      | 9.70  | 23.60  | 50.60  | 66.80  | 95.50  | 116.20   |
| Variation in mass of 1,000 rivets per mm of length | 0.62                                      | 0.89  | 1.58   | 2.47   | 2.98   | 3.55   | 4.49     |

TABLE 12

MASS (WEIGHT) OF ROLLED STEEL  
EQUAL ANGLES

Source: BS EN10056-1:1999, Table 1

| Designation  |                   | Mass/unit<br>length<br>(kg/m) |
|--------------|-------------------|-------------------------------|
| Size<br>(mm) | Thickness<br>(mm) |                               |
| 20 x 20      | 3                 | 0.88                          |
| 25 x 25      | 3                 | 1.12                          |
| 25 x 25      | 4                 | 1.45                          |
| 30 x 30      | 3                 | 1.36                          |
| 30 x 30      | 4                 | 1.78                          |
| 35 x 35      | 4                 | 2.09                          |
| 40 x 40      | 4                 | 2.42                          |
| 40 x 40      | 5                 | 2.97                          |
| 45 x 45      | 4.5               | 3.06                          |
| 50 x 50      | 4                 | 3.06                          |
| 50 x 50      | 5                 | 3.77                          |
| 50 x 50      | 6                 | 4.47                          |
| 60 x 60      | 5                 | 4.57                          |
| 60 x 60      | 6                 | 5.42                          |
| 60 x 60      | 8                 | 7.09                          |
| 65 x 65      | 7                 | 6.83                          |
| 70 x 70      | 6                 | 6.38                          |
| 70 x 70      | 7                 | 7.38                          |
| 75 x 75      | 6                 | 6.85                          |
| 75 x 75      | 8                 | 8.99                          |
| 80 x 80      | 8                 | 9.63                          |
| 80 x 80      | 10                | 11.90                         |
| 90 x 90      | 7                 | 9.61                          |
| 90 x 90      | 8                 | 10.90                         |
| 90 x 90      | 9                 | 12.20                         |
| 90 x 90      | 10                | 13.40                         |
| 100 x 100    | 8                 | 12.20                         |
| 100 x 100    | 10                | 15.00                         |
| 100 x 100    | 12                | 17.80                         |
| 120 x 120    | 10                | 18.20                         |
| 120 x 120    | 12                | 21.60                         |
| 130 x 130    | 12                | 23.60                         |
| 150 x 150    | 10                | 23.00                         |
| 150 x 150    | 12                | 27.30                         |
| 150 x 150    | 15                | 33.80                         |
| 160 x 160    | 15                | 36.20                         |
| 180 x 180    | 16                | 43.50                         |
| 180 x 180    | 18                | 48.60                         |
| 200 x 200    | 16                | 48.50                         |
| 200 x 200    | 18                | 54.30                         |
| 200 x 200    | 20                | 59.90                         |
| 200 x 200    | 24                | 71.10                         |
| 250 x 250    | 28                | 104.00                        |
| 250 x 250    | 35                | 128.00                        |

TABLE 13

MASS (WEIGHT) OF ROLLED STEEL  
UNEQUAL ANGLES

Source: BS EN10056-1:1999, Table 2

| Designation  |                   | Mass/unit<br>length<br>(kg/m) |
|--------------|-------------------|-------------------------------|
| Size<br>(mm) | Thickness<br>(mm) |                               |
| 30 x 20      | 3                 | 1.12                          |
| 30 x 20      | 4                 | 1.46                          |
| 40 x 20      | 4                 | 1.77                          |
| 40 x 25      | 4                 | 1.93                          |
| 45 x 30      | 4                 | 2.25                          |
| 50 x 30      | 5                 | 2.96                          |
| 60 x 30      | 5                 | 3.36                          |
| 60 x 40      | 5                 | 3.76                          |
| 60 x 40      | 6                 | 4.46                          |
| 65 x 50      | 5                 | 4.35                          |
| 70 x 50      | 6                 | 5.41                          |
| 75 x 50      | 6                 | 5.65                          |
| 75 x 50      | 8                 | 7.39                          |
| 80 x 40      | 6                 | 5.41                          |
| 80 x 40      | 8                 | 7.07                          |
| 80 x 60      | 7                 | 7.36                          |
| 100 x 50     | 6                 | 6.84                          |
| 100 x 50     | 8                 | 8.97                          |
| 100 x 65     | 7                 | 8.77                          |
| 100 x 65     | 8                 | 9.94                          |
| 100 x 65     | 10                | 12.30                         |
| 100 x 75     | 8                 | 10.60                         |
| 100 x 75     | 10                | 13.00                         |
| 100 x 75     | 12                | 15.40                         |
| 120 x 80     | 8                 | 12.20                         |
| 120 x 80     | 10                | 15.00                         |
| 120 x 80     | 12                | 17.80                         |
| 125 x 75     | 8                 | 12.20                         |
| 125 x 75     | 10                | 15.00                         |
| 125 x 75     | 12                | 17.80                         |
| 135 x 65     | 8                 | 12.20                         |
| 135 x 65     | 10                | 15.00                         |
| 150 x 75     | 9                 | 15.40                         |
| 150 x 75     | 10                | 17.00                         |
| 150 x 75     | 12                | 20.20                         |
| 150 x 75     | 15                | 24.80                         |
| 150 x 90     | 10                | 18.20                         |
| 150 x 90     | 12                | 21.60                         |
| 150 x 90     | 15                | 26.60                         |
| 150 x 100    | 10                | 19.00                         |
| 150 x 100    | 12                | 22.50                         |
| 200 x 100    | 10                | 23.00                         |
| 200 x 100    | 12                | 27.30                         |
| 200 x 100    | 15                | 33.75                         |
| 200 x 150    | 12                | 32.00                         |
| 200 x 150    | 15                | 39.60                         |



TABLE 14

## MASS (WEIGHT) OF ROLLED STEEL UNIVERSAL BEAMS

Source: BS4-1:2005, Table 2

| Section designation |   |     |   |     | Mass per unit<br>length<br>kg/m | Depth<br>mm | Width<br>mm |
|---------------------|---|-----|---|-----|---------------------------------|-------------|-------------|
| 914                 | x | 419 | x | 388 | 388.0                           | 921.0       | 420.5       |
| 914                 | x | 419 | x | 343 | 343.3                           | 911.8       | 418.5       |
| 914                 | x | 305 | x | 289 | 289.1                           | 926.6       | 307.7       |
| 914                 | x | 305 | x | 253 | 253.4                           | 918.4       | 305.5       |
| 914                 | x | 305 | x | 224 | 224.2                           | 910.4       | 304.1       |
| 914                 | x | 305 | x | 201 | 200.9                           | 903.0       | 303.3       |
| 838                 | x | 292 | x | 226 | 226.5                           | 850.9       | 293.8       |
| 838                 | x | 292 | x | 194 | 193.8                           | 840.7       | 292.4       |
| 838                 | x | 292 | x | 176 | 175.9                           | 834.9       | 291.7       |
| 762                 | x | 267 | x | 197 | 196.8                           | 769.8       | 268.0       |
| 762                 | x | 267 | x | 173 | 173.0                           | 762.2       | 266.7       |
| 762                 | x | 267 | x | 147 | 146.9                           | 754.0       | 265.2       |
| 762                 | x | 267 | x | 134 | 133.9                           | 750.0       | 264.4       |
| 686                 | x | 254 | x | 170 | 170.2                           | 692.9       | 255.8       |
| 686                 | x | 254 | x | 152 | 152.4                           | 687.5       | 254.5       |
| 686                 | x | 254 | x | 140 | 140.1                           | 683.5       | 253.7       |
| 686                 | x | 254 | x | 125 | 125.2                           | 677.9       | 253.0       |
| 610                 | x | 305 | x | 238 | 238.1                           | 635.8       | 311.4       |
| 610                 | x | 305 | x | 179 | 179.0                           | 620.2       | 307.1       |
| 610                 | x | 305 | x | 149 | 149.1                           | 612.4       | 304.8       |
| 610                 | x | 229 | x | 140 | 139.9                           | 617.2       | 230.2       |
| 610                 | x | 229 | x | 125 | 125.1                           | 612.2       | 229.0       |
| 610                 | x | 229 | x | 113 | 113.0                           | 607.6       | 228.2       |
| 610                 | x | 229 | x | 101 | 101.2                           | 602.6       | 227.6       |
| 533                 | x | 210 | x | 122 | 122.0                           | 544.5       | 211.9       |
| 533                 | x | 210 | x | 109 | 109.0                           | 539.5       | 210.8       |
| 533                 | x | 210 | x | 101 | 101.0                           | 536.7       | 210.0       |
| 533                 | x | 210 | x | 92  | 92.1                            | 533.1       | 209.3       |
| 533                 | x | 210 | x | 82  | 82.2                            | 528.3       | 208.8       |
| 457                 | x | 191 | x | 98  | 98.3                            | 467.2       | 192.8       |
| 457                 | x | 191 | x | 89  | 89.3                            | 463.4       | 191.9       |
| 457                 | x | 191 | x | 82  | 82.0                            | 460.0       | 191.3       |
| 457                 | x | 191 | x | 74  | 74.3                            | 457.0       | 190.4       |
| 457                 | x | 191 | x | 67  | 67.1                            | 453.4       | 189.9       |
| 457                 | x | 152 | x | 82  | 82.1                            | 465.8       | 155.3       |
| 457                 | x | 152 | x | 74  | 74.2                            | 462.0       | 154.4       |
| 457                 | x | 152 | x | 67  | 67.2                            | 458.0       | 153.8       |
| 457                 | x | 152 | x | 60  | 59.8                            | 454.6       | 152.9       |
| 457                 | x | 152 | x | 52  | 52.3                            | 449.8       | 152.4       |

TABLE 14 (CONT'D)

## MASS (WEIGHT) OF ROLLED STEEL UNIVERSAL BEAMS (CONT'D)

Source: BS4-1:2005, Table 2

| Section designation | Mass per unit length<br>kg/m | Depth<br>mm | Width<br>mm |
|---------------------|------------------------------|-------------|-------------|
| 406 x 178 x 74      | 74.2                         | 412.8       | 179.5       |
| 406 x 178 x 67      | 67.1                         | 409.4       | 178.8       |
| 406 x 178 x 60      | 60.1                         | 406.4       | 177.9       |
| 406 x 178 x 54      | 54.1                         | 402.6       | 177.7       |
| 406 x 140 x 46      | 46.0                         | 403.2       | 142.2       |
| 406 x 140 x 39      | 39.0                         | 398.0       | 141.8       |
| 356 x 171 x 67      | 67.1                         | 363.4       | 173.2       |
| 356 x 171 x 57      | 57.0                         | 358.0       | 172.2       |
| 356 x 171 x 51      | 51.0                         | 355.0       | 171.5       |
| 356 x 171 x 45      | 45.0                         | 351.4       | 171.1       |
| 356 x 127 x 39      | 39.1                         | 353.4       | 126.0       |
| 356 x 127 x 33      | 33.1                         | 349.0       | 125.4       |
| 305 x 165 x 54      | 54.0                         | 310.4       | 166.9       |
| 305 x 165 x 46      | 46.1                         | 306.6       | 165.7       |
| 305 x 165 x 40      | 40.3                         | 303.4       | 165.0       |
| 305 x 127 x 48      | 48.1                         | 311.0       | 125.3       |
| 305 x 127 x 42      | 41.9                         | 307.2       | 124.3       |
| 305 x 127 x 37      | 37.0                         | 304.4       | 123.4       |
| 305 x 102 x 33      | 32.8                         | 312.7       | 102.4       |
| 305 x 102 x 28      | 28.2                         | 308.7       | 101.8       |
| 305 x 102 x 25      | 24.8                         | 305.1       | 101.6       |
| 254 x 146 x 43      | 43.0                         | 259.6       | 147.3       |
| 254 x 146 x 37      | 37.0                         | 256.0       | 146.4       |
| 254 x 146 x 31      | 31.1                         | 251.4       | 146.1       |
| 254 x 102 x 28      | 28.3                         | 260.4       | 102.2       |
| 254 x 102 x 25      | 25.2                         | 257.2       | 101.9       |
| 254 x 102 x 22      | 22.0                         | 254.0       | 101.6       |
| 203 x 133 x 30      | 30.0                         | 206.8       | 133.9       |
| 203 x 133 x 25      | 25.1                         | 203.2       | 133.2       |
| 203 x 102 x 23      | 23.1                         | 203.2       | 101.8       |
| 178 x 102 x 19      | 19.0                         | 177.8       | 101.2       |
| 152 x 89 x 16       | 16.0                         | 152.4       | 88.7        |
| 127 x 76 x 13       | 13.0                         | 127.0       | 76.0        |

