

ARCHITECTURAL SERVICES DEPARTMENT

**STANDARD METHOD OF
MEASUREMENT
FOR
BUILDING ELEMENTS**

**GOVERNMENT OF THE HONG KONG
SPECIAL ADMINISTRATIVE REGION**

**ARCHITECTURAL SERVICES DEPARTMENT
QUANTITY SURVEYING BRANCH**

**QUEENSWAY GOVERNMENT OFFICES
66 QUEENSWAY
HONG KONG**

2020 EDITION

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INTRODUCTION

This booklet contains the rules of measurement for the standard set of building elements to be used on Architectural Services Department building projects.

THE PROJECT COST MODEL

The Project Cost Model on page (v) shows how the total project cost is built up from those costs relating to the normal main contract (NET BUILDING COST [NBC]) which, when added to the mechanical & electrical services cost, become the GROSS BUILDING COST [GBC]. The GBC represents the cost of the structure above and below ground. However certain site development and external works costs need to be included and these are added to the GBC to compute the NET PROJECT COST [NPC]. The costs of government stores, furniture and equipment, consultant's fees, other works and a contingency are added to calculate the GROSS PROJECT COST [GPC].

The Project Cost Model	
02 – Substructure plus 03 – Superstructure	01 - Preliminaries
NET BUILDING COST	
plus 04 – Mechanical & Electrical Services	
GROSS BUILDING COST	
plus 05 – External Works & Drainage plus 06 - Site Development	
NET PROJECT COST	
plus 07 - Stores, Furniture & Equipment plus 08 - Consultant's Fees plus 09 – Other Works plus 10 - Contingency	
GROSS PROJECT COST	

THE ELEMENT COST MODEL

Each project cost is broken down into ten element groups. These are shown in the previous Project Cost Model and again in the Project Element Cost Model on page (vii).

Within each element group there are various elements. Each element represents a function of the building or its environs. There are thirty seven basic elements representing the major cost centres of the total project.

To allow finer control over the apportionment of cost, some elements are further divided into sub-elements. This permits cost significant parts of the element to be monitored in some details. For example the Structure element is divided into Frame, Roof, Upper Floors, Structural Walls, etc. A full list of sub-elements is given in Table 1.

RULES OF MEASUREMENT

Generally

To standardise the preparation of cost analyses, measurement rules are provided. Each element/sub-element is given a measurement unit for easy cost identification. Those elements given a measurement unit of ITEM assume that a lump sum value will be allocated, thereby making it unnecessary to lay down measurement rules. On the other hand all other measurement units, e.g. M^3 , M^2 , M etc., have been given measurement rules which reflect the complexity of the measurement item.

There is also a 'definition' describing the various works which fall into each element/sub-element. The definition is not intended to be restrictive but if used with the section indicating 'exclusions', then it is not too difficult to identify the appropriate element for a particular work item.

Definition of Construction Floor Area - CFA

CFA is the area to be used in describing the amount of building works completed. This is the sum of all areas at all floor levels, including basements, mezzanine floors, balconies and enclosed rooftop structures, measured to the outer face of the external walls including its external cladding, i.e. the main building line, and measured over all partitions, columns, internal or external structures and load-bearing walls, party walls, stair wells, lift wells, escalator openings, pipe and drain ducts, cable riser shafts and the like. Areas of bay windows are also included.

For exclusions, generally, decorative feature projections beyond the outer face of external walls such as fins, architrave, solar shading devices and the like shall be excluded from the calculation of CFA. Also excluded are uncovered trafficable roof areas such as external playgrounds, landscaped areas and the like.

The Project Element Cost Model

G R O S S P R O J E C T C O S T	N E T P R O J E C T C O S T	G R O S S B U I L D I N G C O S T	<p>N 02 SUBSTRUCTURE E FN Foundations T</p> <p>03 SUPERSTRUCTURE SC SC/M Structure (Reinforced Concrete) B SO SO/M Structure (Other) EW EW/M External Walls (Non-structural) WD WD/M Windows and External Doors I CW CW/M Curtain Walling IP IP/M Internal Partitions ID ID/M Internal Doors D IF IF/M Internal Finishes I EF EF/M External Finishes FF FF/M Fittings and Fixtures SW SW/M Sanitary Fittings and Above Ground Drainage Systems BB BB/M Builders Work in Connection with Services C BP BP/M Builders Profit and Attendance on M & E Services O S T</p>	<p>01 P R E L I M I N A R I E S</p> <p>PR Preliminaries</p>
			<p>04 M & E SERVICES EE EE/M Electrics SB SB/M Low Voltage Cubicle Switchboard GE GE/M Diesel Generating Sets UP UP/M Uninterruptible Power Supply CB CB/M Broadcast Reception AC AC/M Air-conditioning TG TG/M GAS FS FS/M Fire Services SV SV/M Plumbing MS Horizontal & Vertical Movement BA BA/M Building Automation SP SP/M Other Specialist Services</p>	
			<p>05 EXTERNAL WORKS & DRAINAGE XW External Works DR Drainage</p> <p>06 SITE DEVELOPMENT SI Site Investigation PI Piling SR Site Preparation CS Caissons SF Site Formation DE Demolition</p>	
<p>07 STORES, FURNITURE & EQUIPMENT GS Government Stores FE Furniture & Equipment</p>	<p>08 CONSULTANTS FEES CF Consultants Fees</p> <p>09 OTHER WORKS OW Other Works</p>	<p>10 CONTINGENCY CY Contingency</p>		

Table 1

Standard List of Elements and Sub-Elements

Major Cost Code	Minor Cost Code	Element	Sub-Element
NET BUILDING COST	01 PRELIMINARIES	PR PRELIMINARIES	
	02 SUBSTRUCTURE	FN Foundations	FNSE Structural Elements (Foundations) FNBW Basements FNGF Ground Floor Slabs FNSU Foundation Sundries
	03 SUPERSTRUCTURE		
	Part A – Superstructure works other than those included in Part B	SC Structure (RC)	SCFF Frame (RC) SCRF Roofs (RC) SCUF Upper Floors (RC) SCSW Structural Walls (RC) SCSL Stairs & Landings (RC) SCBR Balustrades & Handrails (RC) SCSU Structure Sundries (RC)
		SO Structure (Other)	SOFF Frame (Other) SORF Roofs (Other) SOUF Upper Floors (Other) SOSW Structural Walls (Other) SOSL Stairs and Landings (Other) SOBR Balustrades and Handrails (Other) SOSU Structure Sundries (Other)
		EW External Walls (non-structural)	
		WD Windows & External Doors	
		CW Curtain Walling	
		IP Internal Partitions	
		ID Internal Doors	
		IF Internal Finishes	IFWF Wall Finishes IFFF Floor Finishes IFCF Ceiling Finishes IFSF Stair Finishes IFBF Balustrade & Handrail Finishes IFSU Internal Finishes Sundries
		EF External Finishes	EFRF Roof Finishes EFWF Wall Finishes (External) EFFF Floor Finishes (External) EFCF Ceiling Finishes (External) EFSF Stair Finishes (External) EFBF Balustrade & Handrail Finishes (External) EFGR Green Roof & Vertical Greening (External) EFSU External Finishes Sundries
		FF Fittings and Fixtures	
		SW Sanitary Fittings and Above Ground Drainage Systems	SWRW Rainwater Installation SWSF Sanitary Fittings SWSW Soil & Waste Installation SWRD Refuse Disposal SWSU Above Ground Drainage Systems Sundries

Major Cost Code	Minor Cost Code	Element	Sub-Element
	03 SUPERSTRUCTURE (CONT'D)		
	Part A – Superstructure works other than those included in Part B (Cont'd)	BB BWIC with Services BP Builders Profit & Attendance on M & E Services	
	Part B – Superstructure works forming part of MiC unit or major pre-fabrication unit	SC/M Structure (RC) SO/M Structure (Other) EW/M External Walls (non-structural) WD/M Windows & External Doors CW/M Curtain Walling IP/M Internal Partitions ID/M Internal Doors IF/M Internal Finishes EF/M External Finishes FF/M Fittings and Fixtures SW/M Sanitary Fittings and Above Ground Drainage Systems BB/M BWIC with Services BP/M Builders Profit & Attendance on M & E Services	SCFF/M Frame (RC) SCRF/M Roofs (RC) SCUF/M Upper Floors (RC) SCSW/M Structural Walls (RC) SCSL/M Stairs & Landings (RC) SCBR/M Balustrades & Handrails (RC) SCSU/M Structure Sundries (RC) SOFF/M Frame (Other) SORF/M Roofs (Other) SOUF/M Upper Floors (Other) SOSW/M Structural Walls (Other) SOSL/M Stairs and Landings (Other) SOBR/M Balustrades and Handrails (Other) SOSU/M Structure Sundries (Other) IFWF/M Wall Finishes IFFF/M Floor Finishes IFCF/M Ceiling Finishes IFSF/M Stair Finishes IFBF/M Balustrade & Handrail Finishes IFSU/M Internal Finishes Sundries EFRF/M Roof Finishes EFWF/M Wall Finishes (External) EFFF/M Floor Finishes (External) EFCF/M Ceiling Finishes (External) EFSF/M Stair Finishes (External) EFBF/M Balustrade & Handrail Finishes (External) EFGR/M Green Roof & Vertical Greening (External) EFSU/M External Finishes Sundries SWRW/M Rainwater Installation SWSF/M Sanitary Fittings SWSW/M Soil & Waste Installation SWRD/M Refuse Disposal SWSU/M Above Ground Drainage Systems Sundries

