## General Specification for Electrical Installation in Government Buildings of the Hong Kong Special Administrative Region 2017 Edition (Incorporating Corrigendum No. GSEE01-2017)

The General Specification for Electrical Installation in Government Buildings of the Hong Kong Special Administrative Region 2017 Edition (hereinafter referred to as "General Specification for Electrical Installation 2017 edition") is reviewed from time to time to ensure that requirements stipulated in the document are clear, concise and in pace with technological advancements.

Corrigendum No. GSEE01-2017 is issued to incorporate updates and revisions to the General Specification for Electrical Installation 2017 edition which are highlighted in the ensuing summary of major changes.

Electronic version of the General Specification for Electrical Installation 2017 edition incorporating Corrigendum No. GSEE01-2017 can be viewed on the ArchSD Internet website.

After an introductory period of 1 month, the General Specification for Electrical Installation 2017 edition (incorporating Corrigendum No. GSEE01-2017) shall apply to all tenders to be invited on or after 1 April 2018.

(2/2018)

## MAJOR CHANGES IN THE CORRIGENDUM (NO. GSEE01-2017) OF THE GENERAL SPECIFICATION FOR ELECTRICAL INSTALLATION IN GOVERNMENT BUILDINGS OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION 2017 EDITION

Old Ref. No.	New Ref. No.	Major Changes	
SECTION C2 – WIRING SYSTEM: CABLES, CONDUITS, TRUNKING AND ACCESSORIES			
C2.1.2 (f)	C2.1.2 (f)	To change the text of 2 <sup>nd</sup> sentence "Fire resistant cable" as "The cable".	
C2.1.3 (k)	C2.1.3 (k)	To change the text "stranded conductor and un-insulated circuit protective conductornot exceeding 90°C - BS 7629-1:2015. Fire resistant cable shall also comply withClause C2.1.6." as "stranded conductor, matellic layer, un-insulated full size circuit protective conductornot exceeding 90°C - BS 7629-1:2015. The cable shall be of Category Standard 30 as a minimum. Cable of Standard 60 or Enhanced 120 shall be provided as specified or as required to comply with the FSD's requirement. In addition, the cable shall also comply withClause C2.1.6.".	
C2.1.3 (m)	C2.1.3 (m)	To change the text of 2 <sup>nd</sup> sentence "Fire resistant cable" as "The cable".	
C2.1.6	C2.1.6	To change the text "outer covering, if exists, of fire resistant cable shall be of low emission of smoke and corrosive gases characteristics when affected by fire. Fire resistant cable shall be type tested to the following fire performance requirement" as "outer covering, if any, of fire resistant cable shall emit low level of smoke and corrosive gases when affected by fire. The cable shall be type tested to the following fire performance requirement".	
C2.1.6 (i)	C2.1.6 (i)	Add "BS 8419:2008; or" & "BS EN 50200:2015".	

C2.1.6 (ii)	C2.1.6 (ii)	To delete "IEC 60332-1-1:2004/Amd 1:2015,"; To change the text "IEC 60332-1-2:2004/Amd 1:2015 or" as "BS EN 60332-1-2-2004/Amd 1:2015 or"; and To change the text "IEC 60332-3-24:2000/Amd 1:2008" as "BS EN 60332-3-24:2009".	
C2.1.6 (iii)	C2.1.6 (iii)	To change the text "IEC 61034-2:2005/Amd 1:2013; and" as "BS EN 61034-2:2005/Amd 1:2013; and".	
C2.1.6 (iv)	C2.1.6 (iv)	To delete "IEC 60754-1:2011/Corr 1:2013," & "IEC 60754-2:2011".	
SECTION C3 – POWER CABLES AND ASSOCIATED CABLING FACILITIES			
C3.2 (c)	C3.2 (c)	To change the text of 2 <sup>nd</sup> sentence "Fire resistant cable shall also comply with the fire performance requirement specified in Clause C2.1.6" as "Cable of Category F30, F60 or F120 shall be provided as specified or as required to comply with FSD requirement. In addition, the cable shall also comply with the fire performance requirement specified in Clause C2.1.6".	

## ARCHITECTURAL SERVICES DEPARTMENT BUILDING SERVICES BRANCH

# GENERAL SPECIFICATION FOR ELECTRICAL INSTALLATION IN GOVERNMENT BUILDINGS OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION 2017 EDITION

### Corrigendum No. GSEE01-2017 (Effective from 1 April 2018)

The following clauses are amended in the above edition of General Specification for Electrical Installation.

#### Clauses

## AMENDMENTS TO SECTION C2 – WIRING SYSTEM: CABLES, CONDUITS, TRUNKING AND ACCESSORIES

#### C2.1.2 Non-sheathed Cables

Non-sheathed cables shall be to:

(f) 450/750 V, fire resistant, thermosetting insulated, single core, non-sheathed copper cable, with solid or stranded conductor, with low emission of smoke and corrosive gases when affected by fire, suitable for conductor operating temperature not exceeding 90 °C. The cable shall also comply with the fire performance requirement specified in Clause C2.1.6.

#### C2.1.3 Sheathed Cables

Sheathed cables shall be to:

(k) 300/500 V fire resistant, thermosetting insulated, twin, 3-core or 4-core, sheathed copper cable with solid or stranded conductor, matellic layer, un-insulated full size circuit protective conductor, with low emission of smoke and corrosive gases when affected by fire, suitable for conductor operating temperature not exceeding 90 °C - BS 7629-1:2015. The cable shall be of Category Standard 30 as a

minimum. Cable of Standard 60 or Enhanced 120 shall be provided as specified or as required to comply with the FSD's requirement. In addition, the cable shall

also comply with the fire performance requirement specified in Clause C2.1.6;

(m) 450/750 V, fire resistant, thermosetting insulated, single-core or multi-core, sheathed with or without armour copper cables, with solid or stranded conductor and with low emission of smoke and corrosive gases when affected by fire, suitable for conductor operating temperature not exceeding 90 °C. The cable shall

also comply with the fire performance requirement specified in Clause C2.1.6.

C2.1.6 Fire Performance of Fire Resistant Cables

The materials for insulation and outer covering, if any, of fire resistant cable shall emit low level of smoke and corrosive gases when affected by fire. The cable shall be type tested to the following fire performance requirement:

(i) Circuit integrity: BS 6387:2013;

BS 8491: 2008, or BS EN 50200: 2015

(ii) Flame propagation: BS EN 60332-1-2:2004/Amd 1:2015 or

BS EN 60332-3-24:2009

(iii) Smoke emission: BS EN 61034-2:2005/Amd 1:2013; and

(iv) Acid gas emission: BS EN 60754-1:2014 or

BS EN 60754-2:2014.

## AMENDMENTS TO SECTION C3 – POWER CABLES AND ASSOCIATED CABLING FACILITIES

#### C3.2 TYPES OF POWER CABLES

Power cables for supply and distribution shall be one or a combination of the following types as specified in the Particular Specification or on the Drawings:

(c) 600/1,000 V fire resistant, cross-linked polyethylene (XLPE) insulated, two-core, three-core or four-core, sheathed with armour copper cable, with solid or stranded conductor, with low emission of smoke and corrosive gases when affected by fire, suitable for conductor operating temperature not exceeding 90°C - Category F2 of BS 7846:2015. Cable of Category F30, F60 or F120 shall be provided as specified or as required to comply with FSD requirement. In addition, the cable shall also comply with the fire performance requirement specified in Clause C2.1.6;