TABLE 15

**MASS (WEIGHT) OF ROLLED STEEL  
UNIVERSAL COLUMNS**

Source: BS4-1:2005, Table 3

| Section designation |   |     |   | Mass per unit<br>length<br>kg/m | Depth<br>mm | Width<br>mm |       |
|---------------------|---|-----|---|---------------------------------|-------------|-------------|-------|
| 356                 | x | 406 | x | 634                             | 633.9       | 474.6       | 424.0 |
| 356                 | x | 406 | x | 551                             | 551.0       | 455.6       | 418.5 |
| 356                 | x | 406 | x | 467                             | 467.0       | 436.6       | 412.2 |
| 356                 | x | 406 | x | 393                             | 393.0       | 419.0       | 407.0 |
| 356                 | x | 406 | x | 340                             | 339.9       | 406.4       | 403.0 |
| 356                 | x | 406 | x | 287                             | 287.1       | 393.6       | 399.0 |
| 356                 | x | 406 | x | 235                             | 235.1       | 381.0       | 394.8 |
| 356                 | x | 368 | x | 202                             | 201.9       | 374.6       | 374.7 |
| 356                 | x | 368 | x | 177                             | 177.0       | 368.2       | 372.6 |
| 356                 | x | 368 | x | 153                             | 152.9       | 362.0       | 370.5 |
| 356                 | x | 368 | x | 129                             | 129.0       | 355.6       | 368.6 |
| 305                 | x | 305 | x | 283                             | 282.9       | 365.3       | 322.2 |
| 305                 | x | 305 | x | 240                             | 240.0       | 352.5       | 318.4 |
| 305                 | x | 305 | x | 198                             | 198.1       | 339.9       | 314.5 |
| 305                 | x | 305 | x | 158                             | 158.1       | 327.1       | 311.2 |
| 305                 | x | 305 | x | 137                             | 136.9       | 320.5       | 309.2 |
| 305                 | x | 305 | x | 118                             | 117.9       | 314.5       | 307.4 |
| 305                 | x | 305 | x | 97                              | 96.9        | 307.9       | 305.3 |
| 254                 | x | 254 | x | 167                             | 167.1       | 289.1       | 265.2 |
| 254                 | x | 254 | x | 132                             | 132.0       | 276.3       | 261.3 |
| 254                 | x | 254 | x | 107                             | 107.1       | 266.7       | 258.8 |
| 254                 | x | 254 | x | 89                              | 88.9        | 260.3       | 256.3 |
| 254                 | x | 254 | x | 73                              | 73.1        | 254.1       | 254.6 |
| 203                 | x | 203 | x | 86                              | 86.1        | 222.2       | 209.1 |
| 203                 | x | 203 | x | 71                              | 71.0        | 215.8       | 206.4 |
| 203                 | x | 203 | x | 60                              | 60.0        | 209.6       | 205.8 |
| 203                 | x | 203 | x | 52                              | 52.0        | 206.2       | 204.3 |
| 203                 | x | 203 | x | 46                              | 46.1        | 203.2       | 203.6 |
| 152                 | x | 152 | x | 37                              | 37.0        | 161.8       | 154.4 |
| 152                 | x | 152 | x | 30                              | 30.0        | 157.6       | 152.9 |
| 152                 | x | 152 | x | 23                              | 23.0        | 152.4       | 152.2 |

TABLE 16

**MASS (WEIGHT) OF ROLLED STEEL  
UNIVERSAL BEARING PILES**

Source: BS4-1:2005, Table 4

| Section designation |   |     |   |     | Mass per unit<br>length<br>kg/m | Depth<br>mm | Width<br>mm |
|---------------------|---|-----|---|-----|---------------------------------|-------------|-------------|
| 356                 | x | 368 | x | 174 | 173.9                           | 361.4       | 378.5       |
| 356                 | x | 368 | x | 152 | 152.0                           | 356.4       | 376.0       |
| 356                 | x | 368 | x | 133 | 133.0                           | 352.0       | 373.8       |
| 356                 | x | 368 | x | 109 | 108.9                           | 346.4       | 371.0       |
| 305                 | x | 305 | x | 223 | 222.9                           | 337.9       | 325.7       |
| 305                 | x | 305 | x | 186 | 186.0                           | 328.3       | 320.9       |
| 305                 | x | 305 | x | 149 | 149.1                           | 318.5       | 316.0       |
| 305                 | x | 305 | x | 126 | 126.1                           | 312.3       | 312.9       |
| 305                 | x | 305 | x | 110 | 110.0                           | 307.9       | 310.7       |
| 305                 | x | 305 | x | 95  | 94.9                            | 303.7       | 308.7       |
| 305                 | x | 305 | x | 88  | 88.0                            | 301.7       | 307.8       |
| 305                 | x | 305 | x | 79  | 78.9                            | 299.3       | 306.4       |
| 254                 | x | 254 | x | 85  | 85.1                            | 254.3       | 260.4       |
| 254                 | x | 254 | x | 71  | 71.0                            | 249.7       | 258.0       |
| 254                 | x | 254 | x | 63  | 63.0                            | 247.1       | 256.6       |
| 203                 | x | 203 | x | 54  | 53.9                            | 204.0       | 207.7       |
| 203                 | x | 203 | x | 45  | 44.9                            | 200.2       | 205.9       |

TABLE 17

**MASS (WEIGHT) OF ROLLED STEEL  
JOISTS WITH TAPER FLANGES**

Source: BS4-1:2005, Table 5

| Section designation |   |     |   |    | Mass per unit<br>length<br>kg/m | Depth<br>mm | Width<br>mm |
|---------------------|---|-----|---|----|---------------------------------|-------------|-------------|
| 254                 | x | 203 | x | 82 | 82.0                            | 254.0       | 203.2       |
| 254                 | x | 114 | x | 37 | 37.2                            | 254.0       | 114.3       |
| 203                 | x | 152 | x | 52 | 52.3                            | 203.2       | 152.4       |
| 152                 | x | 127 | x | 37 | 37.3                            | 152.4       | 127.0       |
| 127                 | x | 114 | x | 29 | 29.3                            | 127.0       | 114.3       |
| 127                 | x | 114 | x | 27 | 26.9                            | 127.0       | 114.3       |
| 127                 | x | 76  | x | 16 | 16.5                            | 127.0       | 76.2        |
| 114                 | x | 114 | x | 27 | 26.9                            | 114.3       | 114.3       |
| 102                 | x | 102 | x | 23 | 23.0                            | 101.6       | 101.6       |
| 102                 | x | 44  | x | 7  | 7.5                             | 101.6       | 44.5        |
| 89                  | x | 89  | x | 19 | 19.5                            | 88.9        | 88.9        |
| 76                  | x | 76  | x | 15 | 15.0                            | 76.2        | 80.0        |
| 76                  | x | 76  | x | 13 | 12.8                            | 76.2        | 76.2        |

TABLE 18

**MASS (WEIGHT) OF ROLLED STEEL  
STRUCTURAL TEES CUT FROM UNIVERSAL BEAMS**

Source: BS 4-1:2005 Table 6

| Section designation |   |     |   |     | Mass per<br>unit length<br>kg/m | Cut from universal beams<br>(See BS4-1:2005,Table 2)<br>Section designation |   |     |   |     | Width<br>mm | Depth<br>mm |
|---------------------|---|-----|---|-----|---------------------------------|---|---|-----|---|-----|-------------|-------------|
| 305                 | x | 457 | x | 127 | 126.7                           | 914   | x | 305 | x | 253 | 305.5       | 459.1       |
| 305                 | x | 457 | x | 112 | 112.1                           | 914   | x | 305 | x | 224 | 304.1       | 455.1       |
| 305                 | x | 457 | x | 101 | 100.4                           | 914   | x | 305 | x | 201 | 303.3       | 451.4       |
| 292                 | x | 419 | x | 113 | 113.2                           | 838   | x | 292 | x | 226 | 293.8       | 425.4       |
| 292                 | x | 419 | x | 97  | 96.9                            | 838   | x | 292 | x | 194 | 292.4       | 420.3       |
| 292                 | x | 419 | x | 88  | 87.9                            | 838   | x | 292 | x | 176 | 291.7       | 417.4       |
| 267                 | x | 381 | x | 99  | 98.3                            | 762   | x | 267 | x | 197 | 268.0       | 384.8       |
| 267                 | x | 381 | x | 87  | 86.5                            | 762   | x | 267 | x | 173 | 266.7       | 381.0       |
| 267                 | x | 381 | x | 74  | 73.4                            | 762   | x | 267 | x | 147 | 265.2       | 376.9       |
| 254                 | x | 343 | x | 85  | 85.1                            | 686   | x | 254 | x | 170 | 255.8       | 346.4       |
| 254                 | x | 343 | x | 76  | 76.2                            | 686   | x | 254 | x | 152 | 254.5       | 343.7       |
| 254                 | x | 343 | x | 70  | 70.0                            | 686   | x | 254 | x | 140 | 253.7       | 341.7       |
| 254                 | x | 343 | x | 63  | 62.6                            | 686   | x | 254 | x | 125 | 253.0       | 338.9       |
| 305                 | x | 305 | x | 119 | 119.0                           | 610   | x | 305 | x | 238 | 311.4       | 317.8       |
| 305                 | x | 305 | x | 90  | 89.5                            | 610   | x | 305 | x | 179 | 307.1       | 310.0       |
| 305                 | x | 305 | x | 75  | 74.6                            | 610   | x | 305 | x | 149 | 304.8       | 306.1       |
| 229                 | x | 305 | x | 70  | 69.9                            | 610   | x | 229 | x | 140 | 230.2       | 308.5       |
| 229                 | x | 305 | x | 63  | 62.5                            | 610   | x | 229 | x | 125 | 229.0       | 306.0       |
| 229                 | x | 305 | x | 57  | 56.5                            | 610   | x | 229 | x | 113 | 228.2       | 303.7       |
| 229                 | x | 305 | x | 51  | 50.6                            | 610   | x | 229 | x | 101 | 227.6       | 301.2       |
| 210                 | x | 267 | x | 61  | 61.0                            | 533   | x | 210 | x | 122 | 211.9       | 272.2       |
| 210                 | x | 267 | x | 55  | 54.5                            | 533   | x | 210 | x | 109 | 210.8       | 269.7       |
| 210                 | x | 267 | x | 51  | 50.5                            | 533   | x | 210 | x | 101 | 210.0       | 268.3       |
| 210                 | x | 267 | x | 46  | 46.0                            | 533   | x | 210 | x | 92  | 209.3       | 266.5       |
| 210                 | x | 267 | x | 41  | 41.1                            | 533   | x | 210 | x | 82  | 208.8       | 264.1       |
| 191                 | x | 229 | x | 49  | 49.1                            | 457   | x | 191 | x | 98  | 192.8       | 233.5       |
| 191                 | x | 229 | x | 45  | 44.6                            | 457   | x | 191 | x | 89  | 191.9       | 231.6       |
| 191                 | x | 229 | x | 41  | 41.0                            | 457   | x | 191 | x | 82  | 191.3       | 229.9       |
| 191                 | x | 229 | x | 37  | 37.1                            | 457   | x | 191 | x | 74  | 190.4       | 228.4       |
| 191                 | x | 229 | x | 34  | 33.5                            | 457   | x | 191 | x | 67  | 189.9       | 226.6       |

TABLE 18 (CONT'D)