Major Cost Code	Minor Cost Code	Element	Sub-Element
GROSS BUILDING COST	04 MECHANICAL & ELECTRICAL SERVICES		
	Part A – Mechanical & electrical works other than those included in Part B	EE	<p>Electricies</p> <p>EEML Incoming Mains EEMD Main & Submain EELP Lighting & Power EECC Call Bell System EEOS Electrical Works Associated with Other Services EETT Trunking & Tray EEPR Lightning Protection EEEB Earthing & Bonding EEGS Items Supplied by Government EESU Electrical Sundries</p>
		SB	<p>Low Voltage (LV) Cubicle Switchboards</p> <p>SBSI LV Cubicle Switchboards Installation SBSU LV Cubicle Switchboards Sundries</p>
		GE	<p>Diesel Generating Sets</p> <p>GESI Diesel Generating Sets Installation GESU Diesel Generating Sets Sundries</p>
		UP	<p>Uninterruptible Power Supply</p> <p>UPSI Uninterruptible Power Supply System UPSU Uninterruptible Power Supply Sundries</p>
		CB	<p>Broadcast Reception</p> <p>CBSI Broadcast Reception Installation CBSU Broadcast Reception Sundries</p>
		AC	<p>Air-conditioning</p> <p>ACCH Chilled Water System ACCW Condenser Water System ACHW Heating Water System ACSC Steam & Condensate System ACFO Fuel Oil System ACWT Water Treatment ACAC Air Handling & Distribution System ACCD Condensate Drain System ACUA Unitary Air Conditioning System ACCR Cold Rooms ACMV Mechanical Ventilation System ACSV Staircase Ventilation System ACKE Kitchen Exhaust System ACSE Special Exhaust System ACEC Electrical & Control System (Air-conditioning) ACSU Air-conditioning Sundries</p>
		TG	<p>Gas</p>
		FS	<p>Fire Services</p> <p>FSHH Fire Hydrant & Hosereel System FSSS Sprinkler System FSGE Gaseous Extinguishing System FSAV Audio/Visual Advisory System FSAD Automatic Fire Alarm & Detection System FSPA Portable Hand-operated Appliances FSES Electricity Supply (Fire Services) FSCS Control System (Fire Services) FSSU Fire Service Sundries</p>

Major Cost Code	Minor Cost Code	Element	Sub-Element
	04 MECHANICAL & ELECTRICAL SERVICES (CONT'D)		
	Part A – Mechanical & electrical works other than those included in Part B (Cont'd)	SV Plumbing	SVRW Rainwater Recycling System SVCW Cold Water Installation SVHW Hot Water Installation SVFW Flushing Water Installation SVFF Water Supply for Fire Services SVES Electricity Supply (Plumbing) SVCS Control System (Plumbing) SVSU Plumbing Sundries
		MS Horizontal & Vertical Movement	MSLF Lifts MSCO Conveyors MSES Escalators
		BA Building Automation	
		SP Other Specialist Services	SPKE Kitchen Equipment SPOS Other Specialist Installations SPME Mechanical Plant & Equipment
	Part B – Mechanical & electrical works forming part of MiC unit or major pre-fabrication unit	EE/M Electrics	EEML/M Incoming Mains EEMD/M Main & Submain EELP/M Lighting & Power EECC/M Call Bell System EEOS/M Electrical Works Associated with Other Services EETT/M Trunking & Tray EEPR/M Lightning Protection EEEB/M Earthing & Bonding EEGS/M Items Supplied by Government EESU/M Electrical Sundries
		SB/M Low Voltage (LV) Cubicle Switchboards	SBSI/M LV Cubicle Switchboards Installation SBSU/M LV Cubicle Switchboards Sundries
		GE/M Diesel Generating Sets	GESI/M Diesel Generating Sets Installation GESU/M Diesel Generating Sets Sundries
		UP/M Uninterruptible Power Supply	UPSI/M Uninterruptible Power Supply System UPSU/M Uninterruptible Power Supply Sundries
		CB/M Broadcast Reception	CBSI/M Broadcast Reception Installation CBSU/M Broadcast Reception Sundries
		AC/M Air-conditioning	ACCH/M Chilled Water System ACCW/M Condenser Water System ACHW/M Heating Water System ACSC/M Steam & Condensate System ACFO/M Fuel Oil System ACWT/M Water Treatment ACAC/M Air Handling & Distribution System ACCD/M Condensate Drain System ACUA/M Unitary Air Conditioning System ACCR/M Cold Rooms ACMV/M Mechanical Ventilation System ACSV/M Staircase Ventilation System ACKE/M Kitchen Exhaust System ACSE/M Special Exhaust System ACEC/M Electrical & Control System (Air-conditioning) ACSU/M Air-conditioning Sundries

Major Cost Code	Minor Cost Code	Element	Sub-Element
NET PROJECT COST	04 MECHANICAL & ELECTRICAL SERVICES (CONT'D)		
	Part B – Mechanical & electrical works forming part of MIC unit or major pre-fabrication unit (Cont'd)	TG/M Gas FS/M Fire Services SV/M Plumbing BA/M Building Automation SP/M Other Specialist Services	FSHH/M Fire Hydrant & Hosereel System FSSS/M Sprinkler System FSGE/M Gaseous Extinguishing System FSAV/M Audio/Visual Advisory System FSAD/M Automatic Fire Alarm & Detection System FSPA/M Portable Hand-operated Appliances FSES/M Electricity Supply (Fire Services) FSCS/M Control System (Fire Services) FSSU/M Fire Service Sundries SVRW/M Rainwater Recycling System SVCW/M Cold Water Installation SVHW/M Hot Water Installation SVFW/M Flushing Water Installation SVFF/M Water Supply for Fire Services SVES/M Electricity Supply (Plumbing) SVCS/M Control System (Plumbing) SVSU/M Plumbing Sundries SPKE/M Kitchen Equipment SPOS/M Other Specialist Installations SPME/M Mechanical Plant & Equipment
GROSS PROJECT COST	05 EXTERNAL WORKS & DRAINAGE	XW External Works DR Drainage	XWRS Retaining Structures XWSE Site Enclosures & Divisions XWRO Roads & Pavings XWHL Hard Landscaping XWSL Soft Landscaping XWFE Fittings & Equipment (External Works) XWES External Services XWUC Utility Connections XWAN Ancillary Structures DRSW Soil & Surface Water DRMH Manholes DRST Sewage Treatment DRCH Channels DRCP Catchpits DRDC Drainage Connections
	06 SITE DEVELOPMENT	SI Site Investigation SR Site Preparation SF Site Formation PI Piling CS Caissons DE Demolition	PIPP Driven or Bored Piling CSCP Caisson Piling CSCW Caisson Contiguous Walls
	07 STORES, FURNITURE & EQUIPMENT	GS Government Stores FE Furniture & Equipment	GSBY Building Stores GSBZ M & E Services Stores FECL Client Department (F&E) FEDA Domestic Appliances (F&E)

Major Cost Code	Minor Cost Code	Element	Sub-Element
	08 CONSULTANT'S FEES	CF Consultant's Fees	CFGX Geotechnical Consultants CFAR Architectural Consultants CFST Structural Consultants CFBS Building Services Consultants CFQS Quantity Surveying Consultants CFOO Other Specialist Consultants
	09 OTHER WORKS	OW Other Works	
	10 CONTINGENCY	CY Contingency	

GROUP ELEMENT : 01 - PRELIMINARIES

Element	:	PR – Preliminaries
Unit	:	M ²
Rules	:	Construction floor area - measured overall to the outer face of external wall.
Definition	:	<u>All</u> contractor's preliminary costs not otherwise included in the unit rates of works items.
Exclusions	:	Preliminaries under direct contract or nominated sub-contracts.

GROUP ELEMENT : 02 - SUBSTRUCTURE

Element	:	FN - Foundations
Unit	:	M ²
Rules	:	Site area of building at ground floor level - measured overall to the outer face of external wall.
Definition	:	Work below and including ground floor slab.
Exclusions	:	Internal partitions, upper suspended basement slabs, finishes etc. in basements and finishes to the ground floor slab.

Sub-Element	:	FNSE - Structural Elements (Foundations)
Unit	:	M ²
Rules	:	Site area of building at ground floor level - measured overall to the outer face of external wall.
Definition	:	Footings, raft foundations, pile caps, ground beams, tie beams, structural walls, columns etc. including associated excavation and lateral support, blinding, concrete, reinforcement and formwork.
Exclusions	:	

Sub-Element	:	FNBW - Basements
Unit	:	M ³
Rules	:	Volume of basement measured to outside face of the external wall, the top side of the basement cover slab and the underside of the basement ground floor slab.
Definition	:	Basements, lift and escalator pits including associated bulk excavation and lateral support, external walls, tanking and filling around external walls. Including diaphragm walls and barrettes.
Exclusions	:	Internal partitions, suspended slabs, finishes etc. are to be included in the appropriate superstructure element. Lowest basement slabs to be included with ground floor slabs (see FNGF).

Sub-Element	:	FNGF - Ground floor slabs
Unit	:	M ²
Rules	:	Area measured overall to the outer face of external wall.
Definition	:	Ground floor and lowest basement slabs, including reduce level excavation, hardcore filling, membranes, concrete, reinforcement and formwork. Includes thickening out for non-structural walls.
Exclusions	:	Ground beams (see FNSE). Service ducts (see FNSU). Upper basement floor slabs (see SCUF).

Element : FN - Foundations cont'd

Sub-Element	:	FNSU - Foundation Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Service ducts including excavation, concrete, reinforcement and formwork. Underpinning and all temporary support.
Exclusions	:	

Part A – Superstructure works other than those included in Part B – Superstructure works forming part of MiC unit or major pre-fabrication unit

Element	:	SC - Structure (Reinforced Concrete)
Unit	:	M ²
Rules	:	Construction floor area of works other than those forming part of MiC unit or major prefabrication unit - measured overall to the outer face of external wall.
Definition	:	All structural elements of the building above ground floor slab, constructed in reinforced concrete, other than those forming part of MiC unit or major pre-fabrication unit (see SC/M).
Exclusions	:	Steel structures, brick structures and infill walls, timber and other types of structure.

