Alpha
Consulting Engineers Pte Ltd

FEEDBACK REPORT FORM

Ref No: 173-241115(S)

To: CCG From: LFY

Job No./Project: Master specifications *(where applicable)*

Source of feedback: LFY – Review of master specifications

Scope of Feedback: * [ ] Quality [ ] Environmental [ ] Administrative [ ] Contractual
[ ] Technical [ ] Specification [ ] Others

Section A : Problem & Cause

Thickness of sheet steel for distribution board specified as 14/16 swg steel sheet.

Section B : Mitigating Action Taken, if any

NIL

Section C : Suggested Corrective Action

To change 14/16 swg to 1.5mm – see attached

Section D : Approved Corrective Action

Document Affected * : [✓] Yes [ ] No Affected Document : Electrical Master Spec

Approved By : Date :

Section E : Action

Action By : FTY

Targeted Completion : End Nov 2015

Actual Completion : 24 November 2015 Verified By : NA 24/11

** Mark [X] where appropriate*

Distribution:

↳ By email to all staff

SECTION 7 - DISTRIBUTION BOARDS

7.1 General

All distribution boards and consumer units shall be designed and constructed in compliance with relevant BS standards and shall be wall mounted, flush fronted, cubicle type with front access housing MCCBs, MCBs, RCCBs, contactors, electro-tinned busbars, fuses, fuse bases, time switches, indicating lamps etc. specified in the Specification Drawings or any other items of equipment as deemed necessary whether specifically mentioned herein or not. Consumer units shall be in moulded enclosures and all distribution boards shall be in metalclad enclosures.

It shall be suitable for indoor service in the environment conditions as specified elsewhere in this Specification at maximum continuous rating without exceeding the maximum temperature permitted by the relevant BS specification for operation on 400/230 volt 3 phase 50Hz system with solidly earthed neutral.

7.2 Rating

All distribution boards and consumer units shall be structurally suitable as a whole to withstand without damage the electrical, mechanical and thermal stresses produced by the prospective fault currents at the points of installation.

7.3 Degree of Protection

The minimum degree of protection of the enclosure shall be IP 42 for distribution boards and IP 30 for consumer units in compliance with IEC 60529. Cable entries opening shall be designed such that when cables are properly installed, the minimum degree of protection shall be maintained.

7.4 Design & Construction of Distribution Boards

Metal clad distribution boards shall be fabricated from 1.5mm thick sheet steel and finished externally in grey stove enamel outside to colour 631 of BS 381C and internally to matt white complete with hinged covers to be secured by captive knurled thumb screws chrome-plated lockable handle, gaskets, concealed hinges, detachable top and bottom plates and external wall fixing lugs.

All components to be used shall be tropicalised including electro-tinning of non-ferrous parts and vacuum impregnation of operation coils.

Distribution boards shall be slim and compact standard sub-base assemblies and frames of standard dimensions shall be used.

The physical dimension of the distribution boards shall allow for an increase of at least 20% of circuit ways from the no. of circuit way as specified.

An integral manually operated incoming moulded case circuit breaker and/or earth- leakage circuit breaker shall enable all live parts to be made dead with the switch position at 'off' from the front. All live parts shall be suitably shrouded. The neutral shall be linked by means of a removable bolted HDHC copper link.