**MASS (WEIGHT) OF ROLLED STEEL  
STRUCTURAL TEES CUT FROM UNIVERSAL BEAMS (CONT'D)**

Source: BS 4-1:2005 Table 6

| Section designation |   |     |   |    | Mass per unit length<br>kg/m | Cut from universal beams<br>(See BS4-1:2005,Table 2)<br>Section designation |   |     |   |    | Width<br>mm | Depth<br>mm |
|---------------------|---|-----|---|----|------------------------------|---|---|-----|---|----|-------------|-------------|
| 152                 | x | 229 | x | 41 | 41.0                         | 457   | x | 152 | x | 82 | 155.3       | 232.8       |
| 152                 | x | 229 | x | 37 | 37.1                         | 457   | x | 152 | x | 74 | 154.4       | 230.9       |
| 152                 | x | 229 | x | 34 | 33.6                         | 457   | x | 152 | x | 67 | 153.8       | 228.9       |
| 152                 | x | 229 | x | 30 | 29.9                         | 457   | x | 152 | x | 60 | 152.9       | 227.2       |
| 152                 | x | 229 | x | 26 | 26.1                         | 457   | x | 152 | x | 52 | 152.4       | 224.8       |
| 178                 | x | 203 | x | 37 | 37.1                         | 406   | x | 178 | x | 74 | 179.5       | 206.3       |
| 178                 | x | 203 | x | 34 | 33.5                         | 406   | x | 178 | x | 67 | 178.8       | 204.6       |
| 178                 | x | 203 | x | 30 | 30.0                         | 406   | x | 178 | x | 60 | 177.9       | 203.1       |
| 178                 | x | 203 | x | 27 | 27.0                         | 406   | x | 178 | x | 54 | 177.7       | 201.2       |
| 140                 | x | 203 | x | 23 | 23.0                         | 406   | x | 140 | x | 46 | 142.2       | 201.5       |
| 140                 | x | 203 | x | 20 | 19.5                         | 406   | x | 140 | x | 39 | 141.8       | 198.9       |
| 171                 | x | 178 | x | 34 | 33.5                         | 356   | x | 171 | x | 67 | 173.2       | 181.6       |
| 171                 | x | 178 | x | 29 | 28.5                         | 356   | x | 171 | x | 57 | 172.2       | 178.9       |
| 171                 | x | 178 | x | 26 | 25.5                         | 356   | x | 171 | x | 51 | 171.5       | 177.4       |
| 171                 | x | 178 | x | 23 | 22.5                         | 356   | x | 171 | x | 45 | 171.1       | 175.6       |
| 127                 | x | 178 | x | 20 | 19.5                         | 356   | x | 127 | x | 39 | 126.0       | 176.6       |
| 127                 | x | 178 | x | 17 | 16.5                         | 356   | x | 127 | x | 33 | 125.4       | 174.4       |
| 165                 | x | 152 | x | 27 | 27.0                         | 305   | x | 165 | x | 54 | 166.9       | 155.1       |
| 165                 | x | 152 | x | 23 | 23.0                         | 305   | x | 165 | x | 46 | 165.7       | 153.2       |
| 165                 | x | 152 | x | 20 | 20.1                         | 305   | x | 165 | x | 40 | 165.0       | 151.6       |
| 127                 | x | 152 | x | 24 | 24.0                         | 305   | x | 127 | x | 48 | 125.3       | 155.4       |
| 127                 | x | 152 | x | 21 | 20.9                         | 305   | x | 127 | x | 42 | 124.3       | 153.5       |
| 127                 | x | 152 | x | 19 | 18.5                         | 305   | x | 127 | x | 37 | 123.4       | 152.1       |
| 102                 | x | 152 | x | 17 | 16.4                         | 305   | x | 102 | x | 33 | 102.4       | 156.3       |
| 102                 | x | 152 | x | 14 | 14.1                         | 305   | x | 102 | x | 28 | 101.8       | 154.3       |
| 102                 | x | 152 | x | 13 | 12.4                         | 305   | x | 102 | x | 25 | 101.6       | 152.5       |
| 146                 | x | 127 | x | 22 | 21.5                         | 254   | x | 146 | x | 43 | 147.3       | 129.7       |
| 146                 | x | 127 | x | 19 | 18.5                         | 254   | x | 146 | x | 37 | 146.4       | 127.9       |
| 146                 | x | 127 | x | 16 | 15.5                         | 254   | x | 146 | x | 31 | 146.1       | 125.6       |
| 102                 | x | 127 | x | 14 | 14.1                         | 254   | x | 102 | x | 28 | 102.2       | 130.1       |
| 102                 | x | 127 | x | 13 | 12.6                         | 254   | x | 102 | x | 25 | 101.9       | 128.5       |
| 102                 | x | 127 | x | 11 | 11.0                         | 254   | x | 102 | x | 22 | 101.6       | 126.9       |
| 133                 | x | 102 | x | 15 | 15.0                         | 203   | x | 133 | x | 30 | 133.9       | 103.3       |
| 133                 | x | 102 | x | 13 | 12.5                         | 203   | x | 133 | x | 25 | 133.2       | 101.5       |

TABLE 19

**MASS (WEIGHT) OF ROLLED STEEL  
STRUCTURAL TEES CUT FROM UNIVERSAL COLUMNS**

Source: BS 4-1:2005 Table 7

| Section designation | Mass per unit length<br>kg/m | Cut from universal beams<br>(See BS4-1:2005,Table 2)<br>Section designation |       |       | Width<br>mm | Depth<br>mm |
|---------------------|------------------------------|---|-------|-------|-------------|-------------|
| 406 x 178 x 118     | 117.5                        | 356 x 406 x 235   | 394.8 | 190.4 |             |             |
| 368 x 178 x 101     | 100.9                        | 356 x 368 x 202   | 374.7 | 187.2 |             |             |
| 368 x 178 x 89      | 88.5                         | 356 x 368 x 177   | 372.6 | 184.0 |             |             |
| 368 x 178 x 77      | 76.4                         | 356 x 368 x 153   | 370.5 | 180.9 |             |             |
| 368 x 178 x 65      | 64.5                         | 356 x 368 x 129   | 368.6 | 177.7 |             |             |
| 305 x 152 x 79      | 79.0                         | 305 x 305 x 158   | 311.2 | 163.5 |             |             |
| 305 x 152 x 69      | 68.4                         | 305 x 305 x 137   | 309.2 | 160.2 |             |             |
| 305 x 152 x 59      | 58.9                         | 305 x 305 x 118   | 307.4 | 157.2 |             |             |
| 305 x 152 x 49      | 48.4                         | 305 x 305 x 97  | 305.3 | 153.9 |             |             |
| 254 x 127 x 66      | 66.0                         | 254 x 254 x 132   | 261.3 | 138.1 |             |             |
| 254 x 127 x 54      | 53.5                         | 254 x 254 x 107   | 258.8 | 133.3 |             |             |
| 254 x 127 x 45      | 44.4                         | 254 x 254 x 89  | 256.3 | 130.1 |             |             |
| 254 x 127 x 37      | 36.5                         | 254 x 254 x 73  | 254.6 | 127.0 |             |             |
| 203 x 102 x 43      | 43.0                         | 203 x 203 x 86  | 209.1 | 111.0 |             |             |
| 203 x 102 x 36      | 35.5                         | 203 x 203 x 71  | 206.4 | 107.8 |             |             |
| 203 x 102 x 30      | 30.0                         | 203 x 203 x 60  | 205.8 | 104.7 |             |             |
| 203 x 102 x 26      | 26.0                         | 203 x 203 x 52  | 204.3 | 103.0 |             |             |
| 203 x 102 x 23      | 23.0                         | 203 x 203 x 46  | 203.6 | 101.5 |             |             |
| 152 x 76 x 19       | 18.5                         | 152 x 152 x 37  | 154.4 | 80.8  |             |             |
| 152 x 76 x 15       | 15.0                         | 152 x 152 x 30  | 152.9 | 78.7  |             |             |
| 152 x 76 x 12       | 11.5                         | 152 x 152 x 23  | 152.2 | 76.1  |             |             |



TABLE 20

**MASS (WEIGHT) OF ROLLED STEEL  
PARALLEL FLANGE CHANNELS**

Source: BS 4-1:2005 Table 8

| Section designation | Mass per unit length<br>kg/m | Depth<br>mm | Width<br>mm |
|---------------------|------------------------------|-------------|-------------|
| 430 x 100 x 64      | 64.4                         | 430.0       | 100.0       |
| 380 x 100 x 54      | 54.0                         | 380.0       | 100.0       |
| 300 x 100 x 46      | 45.5                         | 300.0       | 100.0       |
| 300 x 90 x 41       | 41.4                         | 300.0       | 90.0        |
| 260 x 90 x 35       | 34.8                         | 260.0       | 90.0        |
| 260 x 75 x 28       | 27.6                         | 260.0       | 75.0        |
| 230 x 90 x 32       | 32.2                         | 230.0       | 90.0        |
| 230 x 75 x 26       | 25.7                         | 230.0       | 75.0        |
| 200 x 90 x 30       | 29.7                         | 200.0       | 90.0        |
| 200 x 75 x 23       | 23.4                         | 200.0       | 75.0        |
| 180 x 90 x 26       | 26.1                         | 180.0       | 90.0        |
| 180 x 75 x 20       | 20.3                         | 180.0       | 75.0        |
| 150 x 90 x 24       | 23.9                         | 150.0       | 90.0        |
| 150 x 75 x 18       | 17.9                         | 150.0       | 75.0        |
| 125 x 65 x 15       | 14.8                         | 125.0       | 65.0        |
| 100 x 50 x 10       | 10.2                         | 100.0       | 50.0        |

TABLE 21

**MASS (WEIGHT) OF ROLLED STEEL  
EQUAL FLANGE TEES WITH RADIUSED ROOT AND TOES**

Source: BS EN 10055:1996

| Designation | Mass<br>kg/m | Cross-section<br>cm <sup>2</sup> | Height<br>mm | Width<br>mm | Thickness<br>mm |
|-------------|--------------|----------------------------------|--------------|-------------|-----------------|
| T30         | 1.77         | 2.26                             | 30           | 30          | 4               |
| T35         | 2.33         | 2.97                             | 35           | 35          | 4.5             |
| T40         | 2.96         | 3.77                             | 40           | 40          | 5               |
| T50         | 4.44         | 5.66                             | 50           | 50          | 6               |
| T60         | 6.23         | 7.94                             | 60           | 60          | 7               |
| T70         | 8.32         | 10.6                             | 70           | 70          | 8               |
| T80         | 10.7         | 13.6                             | 80           | 80          | 9               |
| T100        | 16.4         | 20.9                             | 100          | 100         | 11              |
| T120        | 23.2         | 29.6                             | 120          | 120         | 13              |
| T140        | 31.3         | 39.9                             | 140          | 140         | 15              |

TABLE 22

MASS (WEIGHT) OF ROLLED STEEL CIRCULAR HOLLOW SECTIONS

Source: BS-EN-10210-2-2006, Table B.1

| Diameter (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|---------------|----------------|-------------------------|
| 21.30         | 2.30           | 1.08                    |
|               | 2.60           | 1.20                    |
|               | 3.20           | 1.43                    |
| 26.90         | 2.30           | 1.40                    |
|               | 2.60           | 1.56                    |
|               | 3.20           | 1.87                    |
| 33.70         | 2.60           | 1.99                    |
|               | 3.20           | 2.41                    |
|               | 4.00           | 2.93                    |
| 42.40         | 2.60           | 2.55                    |
|               | 3.20           | 3.09                    |
|               | 4.00           | 3.79                    |
| 48.30         | 2.60           | 2.93                    |
|               | 3.20           | 3.56                    |
|               | 4.00           | 4.37                    |
|               | 5.00           | 5.34                    |
| 60.30         | 2.60           | 3.70                    |
|               | 3.20           | 4.51                    |
|               | 4.00           | 5.55                    |
|               | 5.00           | 6.82                    |
| 76.10         | 2.60           | 4.71                    |
|               | 3.20           | 5.75                    |
|               | 4.00           | 7.11                    |
|               | 5.00           | 8.77                    |
| 88.90         | 3.20           | 6.76                    |
|               | 4.00           | 8.38                    |
|               | 5.00           | 10.30                   |
|               | 6.30           | 12.80                   |
| 101.60        | 3.20           | 7.77                    |
|               | 4.00           | 9.63                    |
|               | 5.00           | 11.90                   |
|               | 6.30           | 14.80                   |
|               | 8.00           | 18.50                   |
| 114.30        | 3.20           | 8.77                    |
|               | 4.00           | 10.90                   |
|               | 5.00           | 13.50                   |
|               | 6.30           | 16.80                   |
|               | 8.00           | 21.00                   |
|               | 10.00          | 25.70                   |
| 139.70        | 4.00           | 13.40                   |
|               | 5.00           | 16.60                   |
|               | 6.30           | 20.70                   |
|               | 8.00           | 26.00                   |
|               | 10.00          | 32.00                   |
|               | 12.50          | 39.20                   |
| 168.30        | 4.00           | 16.20                   |
|               | 5.00           | 20.10                   |
|               | 6.30           | 25.20                   |
|               | 8.00           | 31.60                   |
|               | 10.00          | 39.00                   |
|               | 12.50          | 48.00                   |

