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Our Ref: OM-SC/033

15 August 2013

MEMORANDUM

To: All Staff

From: Loh Fook Yuen

REVISION TO MASTER SPECIFICATIONS FOR ELECTRICAL INSTALLATION (NSC & DSC)

Please note that the Master Specification for Electrical Installation - "Section 8 – Lighting Power & Telephone – Clause 8.22 - Wiring" has been revised as attached.

As our specifications are being continually updated, all staffs are reminded that they should use the selection list in the master specifications to select the relevant clauses in preparing the specifications, instead of copying the specifications from similar past projects.

Loh Fook Yuen

cc CCG/TLS/GSH
cc Memo File

enc

LFY/na

BCA ISO 14000 CERT. NO.: 2000/134 BS ISO 14001 : 2004
BCA ISO 9000 CERT. NO.: 324 BS ISO 9001 : 2008
SAC ACCREDITED CERTIFICATION BODY Cert No: QS-1997-02 Member of the IAF MLA for QMS

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FEEDBACK REPORT FORM

Ref No: 157-140813(S)

To: CCG From: LFY

Job No./Project: Master Specs – Electrical Installation – Section 8 – Lighting Power & Telephone – Clause 8.22 Wiring *(where applicable)*

Source of feedback:

Scope of Feedback: * ☐ Quality ☐ Environmental ☐ Administrative ☐ Contractual ☐ Technical ☒ Specification ☐ Others

Section A : Problem & Cause

Specifications regarding the use of concealed and surface mount conduits are not clear.

Section B : Mitigating Action Taken, if any

NIL

Section C : Suggested Corrective Action

Specifications revised to indicate the various cases where concealed and upvc conduits are to be used.

Section D : Approved Corrective Action

Document Affected * : ☒ Yes ☐ No Affected Document : Elec Master Spec.

Approved By : CCG Date : 14/8/13

Section E : Action

Action By : NA

Targeted Completion : 18 Aug 2013

Actual Completion : 15 Aug 2013 Verified By : 15/8/13

** Mark [X] where appropriate*

Distribution:

auxiliary NO/NC voltage free contact shall be provided for connection to the fan coil unit control circuit.

The Work shall include the proper selection of the most appropriate presence detector to enable detection of the complete controlled area. Where necessary, more than one single detector operating in parallel shall be provided in order to achieve detection of the complete area.

8.18 - 8.20 Not Used

8.21 Conduit Installation

Conduit installation for final circuits shall be in accordance with that specified for sub-mains distribution.

~~**8.22 Wiring**~~

~~The final circuit wiring for lighting and power within building shall be carried out using PVC circulated or FR cables as follows:~~

~~(a) wirings within the false ceiling spaces, riser ducts, electrical switchroom, substation, mechanical plant and the like shall be in surface G.I conduits/trunkings.~~

~~(b) wirings in staircases, apartment units (where applicable) and all common areas shall be in concealed PVC conduits, i.e. PVC conduits buried or cast in wall plasterings, columns concrete walls/slabs etc.~~

8.22 Final Circuit Wiring

Wiring for lighting and power final circuits within the building shall be carried out using PVC insulated or FR cables as indicated in the tender specification drawings and as follows:

(a) Wirings within PowerGrid substations, consumer HT and LV switchrooms, transformer rooms, mechanical plant rooms, workshops and within false ceiling spaces in offices, lift lobbies and common corridors shall be in surface G.I. conduits and trunkings.

(b) Wirings in all common areas without false ceilings and staircases shall be in concealed UPVC conduits, i.e. UPVC conduits chaste in ceiling slabs, columns, concrete walls and floors.

(c) Wirings in carparks shall either be in concealed UPVC conduits or surface G.I. conduits and trunkings, at the discretion of the Architect.

(d) Wirings for apartment units shall be in concealed conduits in walls and slabs except in toilets or kitchens with false ceilings in which case surface conduits shall be used. For conduits installed in ceiling slabs of toilets and kitchens, UPVC conduits shall be used where the ceiling space is not used as ceiling return for the air-conditioning system. If the false ceiling is used as ceiling return, G.I. conduits shall be used.

(e) For conduits installed in walls of residential apartment units whereby the depth of the concealed conduit to the surface of the wall is less than 50 mm, G.I. conduits shall be used.

(f) Wirings for landscape lighting shall be in PVC/SWA/PVC cables in UPVC conduits.

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8.23 Photoelectric Switches

The rated voltage of the photoelectric switches shall be 230V and the rated current 20 Amp unless otherwise specified. Auxiliary contacts shall be provided for monitoring purpose.

The contact of the photoelectric switch shall be used to control environmental lighting and shall close at 30 lux general lighting level and open at 100 lux general lighting level. The triggering levels should be adjustable to a minimum of +30% of the nominal lighting level specified. A time delay circuitry shall be incorporated to prevent switching on and off due to transient conditions.

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