Sub-Element	:	SCFF - Frame (Reinforced Concrete)
Unit	:	M ²
Rules	:	Construction floor area of works other than those forming part of MiC unit or major prefabrication unit - measured overall to the outer face of external wall.
Definition	:	Columns and beams, fins and projections where part of columns and beams including reinforcement, formwork, fair faced formwork finishes, portal frame, includes pre-cast concrete units, other than those forming part of MiC unit or major pre-fabrication unit (see SCFF/M).
Exclusions	:	Concrete casing to steel framed buildings (see SOFF).

Sub-Element	:	SCRf - Roof (Reinforced Concrete)
Unit	:	M ²
Rules	:	Gross roof area - measured overall on plan to outer face of external wall, rainwater gutter, verge or eaves.
Definition	:	Roof slabs, rainwater gutters, verge or eaves upstand kerbs including reinforcement, formwork, fair faced formwork finishes, includes pre-cast concrete units, other than those forming part of MiC unit or major pre-fabrication unit (see SCRf/M).
Exclusions	:	Parapet wall (see SCSW).

Sub-Element	:	SCUF - Upper Floors (Reinforced Concrete)
Unit	:	M ²
Rules	:	Area measured overall to the outer face of external wall.
Definition	:	Suspended floors, upper basement suspended floors, mezzanine floors, balcony floors including reinforcements, formwork, fair faced formwork finishes, includes pre-cast concrete units, other than those forming part of MiC unit or major pre-fabrication unit (see SCUF/M).
Exclusions	:	Floor support beams (see SCFF).

Element : SC - Structure (Reinforced Concrete) cont'd

Sub-Element	:	SCSW - Structural Walls (Reinforced Concrete)
Unit	:	M ²
Rules	:	Measured the actual area of structural wall between columns.
Definition	:	Structural walls, lift shaft walls, balcony and parapet walls, fins and projections including reinforcement, formwork, fair faced formwork finishes, includes pre- cast concrete units, other than those forming part of MiC unit or major pre-fabrication unit (see SCSW/M).
Exclusions	:	Columns, fins and projections where part of columns and beams, infill panel walls and other non-structural walls (see EW & IP).

Sub-Element	:	SCSL - Stairs & Landings (Reinforced Concrete)
Unit	:	M ²
Rules	:	Measured the gross plan area at each level including intermediate landings.
Definition	:	Stair slabs, treads, risers, intermediate landings, strings and aprons including reinforcement, formwork, fair faced formwork finishes, includes pre-cast concrete units, other than those forming part of MiC unit or major pre-fabrication unit (see SCSL/M).
Exclusions	:	Landings at floor levels (see SCUF).

Sub-Element	:	SCBR - Balustrades & Handrails (Reinforced Concrete)
Unit	:	M
Rules	:	Measured the length on plan of the balustrade or handrail.
Definition	:	Includes balustrades and handrails to stairs and other locations, other than those forming part of MiC unit or major pre-fabrication unit (see SCBR/M)
Exclusions	:	

Sub-Element	:	SCSU - Structure Sundries (Reinforced Concrete)
Unit	:	ITEM
Rules	:	
Definition	:	Sundry items, including planter boxes and window boxes, expansion joints, includes pre-cast concrete sundries, other than those forming part of MiC unit or major pre-fabrication unit (see SCSU/M).
Exclusions	:	Penthouses, machine rooms, stair enclosures at roof level and water tanks.

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	SO - Structure (Other)
Unit	:	M ²
Rules	:	Construction floor area of works other than those forming part of MiC unit or major prefabrication unit - measured overall to the outer face of external wall.
Definition	:	All structural elements of the building above ground floor slab, constructed in materials other than reinforced concrete, other than those forming part of MiC unit or major pre-fabrication unit (see SO/M).
Exclusions	:	Reinforced concrete structure (see SC).

Sub-Element	:	SOFF - Frame (Other)
Unit	:	M ²
Rules	:	Construction floor area of works other than those forming part of MiC unit or major prefabrication unit - measured overall to the outer face of external wall.
Definition	:	For structural steel: columns, beams and trusses including concrete or other fire protection, reinforcement, formwork, fair faced formwork finishes. For timber: posts, beams and trusses. For brick/masonry: columns, piers and arches. Portal frames. Other than those forming part of MiC unit or major pre-fabrication unit (see SOFF/M).
Exclusions	:	For timber: joists and rafters (see SOUF & SORF).

Sub-Element	:	SORF - Roof (Other)
Unit	:	M ²
Rules	:	Gross roof area - measured overall on plan to outer face of external wall, verge or eaves.
Definition	:	Roofs of steel, timber or other material (excluding reinforced concrete), other than those forming part of MiC unit or major pre-fabrication unit (see SORF/M).
Exclusions	:	For timber or other roofs: timber board or other sheet or proprietary roof covering to be included in the relevant finishes section (see EFRF).

Sub-Element	:	SOUF - Upper Floors (Other)
Unit	:	M ²
Rules	:	Area measured overall to the outer face of external wall.
Definition	:	Suspended floors, mezzanine floors, balcony floors, of steel, timber or other materials (excluding reinforced concrete), proprietary floors including concrete topping, other than those forming part of MiC unit or major pre-fabrication unit (see SOUF/M).
Exclusions	:	

Element : SO - Structure (Other) cont'd

Sub-Element	:	SOSW - Structural Walls (Other)
Unit	:	M ²
Rules	:	Measured the actual area of structural wall between columns.
Definition	:	Structural walls of steel, timber, brick, masonry or other materials (excluding reinforced concrete), other than those forming part of MiC unit or major pre-fabrication unit (see SOSW/M).
Exclusions	:	Finishes, unless part of a proprietary system. Non-structural walls.

Sub-Element	:	SOSL - Stairs and Landings (Other)
Unit	:	M ²
Rules	:	Measured the gross plan area at each level including intermediate landings.
Definition	:	Includes treads, risers, intermediate landings, strings and aprons, other than those forming part of MiC unit or major pre-fabrication unit (see SOSL/M).
Exclusions	:	Landings at floor level and finishes. Reinforced concrete stairs and landings (see SCSL).

Sub-Element	:	SOBR - Balustrades and Handrails (Other)
Unit	:	M
Rules	:	Measured the length on plan of the balustrade or handrail.
Definition	:	Includes balustrades and handrails to stairs and other locations, other than those forming part of MiC unit or major pre-fabrication unit (see SOBR/M).
Exclusions	:	Reinforced concrete balustrades and handrails (see SCBR).

Sub-Element	:	SOSU - Structure Sundries (Other)
Unit	:	ITEM
Rules	:	
Definition	:	Roof lights and lantern lights including framing and glass, includes other structure sundries (excluding reinforced concrete), other than those forming part of MiC unit or major pre-fabrication unit (see SOSU/M).
Exclusions	:	

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	EW - External Walls (Non-structural)
Unit	:	M ²
Rules	:	Measured the actual area of external wall between columns.
Definition	:	Includes all non-structural external walls, cladding, infill panel walls, balcony and parapet walls (other than in reinforced concrete), other than those forming part of MiC unit or major pre-fabrication unit (see EW/M).
Exclusions	:	Windows and external doors. Curtain walling. Finishes (see WD, CW & EFWF).

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	WD - Windows and External Doors
Unit	:	M ²
Rules	:	Measured the gross area of windows and external doors.
Definition	:	Windows and external doors including all glass, ironmongery, louvres, fixings, trimmings, decoration and other associated works, roller shutter doors and folding doors, other than those forming part of MiC unit or major pre-fabrication unit (see WD/M).
Exclusions	:	Curtain walling, venetian blinds, curtains, curtain tracks and pelmets (see CW & FF). Finishes to reveals.

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	CW - Curtain Walling
Unit	:	M ²
Rules	:	Measured the gross area of wall covering including all openings in the same system.
Definition	:	Curtain walling including all glass, panelling, louvres, trimmings, fixings, doors, ironmongery, decoration and other associated works, other than those forming part of MiC unit or major pre-fabrication unit (see CW/M).
Exclusions	:	

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	IP - Internal Partitions
Unit	:	M ²
Rules	:	Measured the gross area of internal partitions between columns over door openings and borrowed lights.
Definition	:	Non-structural internal walls and partitions including glazed screens, demountable partitions, proprietary toilet and shower cubicles including doors to same, liftshaft walls other than reinforced concrete, other than those forming part of MiC unit or major pre-fabrication unit (see IP/M).
Exclusions	:	Internal doors with fanlights and/or sidelights including doors in demountable partitions. Folding or sliding doors forming partitions, roller shutters (see ID). Fire stops and sound barriers in ceiling spaces (see IFCF). Wall finishes (see IFWF).

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	ID - Internal Doors
Unit	:	Nr.
Rules	:	Measured the total number of doors.
Definition	:	All internal doors including frames, architraves, finishes, glazing, fanlights, sidelights, panels over doors (door sets) and ironmongery, folding and sliding doors, fire doors, strongroom doors, roller shutter doors, wall hatches and duct doors, other than those forming part of MiC unit or major pre-fabrication unit (see ID/M).
Exclusions	:	Doors to proprietary toilet and shower cubicles, partitions etc. (see IP). Doors to fittings and fixtures (see FF).