| Diameter (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|---------------|----------------|-------------------------|
| 177.80        | 5.00           | 21.30                   |
|               | 6.30           | 26.60                   |
|               | 8.00           | 33.50                   |
|               | 10.00          | 41.40                   |
|               | 12.50          | 51.00                   |
| 193.70        | 5.00           | 23.30                   |
|               | 6.30           | 29.10                   |
|               | 8.00           | 36.60                   |
|               | 10.00          | 45.30                   |
|               | 12.50          | 55.90                   |
| 219.10        | 5.00           | 26.40                   |
|               | 6.30           | 33.10                   |
|               | 8.00           | 41.60                   |
|               | 10.00          | 51.60                   |
|               | 12.50          | 63.70                   |
| 244.50        | 14.20          | 71.80                   |
|               | 16.00          | 80.10                   |
|               | 20.00          | 98.20                   |
|               | 5.00           | 29.50                   |
|               | 6.30           | 37.00                   |
|               | 8.00           | 46.70                   |
|               | 10.00          | 57.80                   |
| 273.00        | 12.50          | 71.50                   |
|               | 14.20          | 80.60                   |
|               | 16.00          | 90.20                   |
|               | 20.00          | 110.70                  |
|               | 25.00          | 135.00                  |
|               | 5.00           | 33.00                   |
|               | 6.30           | 41.40                   |
| 323.90        | 8.00           | 52.30                   |
|               | 10.00          | 64.90                   |
|               | 12.50          | 80.30                   |
|               | 14.20          | 90.60                   |
|               | 16.00          | 101.00                  |
|               | 20.00          | 125.00                  |
|               | 25.00          | 153.00                  |
| 323.90        | 5.00           | 39.30                   |
|               | 6.30           | 49.30                   |
|               | 8.00           | 62.30                   |
|               | 10.00          | 77.40                   |
|               | 12.50          | 96.00                   |
|               | 14.20          | 108.50                  |
|               | 16.00          | 121.00                  |
| 323.90        | 20.00          | 150.00                  |
|               | 25.00          | 184.00                  |

| Diameter (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|---------------|----------------|-------------------------|
| 355.60        | 6.30           | 54.30                   |
|               | 8.00           | 68.60                   |
|               | 10.00          | 85.20                   |
|               | 12.50          | 106.00                  |
|               | 14.20          | 120.00                  |
|               | 16.00          | 134.00                  |
|               | 20.00          | 166.00                  |
| 406.40        | 25.00          | 204.00                  |
|               | 6.30           | 62.20                   |
|               | 8.00           | 78.60                   |
|               | 10.00          | 97.80                   |
|               | 12.50          | 121.00                  |
| 457.00        | 14.20          | 137.00                  |
|               | 16.00          | 154.00                  |
|               | 20.00          | 191.00                  |
|               | 25.00          | 235.00                  |
|               | 30.00          | 278.00                  |
|               | 40.00          | 361.00                  |
|               | 6.30           | 70.00                   |
| 508.00        | 8.00           | 88.60                   |
|               | 10.00          | 110.00                  |
|               | 12.50          | 137.00                  |
|               | 14.20          | 155.00                  |
|               | 16.00          | 174.00                  |
|               | 20.00          | 216.00                  |
|               | 25.00          | 266.00                  |
| 558.60        | 30.00          | 316.00                  |
|               | 40.00          | 411.00                  |
|               | 6.30           | 77.90                   |
|               | 8.00           | 98.60                   |
|               | 10.00          | 123.00                  |
|               | 12.50          | 153.00                  |
|               | 14.20          | 173.00                  |
| 610.00        | 16.00          | 194.00                  |
|               | 20.00          | 241.00                  |
|               | 25.00          | 298.00                  |
|               | 30.00          | 354.00                  |
|               | 40.00          | 462.00                  |
|               | 50.00          | 565.00                  |
|               | 6.30           | 93.80                   |
| 660.40        | 8.00           | 119.00                  |
|               | 10.00          | 148.00                  |
|               | 12.50          | 184.00                  |
|               | 14.20          | 209.00                  |
|               | 16.00          | 234.00                  |
|               | 20.00          | 291.00                  |
|               | 25.00          | 361.00                  |
| 660.40        | 30.00          | 429.00                  |
|               | 40.00          | 562.00                  |
|               | 50.00          | 691.00                  |

TABLE 23

MASS (WEIGHT) OF ROLLED STEEL SQUARE HOLLOW SECTIONS

Source: BS-EN-10210-2-2006, Table B.2

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 40 x 40   | 2.60           | 3.00                    |
|           | 3.20           | 3.61                    |
|           | 4.00           | 4.39                    |
|           | 5.00           | 5.28                    |
| 50 x 50   | 2.60           | 3.81                    |
|           | 3.20           | 4.62                    |
|           | 4.00           | 5.64                    |
|           | 5.00           | 6.85                    |
|           | 6.30           | 8.31                    |
| 60 x 60   | 2.60           | 4.63                    |
|           | 3.20           | 5.62                    |
|           | 4.00           | 6.90                    |
|           | 5.00           | 8.42                    |
|           | 6.30           | 10.30                   |
|           | 8.00           | 12.50                   |
| 70 x 70   | 3.20           | 6.63                    |
|           | 4.00           | 8.15                    |
|           | 5.00           | 9.99                    |
|           | 6.30           | 12.30                   |
|           | 8.00           | 15.00                   |
| 80 x 80   | 3.20           | 7.63                    |
|           | 4.00           | 9.41                    |
|           | 5.00           | 11.60                   |
|           | 6.30           | 14.20                   |
|           | 8.00           | 17.50                   |
| 90 x 90   | 4.00           | 10.70                   |
|           | 5.00           | 13.10                   |
|           | 6.30           | 16.20                   |
|           | 8.00           | 20.10                   |
| 100 x 100 | 4.00           | 11.90                   |
|           | 5.00           | 14.70                   |
|           | 6.30           | 18.20                   |
|           | 8.00           | 22.60                   |
|           | 10.00          | 27.40                   |
| 120 x 120 | 5.00           | 17.80                   |
|           | 6.30           | 22.20                   |
|           | 8.00           | 27.60                   |
|           | 10.00          | 33.70                   |
|           | 12.50          | 40.90                   |
| 140 x 140 | 5.00           | 21.00                   |
|           | 6.30           | 26.10                   |
|           | 8.00           | 32.60                   |
|           | 10.00          | 40.00                   |
|           | 12.50          | 48.70                   |
| 150 x 150 | 5.00           | 22.60                   |
|           | 6.30           | 28.10                   |
|           | 8.00           | 35.10                   |
|           | 10.00          | 43.10                   |
|           | 12.50          | 52.70                   |
|           | 14.20          | 58.90                   |
| 16.00     | 65.20          |                         |

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 160 x 160 | 5.00           | 24.10                   |
|           | 6.30           | 30.10                   |
|           | 8.00           | 37.60                   |
|           | 10.00          | 46.30                   |
|           | 12.50          | 56.60                   |
|           | 14.20          | 63.30                   |
| 180 x 180 | 16.00          | 70.20                   |
|           | 5.00           | 27.30                   |
|           | 6.30           | 34.00                   |
|           | 8.00           | 42.70                   |
|           | 10.00          | 52.50                   |
| 200 x 200 | 12.50          | 64.40                   |
|           | 14.20          | 72.20                   |
|           | 16.00          | 80.20                   |
|           | 5.00           | 30.40                   |
|           | 6.30           | 38.00                   |
|           | 8.00           | 47.70                   |
| 220 x 220 | 10.00          | 58.80                   |
|           | 12.50          | 72.30                   |
|           | 14.20          | 81.10                   |
|           | 16.00          | 90.30                   |
|           | 6.30           | 41.90                   |
|           | 8.00           | 52.70                   |
| 250 x 250 | 10.00          | 65.10                   |
|           | 12.50          | 80.10                   |
|           | 14.20          | 90.10                   |
|           | 16.00          | 100.00                  |
|           | 6.30           | 47.90                   |
|           | 8.00           | 60.30                   |
| 260 x 260 | 10.00          | 74.50                   |
|           | 12.50          | 91.90                   |
|           | 14.20          | 103.00                  |
|           | 16.00          | 115.00                  |
|           | 6.30           | 49.90                   |
|           | 8.00           | 62.80                   |
| 300 x 300 | 10.00          | 77.70                   |
|           | 12.50          | 95.80                   |
|           | 14.20          | 108.00                  |
|           | 16.00          | 120.00                  |
|           | 6.30           | 57.80                   |
|           | 8.00           | 72.80                   |
| 350 x 350 | 10.00          | 90.20                   |
|           | 12.50          | 112.00                  |
|           | 14.20          | 126.00                  |
|           | 16.00          | 141.00                  |
|           | 8.00           | 85.40                   |
|           | 10.00          | 106.00                  |
| 400 x 400 | 12.50          | 131.00                  |
|           | 14.20          | 148.00                  |
|           | 16.00          | 166.00                  |
|           | 10.00          | 122.00                  |
|           | 12.50          | 151.00                  |
|           | 14.20          | 170.00                  |
| 16.00     | 191.00         |                         |
| 20.00     | 235.00         |                         |

TABLE 24

## MASS (WEIGHT) OF ROLLED STEEL RECTANGULAR HOLLOW SECTIONS

Source: BS-EN-10210-2-2006, Table B.3

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) | Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |       |
|-----------|----------------|-------------------------|-----------|----------------|-------------------------|-------|
| 50 x 30   | 2.60           | 3.00                    | 180 x 100 | 4.00           | 16.90                   |       |
|           | 3.20           | 3.61                    |           | 5.00           | 21.00                   |       |
|           | 4.00           | 4.39                    |           | 6.30           | 26.10                   |       |
|           | 5.00           | 5.28                    |           | 8.00           | 32.60                   |       |
| 60 x 40   | 2.60           | 3.81                    |           | 10.00          | 40.00                   |       |
|           | 3.20           | 4.62                    | 12.50     | 48.70          |                         |       |
|           | 4.00           | 5.64                    | 200 x 100 | 4.00           | 18.20                   |       |
|           | 5.00           | 6.85                    |           | 5.00           | 22.60                   |       |
| 6.30      | 8.31           | 6.30                    |           | 28.10          |                         |       |
| 80 x 40   | 3.20           | 5.62                    |           | 8.00           | 35.10                   |       |
|           | 4.00           | 6.90                    |           | 10.00          | 43.10                   |       |
|           | 5.00           | 8.42                    | 12.50     | 52.70          |                         |       |
|           | 6.30           | 10.30                   | 16.00     | 65.20          |                         |       |
| 80 x 40   | 8.00           | 12.50                   | 200 x 120 | 6.30           | 30.10                   |       |
|           | 90 x 50        | 3.20                    |           | 6.63           | 8.00                    | 37.60 |
|           |                | 4.00                    |           | 8.15           | 10.00                   | 46.30 |
|           |                | 5.00                    |           | 9.99           | 12.50                   | 56.60 |
| 6.30      |                | 12.30                   | 250 x 150 | 6.30           | 38.00                   |       |
| 8.00      | 15.00          | 8.00                    |           | 47.70          |                         |       |
| 100 x 50  | 3.20           | 7.13                    |           | 10.00          | 58.80                   |       |
|           | 4.00           | 8.78                    |           | 12.50          | 72.30                   |       |
|           | 5.00           | 10.80                   | 14.20     | 81.10          |                         |       |
|           | 6.30           | 13.30                   | 16.00     | 90.30          |                         |       |
| 100 x 50  | 8.00           | 16.30                   | 260 x 180 | 6.30           | 41.90                   |       |
|           | 100 x 60       | 3.20                    |           | 7.63           | 8.00                    | 52.70 |
|           |                | 4.00                    |           | 9.41           | 10.00                   | 65.10 |
|           |                | 5.00                    |           | 11.60          | 12.50                   | 80.10 |
| 6.30      |                | 14.20                   | 14.20     | 90.10          |                         |       |
| 100 x 60  | 8.00           | 17.50                   | 16.00     | 100.00         |                         |       |
|           | 120 x 60       | 4.00                    | 10.70     | 300 x 200      | 6.30                    | 47.90 |
|           |                | 5.00                    | 13.10     |                | 8.00                    | 60.30 |
|           |                | 6.30                    | 16.20     |                | 10.00                   | 74.50 |
| 8.00      |                | 20.10                   | 12.50     |                | 91.90                   |       |
| 120 x 60  | 10.00          | 24.30                   | 14.20     | 103.00         |                         |       |
|           | 120 x 80       | 4.00                    | 11.90     | 16.00          | 115.00                  |       |
|           |                | 5.00                    | 14.70     | 350 x 250      | 6.30                    | 57.80 |
|           |                | 6.30                    | 18.20     |                | 8.00                    | 72.80 |
| 8.00      |                | 22.60                   | 10.00     |                | 90.20                   |       |
| 10.00     | 27.40          | 12.50                   | 112.00    |                |                         |       |
| 140 x 80  | 4.00           | 13.20                   | 14.20     | 126.00         |                         |       |
|           | 5.00           | 16.30                   | 16.00     | 141.00         |                         |       |
|           | 6.30           | 20.20                   | 400 x 200 | 8.00           | 72.80                   |       |
|           | 8.00           | 25.10                   |           | 10.00          | 90.20                   |       |
| 10.00     | 30.60          | 12.50                   |           | 112.00         |                         |       |
| 150 x 100 | 4.00           | 15.10                   |           | 14.20          | 126.00                  |       |
|           | 5.00           | 18.60                   | 16.00     | 141.00         |                         |       |
|           | 6.30           | 23.10                   | 450 x 250 | 8.00           | 85.40                   |       |
|           | 8.00           | 28.90                   |           | 10.00          | 106.00                  |       |
| 10.00     | 35.30          | 12.50                   |           | 131.00         |                         |       |
| 12.50     | 42.80          | 14.20                   |           | 148.00         |                         |       |
| 160 x 80  | 4.00           | 14.40                   | 16.00     | 166.00         |                         |       |
|           | 5.00           | 17.80                   | 500 x 300 | 10.00          | 122.00                  |       |
|           | 6.30           | 22.20                   |           | 12.50          | 151.00                  |       |
|           | 8.00           | 27.60                   |           | 14.20          | 170.00                  |       |
| 10.00     | 33.70          | 16.00                   |           | 191.00         |                         |       |
| 160 x 80  | 12.50          | 40.90                   | 20.00     | 235.00         |                         |       |

TABLE 25

**MASS (WEIGHT) OF SOLID ALUMINIUM ROUND BARS**

| Diameter (mm) | Mass/unit length (kg/m) |
|---------------|-------------------------|
| 5.00          | 0.054                   |
| 6.35          | 0.086                   |
| 6.73          | 0.097                   |
| 7.14          | 0.109                   |
| 7.92          | 0.134                   |
| 8.74          | 0.162                   |
| 9.14          | 0.178                   |
| 9.52          | 0.193                   |
| 10.31         | 0.226                   |
| 11.10         | 0.263                   |
| 11.89         | 0.301                   |
| 12.70         | 0.344                   |
| 14.27         | 0.434                   |
| 15.06         | 0.484                   |
| 15.87         | 0.537                   |

| Diameter (mm) | Mass/unit length (kg/m) |
|---------------|-------------------------|
| 17.45         | 0.649                   |
| 19.05         | 0.772                   |
| 19.84         | 0.838                   |
| 20.62         | 0.906                   |
| 21.44         | 0.979                   |
| 22.22         | 1.052                   |
| 23.80         | 1.207                   |
| 25.40         | 1.375                   |
| 26.97         | 1.552                   |
| 28.19         | 1.694                   |
| 28.58         | 1.740                   |
| 30.15         | 1.936                   |
| 31.75         | 2.147                   |
| 33.32         | 2.366                   |
| 34.92         | 2.598                   |

| Diameter (mm) | Mass/unit length (kg/m) |
|---------------|-------------------------|
| 35.99         | 2.760                   |
| 36.50         | 2.838                   |
| 38.10         | 3.092                   |
| 44.45         | 4.210                   |
| 46.99         | 4.656                   |
| 47.62         | 4.832                   |
| 50.80         | 5.497                   |
| 52.98         | 6.207                   |
| 57.15         | 6.959                   |
| 60.32         | 7.753                   |
| 63.50         | 8.590                   |
| 69.85         | 10.387                  |
| 76.20         | 12.359                  |

TABLE 26

**MASS (WEIGHT) OF SOLID ALUMINIUM SQUARE BARS**

| Size (mm) | Mass/unit length (kg/m) |
|-----------|-------------------------|
| 6.35      | 0.109                   |
| 7.92      | 0.171                   |
| 9.52      | 0.244                   |

| Size (mm) | Mass/unit length (kg/m) |
|-----------|-------------------------|
| 12.19     | 0.403                   |
| 12.70     | 0.438                   |
| 15.88     | 0.682                   |

| Size (mm) | Mass/unit length (kg/m) |
|-----------|-------------------------|
| 19.05     | 0.984                   |
| 22.22     | 1.341                   |
| 25.40     | 1.750                   |

TABLE 27

**MASS (WEIGHT) OF SOLID  
ALUMINIUM FLATS**

| Size<br>(mm)  | Mass/unit<br>length<br>(kg/m) |
|---------------|-------------------------------|
| 6.35 x 3.18   | 0.054                         |
| 9.52 x 2.36   | 0.061                         |
| 9.52 x 3.18   | 0.082                         |
| 9.52 x 6.35   | 0.016                         |
| 10.10 x 2.01  | 0.055                         |
| 11.10 x 3.96  | 0.118                         |
| 11.10 x 6.35  | 0.190                         |
| 12.70 x 1.57  | 0.054                         |
| 12.70 x 2.36  | 0.080                         |
| 12.70 x 3.18  | 0.109                         |
| 12.70 x 4.75  | 0.164                         |
| 12.70 x 6.35  | 0.219                         |
| 14.00 x 3.00  | 0.113                         |
| 15.88 x 1.57  | 0.067                         |
| 15.88 x 2.36  | 0.101                         |
| 15.88 x 3.18  | 0.137                         |
| 15.88 x 4.75  | 0.204                         |
| 15.88 x 6.35  | 0.272                         |
| 15.88 x 9.52  | 0.409                         |
| 17.45 x 3.18  | 0.150                         |
| 17.45 x 4.75  | 0.223                         |
| 17.45 x 6.35  | 0.301                         |
| 18.24 x 8.74  | 0.427                         |
| 18.64 x 4.37  | 0.219                         |
| 19.05 x 1.57  | 0.082                         |
| 19.05 x 2.36  | 0.122                         |
| 19.05 x 3.18  | 0.164                         |
| 19.05 x 4.75  | 0.246                         |
| 19.05 x 6.35  | 0.329                         |
| 19.05 x 9.07  | 0.491                         |
| 19.99 x 3.00  | 0.162                         |
| 22.22 x 3.18  | 0.192                         |
| 22.22 x 6.35  | 0.381                         |
| 22.22 x 9.52  | 0.574                         |
| 23.80 x 3.18  | 0.205                         |
| 23.80 x 6.35  | 0.409                         |
| 23.80 x 9.52  | 0.615                         |
| 24.99 x 8.00  | 0.543                         |
| 25.40 x 1.57  | 0.109                         |
| 25.40 x 2.36  | 0.162                         |
| 25.40 x 3.18  | 0.219                         |
| 25.40 x 4.75  | 0.327                         |
| 25.40 x 6.35  | 0.438                         |
| 25.40 x 7.92  | 0.546                         |
| 25.40 x 9.52  | 0.656                         |
| 25.40 x 12.70 | 0.875                         |
| 25.40 x 15.88 | 1.094                         |

| Size<br>(mm)  | Mass/unit<br>length<br>(kg/m) |
|---------------|-------------------------------|
| 25.40 x 19.05 | 1.312                         |
| 25.58 x 3.18  | 0.242                         |
| 25.58 x 6.35  | 0.491                         |
| 31.75 x 1.60  | 0.138                         |
| 31.75 x 3.18  | 0.274                         |
| 31.75 x 4.75  | 0.409                         |
| 31.75 x 6.35  | 0.546                         |
| 31.75 x 9.52  | 0.820                         |
| 31.75 x 12.70 | 1.089                         |
| 34.92 x 3.18  | 0.301                         |
| 34.92 x 6.35  | 0.582                         |
| 34.92 x 9.52  | 0.903                         |
| 34.92 x 12.70 | 1.204                         |
| 38.10 x 1.57  | 0.162                         |
| 38.10 x 2.36  | 0.244                         |
| 38.10 x 3.18  | 0.327                         |
| 38.10 x 4.75  | 0.490                         |
| 38.10 x 6.35  | 0.656                         |
| 38.10 x 9.52  | 0.982                         |
| 38.10 x 12.70 | 1.310                         |
| 38.10 x 15.88 | 1.640                         |
| 38.10 x 19.05 | 1.964                         |
| 38.10 x 25.40 | 2.625                         |
| 41.28 x 3.18  | 0.356                         |
| 41.28 x 6.35  | 0.711                         |
| 41.28 x 9.52  | 1.065                         |
| 44.45 x 3.18  | 0.382                         |
| 44.45 x 6.35  | 0.765                         |
| 44.45 x 9.52  | 1.149                         |
| 44.45 x 12.70 | 1.531                         |
| 50.80 x 1.57  | 0.217                         |
| 50.80 x 3.18  | 0.438                         |
| 50.80 x 4.75  | 0.655                         |
| 50.80 x 6.35  | 0.875                         |
| 50.80 x 9.52  | 1.312                         |
| 50.80 x 12.70 | 1.750                         |
| 50.80 x 15.88 | 2.188                         |
| 57.15 x 2.29  | 0.354                         |
| 57.15 x 3.18  | 0.492                         |
| 57.15 x 6.35  | 0.984                         |
| 57.15 x 9.52  | 1.476                         |
| 57.15 x 12.70 | 1.969                         |
| 57.15 x 19.05 | 2.952                         |
| 59.44 x 3.56  | 0.573                         |
| 63.37 x 19.30 | 3.319                         |
| 63.50 x 1.57  | 0.271                         |
| 63.50 x 2.36  | 0.406                         |

| Size<br>(mm)   | Mass/unit<br>length<br>(kg/m) |
|----------------|-------------------------------|
| 63.50 x 3.18   | 0.546                         |
| 63.50 x 6.35   | 1.094                         |
| 63.50 x 9.52   | 1.644                         |
| 63.50 x 12.70  | 2.188                         |
| 63.50 x 19.05  | 3.281                         |
| 69.85 x 3.18   | 0.601                         |
| 69.85 x 4.75   | 0.952                         |
| 69.85 x 6.35   | 1.204                         |
| 69.85 x 9.52   | 1.804                         |
| 69.85 x 12.70  | 2.406                         |
| 69.85 x 15.88  | 3.008                         |
| 76.20 x 1.57   | 0.324                         |
| 76.20 x 3.18   | 0.658                         |
| 76.20 x 6.35   | 1.312                         |
| 76.20 x 9.52   | 1.969                         |
| 76.20 x 12.70  | 2.619                         |
| 76.20 x 19.05  | 3.938                         |
| 82.55 x 3.18   | 0.665                         |
| 82.55 x 6.35   | 1.423                         |
| 82.55 x 12.70  | 2.844                         |
| 88.90 x 3.18   | 0.765                         |
| 88.90 x 6.35   | 1.531                         |
| 88.90 x 9.52   | 2.296                         |
| 88.90 x 12.70  | 3.063                         |
| 95.25 x 3.18   | 0.821                         |
| 95.25 x 6.35   | 1.641                         |
| 95.25 x 9.52   | 2.461                         |
| 95.25 x 12.70  | 3.281                         |
| 101.60 x 3.18  | 0.875                         |
| 101.60 x 6.35  | 1.750                         |
| 101.60 x 9.52  | 2.619                         |
| 101.60 x 31.75 | 8.750                         |
| 114.30 x 2.03  | 0.629                         |
| 114.30 x 6.35  | 1.969                         |
| 114.30 x 9.52  | 2.952                         |
| 114.30 x 12.70 | 3.929                         |
| 127.00 x 6.35  | 2.188                         |
| 127.00 x 9.52  | 3.289                         |
| 127.00 x 12.70 | 4.375                         |
| 127.00 x 19.05 | 6.563                         |
| 133.35 x 6.35  | 2.274                         |
| 139.70 x 6.35  | 2.406                         |
| 146.05 x 6.35  | 2.490                         |
| 152.40 x 3.18  | 1.302                         |
| 152.40 x 6.35  | 2.625                         |
| 152.40 x 9.52  | 3.938                         |

TABLE 28

MASS (WEIGHT) OF  
ALUMINIUM EQUAL ANGLES

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 9.52      | 1.19           | 0.058                   |
| 9.52      | 1.57           | 0.076                   |
| 12.70     | 1.02           | 0.067                   |
| 12.70     | 1.19           | 0.079                   |
| 12.70     | 1.57           | 0.101                   |
| 12.70     | 2.36           | 0.147                   |
| 12.70     | 3.18           | 0.192                   |
| 15.88     | 1.57           | 0.129                   |
| 15.88     | 3.18           | 0.244                   |
| 15.88     | 4.75           | 0.351                   |
| 19.05     | 1.19           | 0.119                   |
| 19.05     | 1.57           | 0.156                   |
| 19.05     | 2.39           | 0.231                   |
| 19.05     | 3.18           | 0.301                   |
| 20.22     | 1.17           | 0.124                   |
| 22.22     | 3.18           | 0.356                   |
| 25.40     | 1.19           | 0.161                   |
| 25.40     | 1.57           | 0.210                   |
| 25.40     | 2.36           | 0.308                   |
| 25.40     | 3.18           | 0.409                   |
| 25.40     | 6.35           | 0.766                   |
| 28.58     | 3.18           | 0.464                   |
| 31.75     | 1.57           | 0.266                   |
| 31.75     | 3.18           | 0.521                   |
| 31.75     | 6.35           | 0.967                   |
| 34.92     | 3.18           | 0.574                   |
| 38.10     | 1.57           | 0.318                   |
| 38.10     | 3.18           | 0.629                   |
| 38.10     | 4.75           | 0.918                   |
| 38.10     | 6.35           | 1.202                   |
| 44.45     | 3.18           | 0.738                   |
| 44.45     | 6.35           | 1.421                   |
| 50.00     | 3.00           | 0.789                   |
| 50.00     | 5.00           | 1.290                   |
| 50.80     | 1.60           | 0.432                   |
| 50.80     | 2.36           | 0.635                   |
| 50.80     | 3.18           | 0.845                   |
| 50.80     | 4.75           | 1.244                   |
| 50.80     | 6.35           | 1.640                   |
| 63.50     | 3.18           | 1.066                   |
| 63.50     | 6.35           | 2.068                   |
| 63.50     | 7.92           | 2.564                   |
| 76.20     | 6.35           | 2.502                   |
| 80.01     | 5.99           | 2.504                   |
| 80.01     | 10.01          | 4.073                   |