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	IF - Internal Finishes
Unit	:	M ²
Rules	:	Measured the actual area of internal finish.
Definition	:	Includes all necessary preparatory work (e.g. spatterdash), expansion joints, plasterbeads, stops and the like, and decoration, other than those forming part of MiC unit or major pre-fabrication unit (see IF/M).
Exclusions	:	

Sub-Element	:	IFWF - Wall Finishes
Unit	:	M ²
Rules	:	Measured the actual area of wall finish.
Definition	:	Includes plaster, tiles, linings, insulation and grounds behind linings and other decorations; skirtings, dado rails and the like, finishes to stairwell walls, other than those forming part of MiC unit or major pre-fabrication unit (see IFWF/M).
Exclusions	:	Finishes to demountable partitions (see IP). Cornices (see IFCF). Integral skirtings (see IFFF). Finishes to balustrades and handrails (see IFBF).

Sub-Element	:	IFFF - Floor Finishes
Unit	:	M ²
Rules	:	Measured the actual area of floor finish.
Definition	:	Includes screeds, surface finishes, integral skirtings (i.e. same material as floor finish), matwells, threshold and junction strips, false floors laid over structural floors (e.g. computer flooring), other than those forming part of MiC unit or major pre-fabrication unit (see IFFF/M).
Exclusions	:	Stair finishes to treads, risers and intermediate landings.

Sub-Element	:	IFCF - Ceiling Finishes
Unit	:	M ²
Rules	:	Measured the actual area of ceiling finish.
Definition	:	Includes suspended ceilings, framings and supports, ceiling and beam linings, insulation and grounds behind linings, cornices, ceilings access panels, fire stops and sound barriers in ceiling spaces together with framing, other than those forming part of MiC unit or major pre-fabrication unit (see IFCF/M).
Exclusions	:	Soffits of stairs and intermediate landings (see IFSF).

Element : IF - Internal Finishes cont'd

Sub-Element	:	IFSF - Stair Finishes
Unit	:	M ²
Rules	:	Measured the gross plan area at each level including intermediate landings.
Definition	:	Finishes to treads and risers including nosings, landings, strings and aprons, and soffits of stairs and landings, other than those forming part of MiC unit or major pre-fabrication unit (see IFSF/M).
Exclusions	:	Finishes to landings at floor levels (see IFFF) and to stairwell walls (see IFWF).

Sub-Element	:	IFBF - Balustrade & Handrail Finishes
Unit	:	M ²
Rules	:	Measured the actual area of balustrade and handrail finish.
Definition	:	Finishes to balustrading and handrails including both sides and top of balustrading, other than those forming part of MiC unit or major pre-fabrication unit (see IFBF/M).
Exclusions	:	

Sub-Element	:	IFSU - Internal Finishes Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes finishes to art works and the like, other than those forming part of MiC unit or major pre-fabrication unit (see IFSU/M).
Exclusions	:	

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	EF - External Finishes
Unit	:	M ²
Rules	:	Measured the actual area of external finish.
Definition	:	Includes all necessary preparatory work (e.g. spatterdash), expansion joints, plasterbeads, stops and the like, and decoration, other than those forming part of MiC unit or major pre-fabrication unit (see EF/M).
Exclusions	:	

Sub-Element	:	EFRF - Roof Finishes
Unit	:	M ²
Rules	:	Measured the actual area of roof finish.
Definition	:	Complete weather-proof covering to all types of roofs, balconies and decks including coverings, sheetings, flashings, skirtings, gutters, screeds and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see EFRF/M).
Exclusions	:	Tile or other types of finish placed on top of the water-proofing when roof, balcony or deck is used for foot traffic and the like (see EFFF).

Sub-Element	:	EFWF - Wall Finishes (External)
Unit	:	M ²
Rules	:	Measured the actual area of wall finish.
Definition	:	Includes fins and projections of all materials other than reinforced concrete, finishes to all fins and other features including both sides and top of balcony and parapet walls, skirtings, dado rails and the like, other than those forming part of MiC unit or major pre-fabrication unit (see EFWF/M).
Exclusions	:	Reinforced concrete fins and projections (see SCFF and SCSW).

Sub-Element	:	EFFF - Floor Finishes (External)
Unit	:	M ²
Rules	:	Measured the actual area of floor finish.
Definition	:	Finishes to roofs, balconies and decks where exposed to foot traffic and the like, other than those forming part of MiC unit or major pre-fabrication unit (see EFFF/M).
Exclusions	:	Weather-proofing to roofs, balconies and decks (see EFRF).

Element : EF - External Finishes cont'd

Sub-Element	:	EFCF - Ceiling Finishes (External)
Unit	:	M ²
Rules	:	Measured the actual area of ceiling finish.
Definition	:	Finishes to external soffits, balcony soffits and the like, other than those forming part of MiC unit or major pre-fabrication unit (see EFCF/M).
Exclusions	:	Finishes to soffits of projecting fins, planters etc. on external walls (see EFWF).

Sub-Element	:	EFSF - Stair Finishes (External)
Unit	:	M ²
Rules	:	Measured the gross plan area at each level including intermediate landings.
Definition	:	Finishes to treads and risers including nosings, landings, strings, aprons and soffits of stairs and landings, other than those forming part of MiC unit or major pre-fabrication unit (see EFSF/M).
Exclusions	:	Finishes to landings at floor levels (see EFFF) and to stairwell walls (see EFWF).

Sub-Element	:	EFBF - Balustrade & Handrail Finishes (External)
Unit	:	M ²
Rules	:	Measured the actual area of balustrade and handrail finish.
Definition	:	Finishes to balustrading and handrails including both sides and top of balustrading, other than those forming part of MiC unit or major pre-fabrication unit (see EFBF/M).
Exclusions	:	

Sub-Element	:	EFGR – Green Roof & Vertical Greening (External)
Unit	:	M ²
Rules	:	Measured the actual area of green roof and vertical greening
Definition	:	Complete green roof and vertical greening system, including hard landscaping (flower boxes, planters, integral seating, ornamental ponds, etc. and the like), soft landscaping (all grassed and planted areas, trees, shrubs, plants and the like) and associated supporting systems, other than those forming part of MiC unit or major pre-fabrication unit (see EFGR/M).
Exclusions	:	Hard landscaping and soft landscaping beyond the line of the external façade of the building structure (see XWHL and XWSL)

Element : EF - External Finishes cont'd

Sub-Element	:	EFSU - External Finishes Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes finishes to art works and the like, other than those forming part of MiC unit or major pre-fabrication unit (see EFSU/M).
Exclusions	:	

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	FF - Fittings and Fixtures
Unit	:	M ²
Rules	:	Construction floor area of works not forming part of MiC unit or major prefabrication unit - measured overall to the outer face of external wall.
Definition	:	Includes wardrobes, cupboards, shelving, shelving units, sinks, vanity and bench units, lockers, fixed desks, cloakroom fittings, benches and seating, counters, bars, chalkboards, projection screens, notice boards, curtain track and pelmets, mirrors, towel rails, hose reel cabinets, storage racks and the like, cat ladders, cat walks and the like, including all finishes, other than those forming part of MiC unit or major pre-fabrication unit (see FF/M).
Exclusions	:	Sanitary fittings (see SWSF). Electrical fittings (see EEEL). Services to fittings and fixtures (see SW, EE, AC, TG, FS & SP).

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	SW – Sanitary Fittings and Above Ground Drainage Systems
Unit	:	M ²
Rules	:	Construction floor area of works not forming part of MiC unit or major prefabrication unit – measured overall to the outer face of external wall.
Definition	:	Sanitary fittings and waste plumbing, including rainwater and refuse disposal, other than those forming part of MiC unit or major pre-fabrication unit (see SW/M).
Exclusions	:	Underground drainage (see DR)

Sub-Element	:	SWRW - Rainwater Installation
Unit	:	M
Rules	:	Measured the gross length of all rainwater pipes and gutters.
Definition	:	Eaves gutters and down pipes, other than those forming part of MiC unit or major pre-fabrication unit (see SWRW/M).
Exclusions	:	Integral roof gutters (see SCRF & EFRF) and rainwater recycling system (see SVRW).

Sub-Element	:	SWSF - Sanitary Fittings
Unit	:	Nr.
Rules	:	The total number of sanitary fittings.
Definition	:	Sanitary fittings including sinks, basins, WCs, urinals, complete with taps, traps, cisterns etc., other than those forming part of MiC unit or major pre-fabrication unit (see SWSF/M).
Exclusions	:	Special kitchen equipment (see SPKE).

Sub-Element	:	SWSW - Soil and Waste Installation
Unit	:	Nr.
Rules	:	The total number of individual soil sanitary fittings.
Definition	:	Includes all types of pipes, fittings and fixings; support systems, other than those forming part of MiC unit or major pre-fabrication unit (see SWSW/M).
Exclusions	:	

Sub-Element	:	SWRD - Refuse Disposal
Unit	:	Nr.
Rules	:	Measured the total number of refuse disposal hoppers.
Definition	:	Refuse chutes, fittings and fixtures, other than those forming part of MiC unit or major pre-fabrication unit (see SWRD/M).
Exclusions	:	

Element : SW- Sanitary Fittings and Above Ground Drainage Systems cont'd

Sub-Element	:	SWSU – Above Ground Drainage Systems Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the above ground drainage systems including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, preparation of builder’s work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, provision of cable and pipe sleeves, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see SWSU/M).
Exclusions	:	

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	BB - Builder's Work in Connection with Services
Unit	:	Item
Rules	:	
Definition	:	All items required to be carried out by the builder as a direct result of a services or specialist services installation, including all holes, pipe sleeves, etc. and the like, and painting on pipes, other than those forming part of MiC unit or major pre-fabrication unit (see BB/M).
Exclusions	:	Service ducts below ground floor slab (see FNSU). External services trenches (see XWES). Water tanks (see SCSU).

GROUP ELEMENT : 03 - SUPERSTRUCTURE

Element	:	BP - Builder's Profit & Attendance on Mechanical & Electrical Services
Unit	:	ITEM
Rules	:	
Definition	:	Sum required by builder for profit and attendance on nominated subcontractors and separate contracts for works not forming part of MiC unit or major pre-fabrication unit (see BP/M).
Exclusions	:	

Part B – Superstructure works forming part of MiC unit or major pre-fabrication unit

For Part B, the unit, rules, definition and exclusions for each Element and Sub-element code are the same as their corresponding code in Part A, except the works are for those “forming part of MiC unit or major pre-fabrication unit”

Element / Sub-element code for superstructure works forming part of MiC unit or major pre-fabrication unit	Corresponding Element / Sub-element code in Part A
SC/M – Structure (Reinforced Concrete)	SC
SCFF/M – Frame (Reinforced Concrete)	SCFF
SCRF/M – Roof (Reinforced Concrete)	SCRF
SCUF/M – Upper Floors (Reinforced Concrete)	SCUF
SCSW/M – Structural Walls (Reinforced Concrete)	SCSW
SCSL/M – Stairs & Landings (Reinforced Concrete)	SCSL
SCBR/M – Balustrade & Handrails (Reinforced Concrete)	SCBR
SCSU/M - Structure Sundries (Reinforced Concrete)	SCSU
SO/M – Structure (Other)	SO
SOFF/M – Frame (Other)	SOFF
SORF/M - Roof (Other)	SORF
SOUF/M - Upper Floors (Other)	SOUF
SOSW/M - Structural Walls (Other)	SOSW
SOSL/M - Stairs and Landings (Other)	SOSL
SOBR/M - Balustrades and Handrails (Other)	SOBR
SOSU/M - Structure Sundries (Other)	SOSU
EW/M - External Walls (Non-structural)	EW
WD/M - Windows and External Doors	WD
CW/M - Curtain Walling	CW
IP/M - Internal Partitions	IP
ID/M – Internal Doors	ID
IF/M – Internal Finishes	IF
IFWF/M - Wall Finishes	IFWF
IFFF/M - Floor Finishes	IFFF
IFCF/M - Ceiling Finishes	IFCF
IFSF/M - Stair Finishes	IFSF
IFBF/M - Balustrade & Handrail Finishes	IFBF
IFSU/M - Internal Finishes Sundries	IFSU
EF/M - External Finishes	EF
EFRF/M - Roof Finishes	EFRF
EFWF/M - Wall Finishes (External)	EFWF
EFFF/M - Floor Finishes (External)	EFFF
EFCF/M - Ceiling Finishes (External)	EFCF
EFSF/M - Stair Finishes (External)	EFSF
EFBF/M - Balustrade & Handrail Finishes (External)	EFBF
EFGR/M – Green Roof & Vertical Greening (External)	EFGR
EFSU/M - External Finishes Sundries	EFSU
FF/M - Fittings and Fixtures	FF
SW/M – Sanitary Fittings and Above Ground Drainage Systems	SW
SWRW/M - Rainwater Installation	SWRW
SWSF/M - Sanitary Fittings	SWSF
SWSW/M - Soil and Waste Installation	SWSW
SWRD/M - Refuse Disposal	SWRD
SWSU/M – Above Ground Drainage Systems Sundries	SWSU
BB/M - Builder’s Work in Connection with Services	BB
BP/M - Builder’s Profit & Attendance on Mechanical & Electrical Services	BP

Part A – Mechanical & electrical services works other than those included in Part B – Mechanical & electrical services works forming part of MiC unit or major pre-fabrication unit

Element	:	EE - Electrics
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the supply of electrical power, additionally those works involved with the provision of call bell system and lightning protection system, other than those forming part of MiC unit or major pre-fabrication unit (see EE/M).
Exclusions	:	Utility connections (see XWUC). Builder's work (see BB & BP).

Sub-Element	:	EEML - Incoming Mains
Unit	:	kVA
Rules	:	Total maximum designed capacity of the incoming mains.
Definition	:	Includes for all works in connection with incoming electricity supply, other than those forming part of MiC unit or major pre-fabrication unit (see EEML/M).
Exclusions	:	Utility connections (see XWUC). Builder's work (see BB & BP).

Sub-Element	:	EEMD - Main & Submain
Unit	:	Nr.
Rules	:	Measured the total number of local distribution boards.
Definition	:	Includes for all works for the distribution of electricity from the main low voltage switchboard to submain and final circuit distribution boards or equipment including busbar trunkings, cables, cabling facilities, switchgears and distribution boards, other than those forming part of MiC unit or major pre-fabrication unit (see EEMD/M).
Exclusions	:	Builder's work (see BB & BP).

Element : EE - Electrics cont'd

Sub-Element	:	EELP - Lighting and Power
Unit	:	Item
Rules	:	
Definition	:	Includes for all works for the installation of lighting points, power points, luminaries, accessories and electrical appliances including trunkings, cables and cabling facilities, other than those forming part of MiC unit or major pre-fabrication unit (see EELP/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EECC – Call Bell System
Unit	:	Nr.
Rules	:	Measured the total number of outlet points.
Definition	:	Includes for all works associated with the installation of call bell system, other than those forming part of MiC unit or major pre-fabrication unit (see EECC/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EEOS - Electrical Works associated with Other Services
Unit	:	Nr.
Rules	:	Measured the total number of outlet points.
Definition	:	Includes for all works associated with the installation of cabling facilities for other trades such as telephone and PABX system, public address system, CCTV system including the installation of trunkings, ducts, trays, cable ladders, conduits and outlet boxes, other than those forming part of MiC unit or major pre-fabrication unit (see EEOS/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EETT - Trunking and Tray
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the installation of cabling facilities associated with more than one system including the installation of trunkings, ducts, trays, cable ladders, conduits and outlet boxes, other than those forming part of MiC unit or major pre-fabrication unit (see EETT/M).
Exclusions	:	Builder's work (see BB & BP).

Element : EE - Electrics cont'd

Sub-Element	:	EEPR - Lightning Protection
Unit	:	M ²
Rules	:	Roof area - measured overall to the outer face of external wall.
Definition	:	Includes for all works associated with the installation of lightning protection system including air termination, down conductors and earth electrodes, other than those forming part of MiC unit or major pre-fabrication unit (see EEPR/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EEEB - Earthing and Bonding
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the installation of earthing and bonding system including equipotential bonding and earth electrodes, other than those forming part of MiC unit or major pre-fabrication unit (see EEEB/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EEGS - Items Supplied by Government
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the fixing only of the items supplied by government, other than those forming part of MiC unit or major pre-fabrication unit (see EEGS/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	EESU - Electrical Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the electrical installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, preparation of working drawings, builder's work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than that require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer's staff, provision of manuals, fabricated composite support structure, supply conduit and cable sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see EESU/M).
Exclusions	:	Builder's work (see BB & BP).

Element	:	SB – Low Voltage (LV) Cubicle Switchboards
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all work and sundry items in connection with the low voltage cubicle switchboards, other than those forming part of MiC unit or major pre-fabrication unit (see SB/M).
Exclusions	:	Utility connection (see XWUC). Builder’s work (see BB & BP).

Sub-Element	:	SBSI – LV Cubicle Switchboards Installation
Unit	:	Ampere
Rules	:	Total maximum current carrying capacity of the switchboards.
Definition	:	Includes for all work in connection with the low voltage cubicle switchboards, other than those forming part of MiC unit or major pre-fabrication unit (see SBSI/M).
Exclusions	:	Utility connection (see XWUC). Builder’s work (see BB & BP).

Sub-Element	:	SBSU – LV Cubicle Switchboards Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the low voltage cubicle switchboards installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, earthing and bonding, preparation of working drawings, builders’ work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer’s staff, provision of manuals, supply conduit and cable sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see SBSU/M).
Exclusions	:	Builder’s work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	GE – Diesel Generating Sets
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all work associated with the diesel generator sets installation and sundry items, other than those forming part of MiC unit or major pre-fabrication unit (see GE/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	GESI – Diesel Generating Sets Installation
Unit	:	KVA
Rules	:	Total maximum designed capacity of the diesel generator sets.
Definition	:	Includes for all work associated with the diesel generator sets installation, other than those forming part of MiC unit or major pre-fabrication unit (see GESI/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	GESU – Diesel Generating Sets Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with diesel generator sets installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, earthing and bonding, preparation of working drawings, builders’ work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer’s staff, provision of manuals, supply conduit and cable sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see GESU/M).
Exclusions	:	Builder’s work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	UP – Uninterruptible Power Supply
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all work and sundry items associated with the installation of uninterruptible power supply system, other than those forming part of MiC unit or major pre-fabrication unit (see UP/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	UPSI – Uninterruptible Power Supply System
Unit	:	KVA
Rules	:	Total maximum designed capacity of the uninterruptible power supply equipment.
Definition	:	Includes for all work associated with the installation of uninterruptible power supply system, other than those forming part of MiC unit or major pre-fabrication unit (see UPSI/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	UPSU – Uninterruptible Power Supply Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with uninterruptible power supply system installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, earthing and bonding, preparation of working drawings, builders’ work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer’s staff, provision of manuals, supply conduit and cable sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see UPSU/M).
Exclusions	:	Builder’s work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	CB – Broadcast Reception
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all work and sundry items associated with the installation of broadcast reception system, other than those forming part of MiC unit or major pre-fabrication unit (see CB/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	CBSI – Broadcast Reception Installation
Unit	:	Nr.
Rules	:	Measured the total number of service points.
Definition	:	Includes for all work associated with the installation of broadcast reception system, other than those forming part of MiC unit or major pre-fabrication unit (see CBSI/M).
Exclusions	:	Builder’s work (see BB & BP).