TABLE 29

MASS (WEIGHT) OF  
ALUMINIUM UNEQUAL ANGLES

| Size (mm)     | Thickness (mm) | Mass/unit length (kg/m) |
|---------------|----------------|-------------------------|
| 12.70 x 6.35  | 3.18           | 0.137                   |
| 15.88 x 12.70 | 3.18           | 0.219                   |
| 19.05 x 6.35  | 3.18           | 0.190                   |
| 19.05 x 9.52  | 3.18           | 0.219                   |
| 19.05 x 12.70 | 1.19           | 0.100                   |
| 19.05 x 12.70 | 1.57           | 0.129                   |
| 19.05 x 12.70 | 3.18           | 0.247                   |
| 22.22 x 12.70 | 1.19           | 0.109                   |
| 22.22 x 12.70 | 3.18           | 0.274                   |
| 25.40 x 12.70 | 1.19           | 0.119                   |
| 25.40 x 12.70 | 1.57           | 0.158                   |
| 25.40 x 12.70 | 2.36           | 0.231                   |
| 25.40 x 12.70 | 3.18           | 0.301                   |
| 25.40 x 19.05 | 3.18           | 0.356                   |
| 31.75 x 12.70 | 1.19           | 0.140                   |
| 31.75 x 12.70 | 1.57           | 0.183                   |
| 31.75 x 12.70 | 2.36           | 0.272                   |
| 31.75 x 12.70 | 3.18           | 0.186                   |
| 31.75 x 19.05 | 2.08           | 0.275                   |
| 31.75 x 19.05 | 3.18           | 0.409                   |
| 31.75 x 25.40 | 3.18           | 0.464                   |
| 38.10 x 11.10 | 1.57           | 0.204                   |
| 38.10 x 12.70 | 1.19           | 0.161                   |
| 38.10 x 12.70 | 1.27           | 0.170                   |
| 38.10 x 12.70 | 1.57           | 0.210                   |
| 38.10 x 12.70 | 2.36           | 0.311                   |
| 38.10 x 12.70 | 3.18           | 0.409                   |
| 38.10 x 19.05 | 2.36           | 0.354                   |
| 38.10 x 19.05 | 3.18           | 0.464                   |
| 38.10 x 25.40 | 1.57           | 0.265                   |
| 38.10 x 25.40 | 2.36           | 0.391                   |
| 38.10 x 25.40 | 3.18           | 0.521                   |
| 38.10 x 31.75 | 3.18           | 0.574                   |
| 44.45 x 12.70 | 1.57           | 0.234                   |
| 44.45 x 12.70 | 3.18           | 0.464                   |
| 44.45 x 25.40 | 1.57           | 0.292                   |
| 44.45 x 25.40 | 2.36           | 0.432                   |
| 44.45 x 25.40 | 3.18           | 0.574                   |
| 47.72 x 15.88 | 3.18           | 0.516                   |
| 50.80 x 12.70 | 1.19           | 0.202                   |
| 50.80 x 12.70 | 1.57           | 0.265                   |
| 50.80 x 12.70 | 2.36           | 0.391                   |
| 50.80 x 12.70 | 3.18           | 0.519                   |
| 50.80 x 19.05 | 3.18           | 0.574                   |
| 50.80 x 25.40 | 1.57           | 0.318                   |
| 50.80 x 25.40 | 3.18           | 0.626                   |
| 50.80 x 38.10 | 3.18           | 0.729                   |
| 63.50 x 12.70 | 2.54           | 0.507                   |
| 63.50 x 25.40 | 3.18           | 0.740                   |
| 63.50 x 38.10 | 6.35           | 1.637                   |
| 76.20 x 12.70 | 1.60           | 0.379                   |
| 76.20 x 12.70 | 2.36           | 0.555                   |
| 76.20 x 25.40 | 3.18           | 0.847                   |
| 76.20 x 31.75 | 3.18           | 0.903                   |
| 88.90 x 25.40 | 6.35           | 1.845                   |
| 88.90 x 44.45 | 3.18           | 1.122                   |

TABLE 30

## MASS (WEIGHT) OF ALUMINIUM CHANNELS

| Size<br>(mm)  | Thickness<br>(mm) | Mass/unit<br>length<br>(kg/m) |
|---------------|-------------------|-------------------------------|
| 7.14 x 5.16   | 1.19              | 0.049                         |
| 7.39 x 5.99   | 1.29              | 0.051                         |
| 7.77 x 5.54   | 1.52              | 0.065                         |
| 7.92 x 12.70  | 1.57              | 0.129                         |
| 9.53 x 9.53   | 1.19              | 0.085                         |
| 9.53 x 9.53   | 1.57              | 0.109                         |
| 11.94 x 15.24 | 2.36              | 0.239                         |
| 12.70 x 9.53  | 1.57              | 0.122                         |
| 12.70 x 9.53  | 3.18              | 0.219                         |
| 12.70 x 12.70 | 1.57              | 0.149                         |
| 12.70 x 12.70 | 2.36              | 0.214                         |
| 12.70 x 19.05 | 1.57              | 0.202                         |
| 12.70 x 19.05 | 2.36              | 0.293                         |
| 12.70 x 19.05 | 3.18              | 0.384                         |
| 14.23 x 4.75  | 2.36              | 0.122                         |
| 15.87 x 3.96  | 1.57              | 0.087                         |
| 15.88 x 12.70 | 3.18              | 0.301                         |
| 15.88 x 15.88 | 1.57              | 0.190                         |
| 15.88 x 15.88 | 1.60              | 0.192                         |
| 15.88 x 25.40 | 3.18              | 0.519                         |
| 17.45 x 11.10 | 3.18              | 0.286                         |
| 19.05 x 9.53  | 1.57              | 0.149                         |
| 19.05 x 9.53  | 2.54              | 0.228                         |
| 19.05 x 12.70 | 1.19              | 0.137                         |
| 19.05 x 12.70 | 2.54              | 0.271                         |
| 19.05 x 19.05 | 1.57              | 0.231                         |
| 19.05 x 19.05 | 3.18              | 0.437                         |
| 19.05 x 38.10 | 3.18              | 0.763                         |
| 22.22 x 12.79 | 1.19              | 0.147                         |
| 25.40 x 12.70 | 1.57              | 0.202                         |
| 25.40 x 19.05 | 2.36              | 0.379                         |
| 25.40 x 25.40 | 3.18              | 0.601                         |
| 25.40 x 38.10 | 3.18              | 0.818                         |
| 31.75 x 12.70 | 1.19              | 0.180                         |
| 31.75 x 12.70 | 3.40              | 0.466                         |
| 31.75 x 25.40 | 2.36              | 0.498                         |
| 31.75 x 25.40 | 3.18              | 0.656                         |
| 31.75 x 41.28 | 3.18              | 0.930                         |

| Size<br>(mm)   | Thickness<br>(mm) | Mass/unit<br>length<br>(kg/m) |
|----------------|-------------------|-------------------------------|
| 34.92 x 6.35   | 1.57              | 0.190                         |
| 38.10 x 12.70  | 1.57              | 0.257                         |
| 38.10 x 12.70  | 2.36              | 0.376                         |
| 38.10 x 19.05  | 3.18              | 0.602                         |
| 38.10 x 25.40  | 1.57              | 0.366                         |
| 38.10 x 38.10  | 3.18              | 0.930                         |
| 38.10 x 69.85  | 1.78              | 0.841                         |
| 44.45 x 15.88  | 3.18              | 0.602                         |
| 44.45 x 25.40  | 3.18              | 0.766                         |
| 50.80 x 12.70  | 1.14              | 0.229                         |
| 50.80 x 12.70  | 1.57              | 0.311                         |
| 50.80 x 12.70  | 2.36              | 0.457                         |
| 50.80 x 12.70  | 3.18              | 0.601                         |
| 50.80 x 25.40  | 1.57              | 0.419                         |
| 50.80 x 25.40  | 2.03              | 0.537                         |
| 50.80 x 25.40  | 3.18              | 0.812                         |
| 50.80 x 25.40  | 9.50              | 1.186                         |
| 50.80 x 50.80  | 3.18              | 1.257                         |
| 53.97 x 6.53   | 1.57              | 0.271                         |
| 57.15 x 12.70  | 1.57              | 0.445                         |
| 63.50 x 12.70  | 2.36              | 0.580                         |
| 63.50 x 15.88  | 3.18              | 0.766                         |
| 63.50 x 22.22  | 3.18              | 0.875                         |
| 63.50 x 38.10  | 3.18              | 1.147                         |
| 70.00 x 25.00  | 3.00              | 0.928                         |
| 76.20 x 12.70  | 1.60              | 0.427                         |
| 76.20 x 12.70  | 2.36              | 0.620                         |
| 76.20 x 12.70  | 3.18              | 0.818                         |
| 76.20 x 25.40  | 2.36              | 0.783                         |
| 76.20 x 25.40  | 3.18              | 1.040                         |
| 76.20 x 38.10  | 2.54              | 1.015                         |
| 76.20 x 44.45  | 2.36              | 1.028                         |
| 95.25 x 25.40  | 3.18              | 2.689                         |
| 100.00 x 20.00 | 1.75              | 0.649                         |
| 101.60 x 25.40 | 2.03              | 0.817                         |
| 101.60 x 38.10 | 3.18              | 1.473                         |
| 127.00 x 69.85 | 3.18              | 2.232                         |



TABLE 31

## MASS (WEIGHT) OF ALUMINIUM TEE SECTIONS

| Size<br>(mm)  | Thickness<br>(mm) | Mass/unit<br>length<br>(kg/m) |
|---------------|-------------------|-------------------------------|
| 12.70 x 12.70 | 3.18              | 0.190                         |
| 15.88 x 15.88 | 3.18              | 0.245                         |
| 19.05 x 19.05 | 1.57              | 0.156                         |
| 19.05 x 19.05 | 3.18              | 0.305                         |
| 19.05 x 31.75 | 3.18              | 0.409                         |
| 25.40 x 19.05 | 1.57              | 0.180                         |
| 25.40 x 25.40 | 1.57              | 0.211                         |
| 25.40 x 25.40 | 3.18              | 0.409                         |
| 25.40 x 30.15 | 1.57              | 0.231                         |
| 25.40 x 31.75 | 3.18              | 0.466                         |
| 25.40 x 38.10 | 1.57              | 0.262                         |
| 25.40 x 38.10 | 3.18              | 0.519                         |
| 28.58 x 38.10 | 3.18              | 0.549                         |
| 31.75 x 19.05 | 2.08              | 0.275                         |
| 31.75 x 25.40 | 3.18              | 0.466                         |
| 38.10 x 25.40 | 2.39              | 0.396                         |
| 38.10 x 25.40 | 3.96              | 0.641                         |
| 38.10 x 38.10 | 3.18              | 0.629                         |
| 38.10 x 38.10 | 6.35              | 1.201                         |
| 50.80 x 19.05 | 3.18              | 0.574                         |
| 50.80 x 25.40 | 3.18              | 0.629                         |
| 50.80 x 38.10 | 3.18              | 0.738                         |
| 50.80 x 50.80 | 4.75              | 1.247                         |

TABLE 32

## MASS (WEIGHT) OF ALUMINIUM ROUND HOLLOW TUBES

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 10.31     | 1.27           | 0.098                   |
| 12.29     | 1.45           | 0.134                   |
| 12.70     | 1.22           | 0.122                   |
| 12.70     | 1.57           | 0.149                   |
| 13.34     | 1.57           | 0.159                   |
| 15.65     | 1.42           | 0.173                   |
| 15.88     | 1.57           | 0.235                   |
| 15.88     | 2.03           | 0.239                   |
| 18.01     | 1.50           | 0.211                   |
| 19.05     | 1.24           | 0.180                   |
| 19.05     | 1.57           | 0.235                   |
| 19.05     | 2.03           | 0.295                   |
| 19.05     | 2.36           | 0.336                   |
| 19.05     | 3.18           | 0.429                   |
| 19.99     | 4.50           | 0.594                   |
| 20.00     | 1.50           | 0.236                   |
| 21.49     | 3.51           | 0.552                   |
| 22.23     | 1.57           | 0.277                   |
| 22.23     | 2.03           | 0.349                   |
| 23.01     | 1.50           | 0.277                   |
| 23.01     | 5.00           | 0.768                   |
| 23.50     | 1.50           | 0.281                   |
| 23.50     | 3.81           | 0.678                   |
| 24.13     | 3.18           | 0.567                   |
| 25.40     | 1.24           | 0.256                   |
| 25.40     | 1.91           | 0.381                   |
| 25.40     | 2.03           | 0.405                   |
| 25.40     | 2.36           | 0.464                   |
| 25.40     | 3.18           | 0.601                   |
| 25.91     | 1.27           | 0.266                   |
| 26.19     | 1.09           | 0.234                   |
| 26.49     | 3.25           | 0.643                   |
| 26.97     | 2.39           | 0.493                   |
| 26.97     | 5.94           | 1.052                   |
| 27.00     | 4.90           | 0.905                   |
| 27.20     | 1.60           | 0.350                   |
| 28.58     | 1.47           | 0.339                   |
| 28.58     | 2.49           | 0.554                   |
| 29.01     | 8.99           | 1.534                   |
| 29.06     | 4.57           | 0.954                   |
| 29.11     | 5.41           | 1.082                   |
| 29.11     | 7.01           | 1.305                   |
| 29.36     | 6.35           | 1.246                   |
| 30.99     | 9.00           | 1.686                   |
| 31.24     | 2.74           | 0.664                   |
| 31.75     | 1.47           | 0.379                   |
| 31.75     | 1.57           | 0.408                   |

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 31.75     | 2.03           | 0.515                   |
| 31.75     | 3.18           | 0.774                   |
| 31.75     | 4.75           | 1.085                   |
| 31.75     | 6.35           | 1.360                   |
| 32.99     | 1.52           | 0.405                   |
| 33.02     | 6.35           | 1.429                   |
| 33.35     | 3.18           | 0.820                   |
| 34.93     | 1.47           | 0.420                   |
| 34.93     | 2.79           | 0.790                   |
| 34.93     | 3.18           | 0.851                   |
| 34.93     | 4.75           | 1.222                   |
| 34.93     | 4.95           | 0.689                   |
| 34.93     | 6.35           | 1.531                   |
| 34.93     | 7.14           | 1.692                   |
| 35.00     | 1.50           | 0.466                   |
| 38.10     | 3.25           | 0.966                   |
| 38.10     | 1.57           | 0.490                   |
| 38.10     | 2.36           | 0.719                   |
| 38.10     | 2.64           | 0.798                   |
| 38.10     | 3.18           | 0.945                   |
| 38.10     | 5.08           | 1.430                   |
| 38.10     | 6.17           | 1.677                   |
| 38.10     | 8.74           | 2.186                   |
| 38.99     | 7.98           | 2.089                   |
| 39.37     | 9.37           | 2.378                   |
| 39.67     | 6.35           | 1.802                   |
| 40.13     | 9.07           | 2.400                   |
| 41.28     | 4.70           | 1.461                   |
| 41.28     | 5.94           | 1.793                   |
| 41.28     | 10.34          | 2.723                   |
| 42.85     | 1.57           | 0.558                   |
| 42.93     | 6.93           | 2.124                   |
| 43.99     | 8.00           | 2.429                   |
| 44.45     | 1.57           | 0.579                   |
| 44.45     | 3.18           | 1.115                   |
| 44.45     | 4.06           | 1.399                   |
| 44.45     | 6.02           | 1.610                   |
| 44.45     | 6.73           | 2.164                   |
| 44.45     | 8.74           | 2.633                   |
| 44.45     | 14.22          | 3.664                   |
| 44.45     | 15.88          | 3.866                   |
| 45.24     | 1.98           | 0.731                   |
| 45.72     | 2.03           | 0.749                   |
| 45.72     | 2.34           | 0.865                   |
| 47.63     | 3.66           | 1.371                   |
| 47.63     | 4.75           | 1.722                   |
| 47.63     | 7.32           | 2.509                   |

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 47.75     | 6.60           | 2.292                   |
| 48.21     | 5.61           | 2.037                   |
| 48.26     | 1.91           | 0.753                   |
| 49.99     | 4.04           | 4.750                   |
| 50.50     | 13.23          | 4.204                   |
| 50.80     | 1.57           | 0.661                   |
| 50.80     | 3.18           | 1.289                   |
| 50.80     | 5.38           | 2.067                   |
| 50.80     | 7.92           | 2.869                   |
| 50.80     | 9.39           | 3.286                   |
| 50.80     | 13.41          | 4.229                   |
| 50.80     | 14.30          | 4.445                   |
| 50.93     | 4.00           | 1.583                   |
| 50.93     | 7.49           | 2.769                   |
| 51.00     | 11.99          | 3.985                   |
| 51.00     | 16.76          | 4.686                   |
| 51.56     | 6.09           | 2.336                   |
| 51.56     | 8.31           | 3.034                   |
| 51.99     | 10.00          | 3.542                   |
| 51.99     | 11.99          | 4.048                   |
| 52.50     | 1.50           | 0.652                   |
| 52.50     | 16.00          | 4.973                   |
| 52.98     | 15.49          | 4.947                   |
| 53.26     | 2.03           | 0.878                   |
| 53.98     | 6.99           | 3.542                   |
| 54.00     | 2.24           | 0.991                   |
| 54.00     | 2.26           | 0.991                   |
| 54.48     | 2.59           | 1.140                   |
| 54.51     | 2.29           | 1.018                   |
| 55.88     | 16.51          | 5.540                   |
| 57.15     | 3.86           | 1.801                   |
| 57.51     | 1.50           | 0.716                   |
| 58.93     | 11.48          | 4.642                   |
| 58.98     | 11.99          | 7.405                   |
| 60.96     | 5.84           | 2.716                   |
| 60.96     | 9.83           | 4.239                   |
| 60.96     | 8.26           | 3.670                   |
| 61.11     | 2.36           | 1.183                   |
| 63.50     | 1.60           | 0.844                   |
| 63.50     | 3.13           | 0.143                   |
| 63.50     | 6.99           | 3.329                   |
| 76.20     | 2.36           | 1.487                   |
| 76.20     | 4.76           | 2.897                   |
| 76.20     | 20.32          | 9.676                   |
| 101.60    | 6.35           | 5.155                   |
| 127.00    | 12.70          | 12.369                  |

TABLE 33

**MASS (WEIGHT) OF ALUMINIUM  
SQUARE HOLLOW SECTIONS**

| Size<br>(mm) | Thickness<br>(mm) | Mass/unit<br>length<br>(kg/m) |
|--------------|-------------------|-------------------------------|
| 9.54         | 1.57              | 0.135                         |
| 12.88        | 1.20              | 0.150                         |
| 12.70        | 1.57              | 0.244                         |
| 15.88        | 1.20              | 0.191                         |
| 18.24        | 3.18              | 0.519                         |
| 19.05        | 1.20              | 0.232                         |
| 19.05        | 1.57              | 0.296                         |
| 19.05        | 2.36              | 0.428                         |
| 25.40        | 1.40              | 0.364                         |
| 25.40        | 1.60              | 0.415                         |
| 25.40        | 2.03              | 0.515                         |
| 25.40        | 2.36              | 0.589                         |
| 25.40        | 3.18              | 0.765                         |
| 30.00        | 2.00              | 0.604                         |
| 31.75        | 2.03              | 0.655                         |
| 38.10        | 1.57              | 0.623                         |
| 38.10        | 2.03              | 0.795                         |
| 38.10        | 3.18              | 1.205                         |
| 44.45        | 2.39              | 1.091                         |
| 46.62        | 3.18              | 1.531                         |
| 50.00        | 2.00              | 1.044                         |
| 50.80        | 2.03              | 1.074                         |
| 50.80        | 2.36              | 1.241                         |
| 63.50        | 3.18              | 2.056                         |
| 76.20        | 3.18              | 2.516                         |
| 80.00        | 2.49              | 2.092                         |

TABLE 34

**MASS (WEIGHT) OF ALUMINIUM  
RECTANGULAR HOLLOW SECTIONS**

| Size<br>(mm)   | Thickness<br>(mm) | Mass/unit<br>length<br>(kg/m) |
|----------------|-------------------|-------------------------------|
| 12.70 x 9.85   | 1.59              | 0.165                         |
| 25.40 x 12.70  | 1.60              | 0.302                         |
| 25.40 x 12.70  | 1.20              | 0.232                         |
| 31.75 x 19.05  | 2.36              | 0.591                         |
| 36.10 x 19.05  | 2.36              | 0.673                         |
| 38.10 x 25.40  | 1.40              | 0.461                         |
| 38.10 x 25.40  | 2.03              | 0.655                         |
| 38.10 x 25.40  | 2.54              | 0.811                         |
| 47.63 x 23.80  | 3.18              | 1.122                         |
| 50.00 x 40.00  | 2.00              | 0.933                         |
| 50.80 x 25.40  | 1.40              | 0.557                         |
| 50.80 x 25.40  | 1.57              | 0.624                         |
| 50.80 x 25.40  | 2.03              | 0.795                         |
| 50.80 x 25.40  | 2.36              | 0.917                         |
| 50.80 x 38.10  | 1.60              | 0.744                         |
| 50.80 x 38.10  | 2.03              | 0.935                         |
| 50.80 x 38.10  | 2.36              | 1.016                         |
| 63.50 x 31.75  | 2.36              | 1.161                         |
| 63.50 x 38.10  | 2.54              | 1.327                         |
| 63.50 x 38.10  | 3.18              | 1.652                         |
| 69.85 x 31.75  | 3.18              | 1.641                         |
| 76.20 x 25.40  | 1.80              | 0.957                         |
| 76.20 x 25.40  | 2.36              | 1.241                         |
| 76.20 x 38.10  | 3.18              | 1.860                         |
| 76.20 x 44.45  | 1.80              | 1.143                         |
| 76.20 x 44.45  | 2.36              | 1.439                         |
| 76.20 x 44.45  | 3.18              | 1.958                         |
| 76.20 x 50.80  | 2.36              | 1.567                         |
| 76.20 x 50.80  | 3.18              | 2.076                         |
| 80.00 x 20.00  | 2.00              | 1.045                         |
| 80.00 x 40.00  | 2.00              | 1.258                         |
| 80.00 x 50.00  | 2.50              | 1.688                         |
| 82.55 x 28.58  | 2.36              | 1.360                         |
| 100.00 x 40.00 | 2.50              | 1.823                         |
| 101.60 x 25.40 | 1.80              | 1.205                         |
| 101.60 x 25.40 | 2.03              | 1.354                         |
| 101.60 x 25.40 | 2.36              | 1.567                         |
| 101.60 x 38.10 | 3.18              | 2.292                         |
| 101.60 x 44.45 | 1.80              | 1.391                         |
| 101.60 x 44.45 | 1.98              | 1.529                         |
| 101.60 x 44.45 | 2.36              | 1.813                         |
| 101.60 x 44.45 | 3.18              | 2.403                         |
| 101.60 x 60.33 | 2.36              | 2.015                         |
| 127.00 x 25.40 | 2.36              | 1.894                         |

**TABLE 35**

**MASS (WEIGHT) OF STAINLESS STEEL FLAT BARS**

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 19.05     | 3.00           | 0.450                   |
| 19.05     | 6.00           | 0.901                   |
| 25.40     | 3.00           | 0.601                   |
| 25.40     | 6.00           | 1.201                   |
| 31.80     | 3.00           | 0.751                   |
| 31.80     | 3.60           | 0.901                   |
| 31.80     | 6.00           | 1.802                   |
| 50.80     | 6.00           | 2.402                   |

**TABLE 36**

**MASS (WEIGHT) OF STAINLESS STEEL ANGLES**

| Size (mm)     | Thickness (mm) | Mass/unit length (kg/m) |
|---------------|----------------|-------------------------|
| 9.52 x 9.52   | 1.00           | 0.142                   |
| 12.70 x 12.70 | 1.00           | 0.192                   |
| 19.05 x 19.05 | 1.00           | 0.292                   |
| 25.40 x 25.40 | 1.00           | 0.392                   |
| 12.70 x 25.40 | 1.00           | 0.293                   |
| 38.10 x 38.10 | 3.00           | 1.731                   |