Sub-Element	:	CBSU – Broadcast Reception Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with broadcast reception installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, earthing and bonding, preparation of working drawings, builders’ work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer’s staff, provision of manuals, supply conduit and cable sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see CBSU/M).
Exclusions	:	Builder’s work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	AC - Air-conditioning
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the provision of mechanical ventilation and air-conditioning including all pipework, insulation, ducting, fan motors, chillers and other plant and equipment, including boilers and unitary air conditioners, other than those forming part of MiC unit or major pre-fabrication unit (see AC/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACCH - Chilled Water System
Unit	:	kW
Rules	:	Measured the total cooling capacity of chillers.
Definition	:	Includes for all works associated with the chilled water system including chillers, water pumps, all pipework, fittings, insulation and valves, other than those forming part of MiC unit or major pre-fabrication unit (see ACCH/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACCW - Condenser Water System
Unit	:	kW
Rules	:	Measured the total heat rejection capacity of condensers.
Definition	:	Includes for all works associated with the condenser water system including condensers, water pumps, all pipework, fittings and valves, other than those forming part of MiC unit or major pre-fabrication unit (see ACCW/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACHW - Heating Water System
Unit	:	kW
Rules	:	Measured the total heating capacity of heating water system.
Definition	:	Includes for all works associated with the heating water system including hot water boilers, flue, calorifiers, water pumps, all pipework, fittings, valves and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see ACHW/M).
Exclusions	:	Builder's work (see BB & BP).

Element : AC - Air-conditioning cont'd

Sub-Element	:	ACSC - Steam and Condensate System
Unit	:	kW
Rules	:	Measured the total heating capacity of the steam supply system.
Definition	:	Includes for all works associated with the steam and condensate system including steam boilers, flue, calorifiers, water pumps, all pipework, fittings, insulation, valves and steam traps, other than those forming part of MiC unit or major pre-fabrication unit (see ACSC/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACFO - Fuel Oil System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the provision of fuel oil supply to heating water system and steam supply system including fuel storage tank, fuel pumps, all pipework, fittings and valves, other than those forming part of MiC unit or major pre-fabrication unit (see ACFO/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACWT - Water Treatment
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works and services associated with water treatment of air conditioning system including metering pumps, chemical storage, electrochemical chlorinator, pipework, fittings and valves, other than those forming part of MiC unit or major pre-fabrication unit (see ACWT/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACAC - Air Handling and Distribution System
Unit	:	kW
Rules	:	Measured the total cooling capacity of air handling equipment.
Definition	:	Includes for all works associated with air handling and distribution installation including air handling units, fan coil units, variable air volume boxes, ventilation fans, air grilles and registers, air ducts, insulation, filters and dampers, other than those forming part of MiC unit or major pre-fabrication unit (see ACAC/M).
Exclusions	:	Builder's work (see BB & BP).

Element : AC - Air-conditioning cont'd

Sub-Element	:	ACCD - Condensate Drain System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with condensate drain system including pipeworks, fittings, valves and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see ACCD/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACUA - Unitary Air-conditioning System
Unit	:	kW
Rules	:	Measured the total cooling capacity of unitary air conditioning system.
Definition	:	Includes for all works associated with unitary air conditioning system including condensing units, direct expansion units, pipework, fittings, valves and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see ACUA/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACCR - Cold Rooms
Unit	:	M ³
Rules	:	Measured the total internal volume of cold rooms.
Definition	:	Includes for all works associated with cold room installation including cold room, refrigeration plant, pipework, fittings, valves and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see ACCR/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACMV - Mechanical Ventilation System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with mechanical ventilation installation including ventilation fans, ductwork, air grilles and registers, filters, dampers and insulation, other than those forming part of MiC unit or major pre-fabrication unit (see ACMV/M).
Exclusions	:	Builder's work (see BB & BP).

Element : AC - Air-conditioning cont'd

Sub-Element	:	ACSV - Staircase Ventilation System
Unit	:	M ²
Rules	:	Measured the actual floor area of the staircase.
Definition	:	Includes for all works associated with staircase pressurisation installation including ventilation fans, ductwork, air grilles and registers, filters and dampers, other than those forming part of MiC unit or major pre-fabrication unit (see ACSV/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACKE - Kitchen Exhaust System
Unit	:	M ²
Rules	:	Measured the actual floor area of kitchen.
Definition	:	Includes for all works associated with kitchen ventilation and kitchen exhaust purification installation including water scrubbers, exhaust hoods, hydro-vent units, roof extractors, ventilation fans, ductwork, air grilles and registers, filters and dampers, other than those forming part of MiC unit or major pre-fabrication unit (see ACKE/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACSE - Special Exhaust System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with ventilating installation specifically designed for removal of toxic fumes or irritating gases including vehicular exhausts, bio-incinerator exhausts, ventilation fans, ductwork, air grilles and registers, filters and dampers, other than those forming part of MiC unit or major pre-fabrication unit (see ACSE/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	ACEC - Electrical and Control System (Air-conditioning)
Unit	:	Percentage
Rules	:	Measured the percentage value of electrical and control system cost to total air conditioning installation cost.
Definition	:	Includes for all works associated with the provision of electrical supply and control of the total air conditioning installation including control cubicle and panels, power and control cables, cabling facilities, sensing devices, central control and monitoring equipment, other than those forming part of MiC unit or major pre-fabrication unit (see ACEC/M).
Exclusions	:	Builder's work (see BB & BP).

Element : AC - Air-conditioning cont'd

Sub-Element	:	ACSU - Air-conditioning Sundries
Unit	:	Item
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the air conditioning installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, preparation of working drawings, builder's work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than that require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer's staff, provision of manuals, fabricated composite support structure, supply conduit, cable and pipe sleeves for fixing by other trades and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see ACSU/M).
Exclusions	:	Builder's work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	TG - Gas
Unit	:	Nr.
Rules	:	Measured the total number of individual service points.
Definition	:	Includes for all works associated with the provision of piped or bottle gas including distribution pipework, meters and equipment, other than those forming part of MiC unit or major pre-fabrication unit (see TG/M).
Exclusions	:	Utility connection (see XWUC). Builder's work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	FS - Fire Services
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with fire fighting, detection, alarming and advisory installation, other than those forming part of MiC unit or major pre-fabrication unit (see FS/M).
Exclusions	:	Utility connections (see XWUC). Main riser to roof/transfer tanks (see SVFF). Fire stops in ceilings (see IFCF). Builder's work (see BB & BP).

Sub-Element	:	FSHH - Fire Hydrant & Hosereel System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with fire hydrant and hosereel installation including pipework, fittings, valves, water pumps, hydrant outlets, fire services inlets and hosereels, other than those forming part of MiC unit or major pre-fabrication unit (see FSHH/M).
Exclusions	:	Builder's work (see BB & BP)

Sub-Element	:	FSSS - Sprinkler System
Unit	:	Nr.
Rules	:	Measured the total number of sprinkler heads.
Definition	:	Includes for all works associated with water sprinkler installation including pipework, fittings, valves, sprinkler heads, water pumps, sprinkler water inlets, other than those forming part of MiC unit or major pre-fabrication unit (see FSSS/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	FSGE - Gaseous Extinguishing System
Unit	:	Nr.
Rules	:	Measured the total number of gas nozzles
Definition	:	Includes for all works associated with gas extinguishing installation including gas cylinders, cylinder racks and fixings, pipework, fittings, valves and nozzles, other than those forming part of MiC unit or major pre-fabrication unit (see FSGE/M).
Exclusions	:	Builder's work (see BB & BP).

Element : FS - Fire Services cont'd

Sub-Element	:	FSAV - Audio/Visual Advisory System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with audio/visual advisory system including microphones, amplifiers, loudspeakers, cassette decks, CD decks, visual directional signs and audio/visual control equipment, other than those forming part of MiC unit or major pre-fabrication unit (see FSAV/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	FSAD - Automatic Fire Alarm & Detection System
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with automatic fire alarm and detection installation including detectors and alarm signalling devices, other than those forming part of MiC unit or major pre-fabrication unit (see FSAD/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	FSPA - Portable Hand-operated Appliances
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all hand held fire fighting equipment, other than those forming part of MiC unit or major pre-fabrication unit (see FSPA/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	FSES - Electricity Supply (Fire Services)
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the provision of electricity supply to the fire services installation including power cables, cabling facilities and starters, other than those forming part of MiC unit or major pre-fabrication unit (see FSES/M).
Exclusions	:	Builder's work (see BB & BP).

Element : FS - Fire Services cont'd

Sub-Element	:	FSCS - Control System (Fire Services)
Unit	:	Nr.
Rules	:	Measured the total number of equipment control points.
Definition	:	Includes for all works associated with control system of the fire service installation including control cables, cabling facilities and control panels, other than those forming part of MiC unit or major pre-fabrication unit (see FSCS/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	FSSU - Fire Services Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the fire service installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, preparation of working drawings, builder's work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, maintenance service other than that require under the defects liability as stipulated in the General Conditions of Contract, tuition of Employer's staff, provision of manuals, fabricated composite support structure, cable and pipe sleeves for fixing by other trades and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see FSSU/M).
Exclusions	:	Builder's work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	SV – Plumbing
Unit	:	M ²
Rules	:	Construction floor area of works not forming part of MiC unit or major prefabrication unit – measured overall to the outer face of external wall.
Definition	:	Water supply services for fresh water, hot water, flushing water, fire fighting, associated electricity supply and control system, other than those forming part of MiC unit or major pre-fabrication unit (see SV/M).
Exclusions	:	Sanitary fittings (see SWSF), soil and waste installation (see SWSW), water connections (see XWUC), concrete tanks (see SCSU) and Builder’s work (see BB & BP).

Sub-Element	:	SVRW - Rainwater Recycling System
Unit	:	Item
Rules	:	
Definition	:	Includes all types of pipes, fittings and fixings and supporting systems for rainwater recycling system and the like, other than those forming part of MiC unit or major pre-fabrication unit (see SVRW/M).
Exclusions	:	Eaves gutters and down pipes, and rainwater installation (see SWRW).

Sub-Element	:	SVCW – Cold Water Installation
Unit	:	Nr.
Rules	:	The total number of individual outlets.
Definition	:	Includes all types of pipes, fittings and fixings and support systems for cold water installation including incoming water mains; and water supply for feeding/makeup to air-conditioning installation, fountain installation, swimming pool installation, irrigation system, potable water and cleansing water, other than those forming part of MiC unit or major pre-fabrication unit (see SVCW/M).
Exclusions	:	

Sub-Element	:	SVHW - Hot Water Installation
Unit	:	Nr.
Rules	:	The total number of individual outlets.
Definition	:	Includes all types of pipes, fittings and fixings and support systems for hot water installation, other than those forming part of MiC unit or major pre-fabrication unit (see SVHW/M).
Exclusions	:	

Element : SV - Plumbing cont'd

Sub-Element	:	SVFW - Flushing Water Installation
Unit	:	Nr.
Rules	:	The total number of individual outlets.
Definition	:	Includes all types of pipes, fittings and fixings and support systems for flushing water installation including incoming water mains, other than those forming part of MiC unit or major pre-fabrication unit (see SVFW/M).
Exclusions	:	

Sub-Element	:	SVFF – Water Supply for Fire Services
Unit	:	ITEM
Rules	:	Water mains to the roof/transfer tanks.
Definition	:	Includes all types of pipes, fittings and fixing, support systems for water supply for fire services installation including incoming water mains, other than those forming part of MiC unit or major pre-fabrication unit (see SVFF/M).
Exclusions	:	Sprinkler system. Feeds to hose reels etc. (see FS). Hose reel cabinets (see FF). Alarm system (see FS).

Sub-Element	:	SVES – Electricity Supply (Plumbing)
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the provision of electricity supply to the plumbing installation including pump sets, power cables, cabling facilities and starters, other than those forming part of MiC unit or major pre-fabrication unit (see SVES/M).
Exclusions	:	Builder's works (see BB & BP)

Sub-Element	:	SVCS – Control System (Plumbing)
Unit	:	Nr.
Rules	:	Measured the total number of equipment control points.
Definition	:	Includes for all works associated with control system of the plumbing installation including control cables, cabling facilities and control panels, other than those forming part of MiC unit or major pre-fabrication unit (see SVCS/M).
Exclusions	:	Builder's works (see BB & BP)

Element : SV - Plumbing cont'd

Sub-Element	:	SVSU - Plumbing Sundries
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all miscellaneous work associated with the plumbing installation including marking the position of holes, mortices, chases and the like in the structure, testing and commissioning, preparation of working drawings, builder's work drawings, as-built drawings and design drawings, provision of mock-ups and/or prototypes, provision of manuals, cable and pipe sleeves for fixing by other trades, and fire stopping, other than those forming part of MiC unit or major pre-fabrication unit (see SVSU/M).
Exclusions	:	

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	MS - Horizontal and Vertical Movement
Unit	:	ITEM
Rules	:	
Definition	:	Includes lifts, escalators, conveyors and any other form of horizontal or vertical transportation system for people or goods.
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	MSLF - Lifts
Unit	:	Nr.
Rules	:	Measured the total number of lifts.
Definition	:	Includes for all works associated with the installation of goods or passenger lifts and hoists.
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	MSCO - Conveyors
Unit	:	Nr.
Rules	:	Measured the total number of conveyors.
Definition	:	Includes for all works associated with for the installation of a conveyor system.
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	MSES - Escalators
Unit	:	Nr.
Rules	:	Measured the total number of escalators.
Definition	:	Includes for all works associated with the provision of escalators.
Exclusions	:	Builder's work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	BA - Building Automation
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works necessary for the installation of a building automation system including wiring, conduit, trunking, outlets, equipment etc., other than those forming part of MiC unit or major pre-fabrication unit (see BA/M).
Exclusions	:	Builder's work (see BB & BP).

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element	:	SP - Other Specialist Services
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all other specialist services installations not already mentioned above for example, kitchen equipment, specialist medical gases, steam/hot water boilers and other mechanical plant and equipment and the like, other than those forming part of MiC unit or major pre-fabrication unit (see SP/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	SPKE - Kitchen Equipment
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with the installation of kitchen equipment, other than those forming part of MiC unit or major pre-fabrication unit (see SPKE/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	SPOS - Other Specialist Installations
Unit	:	ITEM
Rules	:	
Definition	:	Includes for all works associated with specialist medical gases, steam/hot water boiler installations and the like, other than those forming part of MiC unit or major pre-fabrication unit (see SPOS/M).
Exclusions	:	Builder's work (see BB & BP).

Sub-Element	:	SPME - Mechanical Plant and Equipment
Unit	:	ITEM
Rules	:	
Definition	:	Includes such items as gondolas, turnstiles, weighbridges, turntables and the like, other than those forming part of MiC unit or major pre-fabrication unit (see SPME/M).
Exclusions	:	Builder's work (see BB & BP).

Part B – Mechanical & electrical services works forming part of MiC unit or major pre-fabrication unit

For Part B, the unit, rules, definition and exclusions for each Element and Sub-element code are the same as their corresponding code in Part A, except the works are for those “forming part of MiC unit or major pre-fabrication unit”

Element / Sub-element code for superstructure works forming part of MiC unit or major pre-fabrication unit	Corresponding Element / Sub-element code in Part A
EE/M – Electrics	EE
EEML/M - Incoming Mains	EEML
EEMD/M - Main & Submain	EEMD
EELP/M - Lighting and Power	EELP
EECC/M – Call Bell System	EECC
EEOS/M - Electrical Works associated with Other Services	EEOS
EETT/M - Trunking and Tray	EETT
EEPR/M - Lightning Protection	EEPR
EEEB/M - Earthing and Bonding	EEEB
EEGS/M - Items Supplied by Government	EEGS
EESU/M - Electrical Sundries	EESU
SB/M – Low Voltage (LV) Cubicle Switchboards	SB
SBSI/M – LV Cubicle Switchboards Installation	SBSI
SBSU/M – LV Cubicle Switchboards Sundries	SBSU
GE/M – Diesel Generating Sets	GE
GESI/M – Diesel Generating Sets Installation	GESI
GESU/M – Diesel Generating Sets Sundries	GESU
UP/M – Uninterruptible Power Supply	UP
UPSI/M – Uninterruptible Power Supply System	UPSI
UPSU/M – Uninterruptible Power Supply Sundries	UPSU
CB/M – Broadcast Reception	CB
CBSI/M – Broadcast Reception Installation	CBSI
CBSU/M – Broadcast Reception Sundries	CBSU
AC/M - Air-conditioning	AC
ACCH/M - Chilled Water System	ACCH
ACCW/M - Condenser Water System	ACCW
ACHW/M - Heating Water System	ACHW
ACSC/M - Steam and Condensate System	ACSC
ACFO/M - Fuel Oil System	ACFO
ACWT/M - Water Treatment	ACWT
ACAC/M - Air Handling and Distribution System	ACAC
ACCD/M - Condensate Drain System	ACCD
ACUA/M - Unitary Air-conditioning System	ACUA
ACCR/M - Cold Rooms	ACCR
ACMV/M - Mechanical Ventilation System	ACMV
ACSV/M - Staircase Ventilation System	ACSV
ACKE/M - Kitchen Exhaust System	ACKE
ACSE/M - Special Exhaust System	ACSE
ACEC/M - Electrical and Control System (Air-conditioning)	ACEC
ACSU/M - Air-conditioning Sundries	ACSU

GROUP ELEMENT : 04 - MECHANICAL & ELECTRICAL SERVICES

Element / Sub-element code for superstructure works forming part of MiC unit or major pre-fabrication unit (Cont'd)	Corresponding Element / Sub-element code in Part A (Cont'd)
TG/M - Gas	TG
FS/M - Fire Services	FS
FSHH/M - Fire Hydrant & Hosereel System	FSHH
FSSS/M - Sprinkler System	FSSS
FSGE/M - Gaseous Extinguishing System	FSGE
FSAV/M - Audio/Visual Advisory System	FSAV
FSAD/M - Automatic Fire Alarm & Detection System	FSAD
FSPA/M - Portable Hand-operated Appliances	FSPA
FSES/M - Electricity Supply (Fire Services)	FSES
FSCS/M - Control System (Fire Services)	FSCS
FSSU/M - Fire Services Sundries	FSSU
SV/M - Plumbing	SV
SVRW/M - Rainwater Recycling System	SVRW
SVCW/M - Cold Water Installation	SVCW
SVHW/M - Hot Water Installation	SVHW
SVFW/M - Flushing Water Installation	SVFW
SVFF/M - Water Supply for Fire Services	SVFF
SVES/M - Electricity Supply (Plumbing)	SVES
SVCS/M - Control System (Plumbing)	SVCS
SVSU/M - Plumbing Sundries	SVSU
BA/M - Building Automation	BA
SP/M - Other Specialist Services	SP
SPKE/M - Kitchen Equipment	SPKE
SPOS/M - Other Specialist Installations	SPOS
SPME/M - Mechanical Plant and Equipment	SPME

GROUP ELEMENT : 05 - EXTERNAL WORKS AND DRAINAGE

Element	:	XW - External Works
Unit	:	M ²
Rules	:	Measured the gross area of the site excluding the plan area of the building.
Definition	:	Site works beyond the line of the external face of the building structure.
Exclusions	:	Bulk excavation for site formation (see SF).