**TABLE 37**

**MASS (WEIGHT) OF STAINLESS STEEL CHANNELS**

| Size (mm)      | Thickness (mm) | Mass/unit length (kg/m) |
|----------------|----------------|-------------------------|
| 9.52 x 9.52    | 0.50           | 0.109                   |
| 9.52 x 9.52    | 0.80           | 0.170                   |
| 12.70 x 12.70  | 0.50           | 0.146                   |
| 12.70 x 12.70  | 0.80           | 0.230                   |
| 12.70 x 19.05  | 0.50           | 0.171                   |
| 12.70 x 25.40  | 0.50           | 0.196                   |
| 12.70 x 38.10  | 0.50           | 0.246                   |
| 12.70 x 50.80  | 0.50           | 0.296                   |
| 12.70 x 76.20  | 0.50           | 0.396                   |
| 12.70 x 101.60 | 0.80           | 0.791                   |

**TABLE 38**

**MASS (WEIGHT) OF STAINLESS STEEL ROUND TUBES**

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 9.52      | 0.80           | 0.173                   |
| 12.70     | 1.00           | 0.290                   |
| 15.87     | 0.80           | 0.298                   |
| 19.05     | 1.00           | 0.447                   |
| 19.05     | 1.20           | 0.530                   |
| 25.40     | 1.00           | 0.604                   |
| 25.40     | 1.50           | 0.888                   |
| 31.75     | 1.00           | 0.761                   |
| 31.75     | 1.50           | 1.123                   |
| 38.10     | 1.50           | 1.359                   |
| 44.45     | 1.50           | 1.595                   |
| 50.80     | 1.50           | 1.831                   |
| 60.32     | 1.50           | 2.184                   |

**TABLE 39**

**MASS (WEIGHT) OF STAINLESS STEEL SQUARE HOLLOW SECTIONS**

| Size (mm) | Thickness (mm) | Mass/unit length (kg/m) |
|-----------|----------------|-------------------------|
| 19.05     | 1.00           | 0.569                   |
| 25.40     | 1.00           | 0.769                   |
| 12.70     | 1.00           | 0.369                   |
| 19.05     | 1.00           | 0.569                   |
| 25.40     | 1.20           | 0.915                   |
| 31.75     | 1.20           | 1.156                   |
| 38.10     | 1.20           | 1.396                   |
| 50.80     | 1.20           | 1.876                   |

**TABLE 40**

**MASS (WEIGHT) OF STAINLESS STEEL RECTANGULAR HOLLOW SECTIONS**

| Size (mm)      | Thickness (mm) | Mass/unit length (kg/m) |
|----------------|----------------|-------------------------|
| 12.70 x 25.40  | 1.00           | 0.569                   |
| 15.87 x 31.75  | 1.20           | 0.855                   |
| 25.40 x 38.10  | 1.20           | 1.156                   |
| 25.40 x 50.80  | 1.20           | 1.396                   |
| 38.10 x 76.20  | 1.50           | 2.631                   |
| 44.45 x 76.20  | 1.50           | 2.782                   |
| 50.80 x 101.60 | 2.00           | 4.678                   |

**TABLE 41**  
**STANDARD BRC FABRICS**  
**SQUARE MESHES**

| BRC reference number | BS 4483 or SS-32 reference number | Main wire |              | Cross wire |              | Cross Sectional Area    |                          | Mass per unit area (kg/m <sup>2</sup> ) |
|----------------------|-----------------------------------|-----------|--------------|------------|--------------|-------------------------|--------------------------|---|
|                      |                                   | Size (mm) | Spacing (mm) | Size (mm)  | Spacing (mm) | Main mm <sup>2</sup> /m | Cross mm <sup>2</sup> /m |   |
| D 13                 | -                                 | 13.00     | 100.00       | 13.00      | 100.00       | 1,327.00                | 1,327.00                 | 20.84                                   |
| D 12                 | -                                 | 12.00     | 100.00       | 12.00      | 100.00       | 1,131.00                | 1,131.00                 | 17.76                                   |
| D 11                 | -                                 | 11.00     | 100.00       | 11.00      | 100.00       | 950.00                  | 950.00                   | 14.92                                   |
| D 10                 | -                                 | 10.00     | 100.00       | 10.00      | 100.00       | 785.00                  | 785.00                   | 12.32                                   |
| D 9                  | -                                 | 9.00      | 100.00       | 9.00       | 100.00       | 636.00                  | 636.00                   | 9.98                                    |
| D 8                  | -                                 | 8.00      | 100.00       | 8.00       | 100.00       | 503.00                  | 503.00                   | 7.90                                    |
| D 7                  | -                                 | 7.00      | 100.00       | 7.00       | 100.00       | 385.00                  | 385.00                   | 6.04                                    |
| D 6                  | -                                 | 6.00      | 100.00       | 6.00       | 100.00       | 283.00                  | 283.00                   | 4.44                                    |
| D 5                  | -                                 | 5.00      | 100.00       | 5.00       | 100.00       | 196.00                  | 196.00                   | 3.08                                    |
| D 4                  | -                                 | 4.00      | 100.00       | 4.00       | 100.00       | 126.00                  | 126.00                   | 1.98                                    |
| A 13                 | -                                 | 13.00     | 200.00       | 13.00      | 200.00       | 664.00                  | 664.00                   | 10.42                                   |
| A 12                 | -                                 | 12.00     | 200.00       | 12.00      | 200.00       | 566.00                  | 566.00                   | 8.88                                    |
| A 11                 | -                                 | 11.00     | 200.00       | 11.00      | 200.00       | 475.00                  | 475.00                   | 7.46                                    |
| A 10                 | A 393                             | 10.00     | 200.00       | 10.00      | 200.00       | 393.00                  | 393.00                   | 6.16                                    |
| A 9                  | -                                 | 9.00      | 200.00       | 9.00       | 200.00       | 318.00                  | 318.00                   | 4.99                                    |
| A 8                  | A 252                             | 8.00      | 200.00       | 8.00       | 200.00       | 252.00                  | 252.00                   | 3.95                                    |
| A 7                  | A 193                             | 7.00      | 200.00       | 7.00       | 200.00       | 193.00                  | 193.00                   | 3.02                                    |
| A 6                  | A 142                             | 6.00      | 200.00       | 6.00       | 200.00       | 142.00                  | 142.00                   | 2.22                                    |
| A 5                  | A 98                              | 5.00      | 200.00       | 5.00       | 200.00       | 98.00                   | 98.00                    | 1.54                                    |
| E 13                 | -                                 | 13.00     | 150.00       | 13.00      | 150.00       | 885.00                  | 885.00                   | 13.89                                   |
| E 12                 | -                                 | 12.00     | 150.00       | 12.00      | 150.00       | 754.00                  | 754.00                   | 11.84                                   |
| E 11                 | -                                 | 11.00     | 150.00       | 11.00      | 150.00       | 634.00                  | 634.00                   | 9.95                                    |
| E 10                 | -                                 | 10.00     | 150.00       | 10.00      | 150.00       | 524.00                  | 524.00                   | 8.23                                    |
| E 9                  | -                                 | 9.00      | 150.00       | 9.00       | 150.00       | 424.00                  | 424.00                   | 6.67                                    |
| E 8                  | -                                 | 8.00      | 150.00       | 8.00       | 150.00       | 335.00                  | 335.00                   | 5.27                                    |
| N 6                  | -                                 | 6.00      | 100.00       | 6.00       | 75.00        | 283.00                  | 377.00                   | 5.18                                    |

**TABLE 42**  
**STANDARD BRC FABRICS**  
**RECTANGULAR MESHES**

| BRC reference number | BS 4483 or SS-32 reference number | Main wire |              | Cross wire |              | Cross Sectional Area    |                          | Mass per unit area (kg/m <sup>2</sup> ) |
|----------------------|-----------------------------------|-----------|--------------|------------|--------------|-------------------------|--------------------------|---|
|                      |                                   | Size (mm) | Spacing (mm) | Size (mm)  | Spacing (mm) | Main mm <sup>2</sup> /m | Cross mm <sup>2</sup> /m |   |
| B 13                 | -                                 | 13.00     | 100.00       | 10.00      | 200.00       | 1,327.00                | 393.00                   | 13.50                                   |
| B 12                 | B 1131                            | 12.00     | 100.00       | 8.00       | 200.00       | 1,131.00                | 252.00                   | 10.90                                   |
| B 11                 | -                                 | 11.00     | 100.00       | 8.00       | 200.00       | 950.00                  | 252.00                   | 9.43                                    |
| B 10                 | B 785                             | 10.00     | 100.00       | 8.00       | 200.00       | 785.00                  | 252.00                   | 8.14                                    |
| B 9                  | -                                 | 9.00      | 100.00       | 8.00       | 200.00       | 636.00                  | 252.00                   | 6.97                                    |
| B 8A                 | -                                 | 8.00      | 150.00       | 7.00       | 200.00       | 335.00                  | 193.00                   | 4.14                                    |
| B 8                  | B 503                             | 8.00      | 100.00       | 8.00       | 200.00       | 503.00                  | 252.00                   | 5.93                                    |
| B 7                  | B 385                             | 7.00      | 100.00       | 7.00       | 200.00       | 385.00                  | 193.00                   | 4.53                                    |
| B 6                  | B 283                             | 6.00      | 100.00       | 7.00       | 200.00       | 283.00                  | 193.00                   | 3.73                                    |
| B 5                  | B 196                             | 5.00      | 100.00       | 7.00       | 200.00       | 196.00                  | 193.00                   | 3.05                                    |
| C 10                 | C 785                             | 10.00     | 100.00       | 6.00       | 400.00       | 785.00                  | 70.80                    | 6.72                                    |
| C 9                  | C 636                             | 9.00      | 100.00       | 6.00       | 400.00       | 636.00                  | 70.80                    | 5.55                                    |
| C 8                  | C 503                             | 8.00      | 100.00       | 5.00       | 400.00       | 503.00                  | 49.00                    | 4.34                                    |
| C 7                  | C 385                             | 7.00      | 100.00       | 5.00       | 400.00       | 385.00                  | 49.00                    | 3.41                                    |
| C 6                  | C 283                             | 6.00      | 100.00       | 5.00       | 400.00       | 283.00                  | 49.00                    | 2.61                                    |

TABLE 43

MASS (WEIGHT) OF  
STEEL SHEET PILES

| Type                 | Mass per pile (kg/m) | Mass per wall width (kg/m <sup>2</sup> ) |
|----------------------|----------------------|--|
| FSP-I <sub>A</sub>   | 35.50                | 88.80                                    |
| FSP-II               | 48.00                | 120.00                                   |
| FSP-II <sub>A</sub>  | 43.20                | 108.00                                   |
| FSP-III              | 60.00                | 150.00                                   |
| FSP-III <sub>A</sub> | 58.40                | 146.00                                   |
| FSP-III <sub>L</sub> | 68.00                | 138.00                                   |
| FSP-IV               | 76.10                | 190.00                                   |
| FSP-IV <sub>A</sub>  | 74.00                | 185.00                                   |
| FSP-IV <sub>L</sub>  | 87.50                | 175.00                                   |
| FSP-V <sub>L</sub>   | 105.00               | 210.00                                   |
| FSP-VI <sub>L</sub>  | 120.00               | 240.00                                   |
| YSP-I                | 36.50                | 91.20                                    |
| YSP-U <sub>5</sub>   | 35.50                | 88.80                                    |
| YSP-II               | 48.00                | 120.00                                   |
| YSP-U <sub>9</sub>   | 43.20                | 108.00                                   |
| YSP-III              | 60.00                | 150.00                                   |
| YSP-U <sub>15</sub>  | 58.40                | 146.00                                   |
| YSP-IV               | 76.10                | 190.00                                   |
| YSP-U <sub>23</sub>  | 74.00                | 185.00                                   |
| YSP-V                | 105.00               | 250.00                                   |

TABLE 44

## MASS (WEIGHT) OF STEEL CHEQUER PLATE

| Thickness on plain mm (t) | Projected thickness (inclusive of raised pattern) mm | Approximate weight kg/m <sup>2</sup> |
|---------------------------|--|--------------------------------------|
| 3.0                       | 4.5  | 28.7                                 |
| 4.5                       | 6.0  | 40.5                                 |
| 6.0                       | 7.5  | 52.2                                 |
| 8.0                       | 9.5  | 67.9                                 |
| 10.0                      | 11.5   | 83.6                                 |
| 12.5                      | 14.0   | 103.1                                |