Sub-Element	:	XWRS - Retaining Structures
Unit	:	M ²
Rules	:	Measured the gross vertical area of the retaining wall.
Definition	:	Retaining walls, crib walls and the like.
Exclusions	:	

Sub-Element	:	XWSE - Site Enclosures and Divisions
Unit	:	M ²
Rules	:	Measured the gross vertical area of the enclosure.
Definition	:	All types of fencing and screen walls constructed in any material.
Exclusions	:	

Sub-Element	:	XWRO - Roads and Pavings
Unit	:	M ²
Rules	:	Measured the gross area on plan over all openings.
Definition	:	Any form of road, path, track, highway, parking area including excavation, filling, sub-base, paving material, surface finish, kerbs and road channels. Includes road markings and signs. Highways Office run-in charges.
Exclusions	:	Drainage (see DR) - other than road channels.

Element : XW - External Works cont'd

Sub-Element	:	XWHL - Hard Landscaping
Unit	:	M ²
Rules	:	Measured the gross area of hard landscaping.
Definition	:	Flower boxes, planters, integral seating, ornamental ponds etc. and the like.
Exclusions	:	

Sub-Element	:	XWSL - Soft Landscaping
Unit	:	M ²
Rules	:	Measured the gross area of soft landscaping.
Definition	:	Includes all grassed and planted areas, trees, shrubs, plants and the like, preservation and protection of existing and new trees, carrying out tree risk assessment etc. and the like.
Exclusions	:	

Sub-Element	:	XWFE - Fittings and Equipment (External Works)
Unit	:	Nr.
Rules	:	Measured the total number of individual items.
Definition	:	Playground equipment, individual benches, seats, rain shelters, trellis and the like.
Exclusions	:	

Sub-Element	:	XWES - External Services
Unit	:	M
Rules	:	Measured the gross length of all services pipes and/or cables.
Definition	:	Includes trenches, pipe/duct sleeves for incoming water mains, gas, electricity, telephone etc., backfilling, protection, reinstatement as necessary.
Exclusions	:	

Element : XW - External Works cont'd

Sub-Element	:	XWUC - Utility Connections
Unit	:	ITEM
Rules	:	
Definition	:	Includes all connection charges for any incoming service.
Exclusions	:	Drainage connections (see DRDC).

Sub-Element	:	XWAN - Ancillary Structures
Unit	:	Nr.
Rules	:	Measured the total number of individual structures.
Definition	:	Includes dangerous goods stores, guard houses, dog kennels, covering to carspaces, garages, elevated walkways and the like.
Exclusions	:	

GROUP ELEMENT : 05 - EXTERNAL WORKS AND DRAINAGE

Element	:	DR - Drainage
Unit	:	ITEM
Rules	:	
Definition	:	Generally covers all soil and surface water drainage, manholes, channels and catchpits; drainage connections.
Exclusions	:	Kerbs and channels to roads (see XWRO).

Sub-Element	:	DRSW - Soil and Surface Water
Unit	:	M
Rules	:	Measured the gross length of all pipe runs.
Definition	:	Includes trenches, backfilling, pipes, haunching and surrounds.
Exclusions	:	

Sub-Element	:	DRMH - Manholes
Unit	:	Nr.
Rules	:	Measured the total number of individual units.
Definition	:	Includes manholes, inspection chambers, soakaways and the like.
Exclusions	:	Septic tanks (see DRST).

Sub-Element	:	DRST - Sewage Treatment
Unit	:	ITEM
Rules	:	
Definition	:	Includes all forms of sewage treatment, e.g. septic tanks, filtration beds and the like.
Exclusions	:	

Sub-Element	:	DRCH - Channels
Unit	:	M
Rules	:	Measured the gross length of all channels.
Definition	:	Includes all surface water channels and the like, gratings and covers.
Exclusions	:	Kerbs and channels to roads (see XWRO).

Element : DR - Drainage cont'd

Sub-Element	:	DRCP - Catchpits
Unit	:	Nr.
Rules	:	Measured the total number of individual units.
Definition	:	Includes catchpits and the like in connection with surface water drainage, gratings and covers.
Exclusions	:	

Sub-Element	:	DRDC - Drainage Connections
Unit	:	ITEM
Rules	:	
Definition	:	Includes all connection charges between the last connecting manhole or catchpit etc. and the sewer or outfall.
Exclusions	:	

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Element	:	SI – Site Investigation
Unit	:	ITEM
Rules	:	
Definition	:	Site and geotechnical investigation.
Exclusions	:	

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Sub-Element	:	SR - Site Preparation
Unit	:	M ²
Rules	:	Measured the gross area of the site excluding the plan area of the building.
Definition	:	Includes site clearance and hoardings.
Exclusions	:	Bulk excavation for site formation (see SF).

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Element	:	SF - Site Formation
Unit	:	M ³
Rules	:	Measured as the absolute gross volume of excavation and/or fill.
Definition	:	Site formation and geotechnical works e.g. slope stabilization, including associated excavation and lateral support.
Exclusions	:	

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Element	:	PI - Piling
Unit	:	Item
Rules	:	
Definition	:	Includes all types of driven or bored piles .
Exclusions	:	

Sub-Element	:	PIPP - Driven or Bored Piling
Unit	:	M
Rules	:	Measured the total length of driven or bored piles in place (stating the average size/diameter).
Definition	:	Includes all types of driven or bored piles.
Exclusions	:	

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Element	:	CS - Caissons
Unit	:	ITEM
Rules	:	
Definition	:	Generally includes hand dug and large diameter driven caissons, contiguous walls, and associated rock anchors and the like.
Exclusions	:	

Sub-Element	:	CSCP - Caisson Piling
Unit	:	M
Rules	:	Measured the total length (stating the diameter and whether hand dug or bored).
Definition	:	Includes hand dug and large diameter driven caissons.
Exclusions	:	

Sub-Element	:	CSCW - Caisson Contiguous Walls
Unit	:	M ²
Rules	:	Measured the actual area supported (stating whether hand dug or bored).
Definition	:	Includes hand dug and/or large diameter driven caisson contiguous walls and associated rock anchors and the like.
Exclusions	:	

GROUP ELEMENT : 06 - SITE DEVELOPMENT

Element	:	DE – Demolition
Unit	:	M ²
Rules	:	Gross demolition area – measured overall on plan to the outer face of external wall.
Definition	:	Demolition of substructure and superstructure constructed of concrete, steel, timber or other material, including foundations, basements, ground floor slabs, structures, external walls, windows and external doors, curtain walling, internal partitions, internal doors, internal finishes, external finishes, fitting and fixtures, sanitary fittings and above ground drainage system, mechanical and electrical services.
Exclusions	:	

GROUP ELEMENT : 07 - STORES, FURNITURE & EQUIPMENT

Element	:	GS - Government Stores
Unit	:	ITEM
Rules	:	
Definition	:	Includes all items supplied by Government Supplies Department including indent items.
Exclusions	:	Fix only is taken with the appropriate element.

Sub-Element	:	GSBY - Building Stores
Unit	:	ITEM
Rules	:	
Definition	:	Ironmongery, sanitary fittings, manhole covers and the like supplied by Government Supplies Department.
Exclusions	:	Fix only is taken with the appropriate element.

Sub-Element	:	GSBZ - Mechanical & Electrical Services Stores
Unit	:	ITEM
Rules	:	
Definition	:	Items required by the Government Building Services Engineer supplied by Government Supplies Department.
Exclusions	:	Fix only is taken with the appropriate element. Domestic appliances (see FEDA).

GROUP ELEMENT : 07 - STORES, FURNITURE & EQUIPMENT

Element	:	FE - Furniture and Equipment
Unit	:	ITEM
Rules	:	
Definition	:	Includes those items required by the client (Government) department and domestic appliances.
Exclusions	:	

Sub-Element	:	FECL - Client Department (F&E)
Unit	:	ITEM
Rules	:	
Definition	:	Items required by the client (Government) department to be charged to Furniture & Equipment within the project vote.
Exclusions	:	

Sub-Element	:	FEDA - Domestic Appliances (F&E)
Unit	:	ITEM
Rules	:	
Definition	:	Domestic appliances required by the Government Building Services Engineer to be charged to Furniture & Equipment within the project vote.
Exclusions	:	

GROUP ELEMENT : 08 - CONSULTANT'S FEES

Element	:	CF - Consultant's Fees
Unit	:	ITEM
Rules	:	
Definition	:	All fees to be charged by the various consultants employed on the project.
Exclusions	:	

Sub-Element	:	CFGX - Geotechnical Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

Sub-Element	:	CFAR - Architectural Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

Sub-Element	:	CFST - Structural Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

Sub-Element	:	CFBS - Building Services Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

Element : CF - Consultant's Fees cont'd

Sub-Element	:	CFQS - Quantity Surveying Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

Sub-Element	:	CFOO - Other Specialist Consultants
Unit	:	ITEM
Rules	:	
Definition	:	All fees chargeable for the specialist services.
Exclusions	:	

GROUP ELEMENT : 09 - OTHER WORKS

Element	:	OW – Other Works
Unit	:	ITEM
Rules	:	
Definition	:	Items of works included in the project vote but not included in any of the Group Elements 01 to 08 (e.g. works carried out by other departments, etc.)
Exclusions	:	

GROUP ELEMENT : 10 - CONTINGENCY

Element	:	CY – Contingency
Unit	:	ITEM
Rules	:	
Definition	:	A sum to be set aside for any unforeseeable circumstances.
Exclusions	:	

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