NA

From: NA
Sent: Wednesday, July 28, 2010 6:31 PM
To: Director; Engineer; CAD; Admin
Subject: Master Specs - Electrical Installation
Attachments: E15 - Building Security System.pdf

Our Ref: OM-SC/19

Hi All

Please note that the following master specification has been updated:

- Electrical Installation - Section 15 - Building Security System - Presence Detectors

Regards
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FEEDBACK REPORT FORM

Ref No: 141 - 230710 (S)

To: LCT From: LFY

Job No./Project: ELECTRICAL MASTER SPECS *(where applicable)*
Section 15 - Building Security System

Source of feedback: _____

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

Section A : Problem & Cause

Presence sensor - Specs of presence sensor is outdated

Section B : Mitigating Action Taken, if any

Section C : Suggested Corrective Action

Revised specs attached.

Section D : Approved Corrective Action

Document Affected * : ☒ Yes ☐ No Affected Document : Pages E/15-2 & E/15-8

Approved By : (LCT) Date : 23 July 2010

Section E : Action

Action By : NA

Targeted Completion : End July 2010

Actual Completion : 28 July 2010 Verified By : (LCT)

** Mark [X] where appropriate*

Distribution:

15.6 Door Alarm Contacts

The door alarm contacts shall be the magnetic type and suitable for application in closed-circuit system. When a protected door is in closed position, the contact which is concealed in the door jamb shall come in line with a permanent bar magnet which is concealed in the door leaf, causing the contact to close to form a closed-circuit loop in the system. Should the door be forced open by any intended intruder or unauthorised person, the magnetic bar shall be out of position open circuit and initiate an alarm signal in the central controller. The closed-circuit arrangement shall ensure that any cutting or damaging by the connecting cable either intentionally or accidentally will initiate an alarm signal.

The door alarm contacts for framed doors shall be of the magnetic read type contact which can be used with electronic controls and shall not be subjected to contact bounce as in the case of mechanical contact. Door alarm contacts where required to be installed on fire doors shall be fitted at the manufacturer's works. The alarm contact shall be hermetically sealed reed switch enclosed with rhodium plated contacts of ample current rating designed for positive action. The devices shall be mounted in a totally concealed manner in the door frame. The cost for all necessary cutting out and making good to the doors of frames shall be deemed to have been included in the Sub-Contract Price.

15.7 Presence Detectors

All presence detectors shall be designed based on a combination of passive infrared (PIR) and microwave detection technologies. Using adaptive processing techniques, the detector adjusts to background disturbances thereby reducing false alarms without sacrificing the ability to respond to an intruder and be able to distinguish between signals caused by humans and pets.

Provide presence detectors that automatically adjusts its sensitivity based on signal amplitude, polarity, slope and timing without the installer having to select the sensitivity level. The alarm relay will only be activated when both PIR and microwave agree that there is an alarm.

In the event that the microwave subsystem fails then the PIR subsystem provides single technology coverage. Provide presence detectors with a 3 dimensional look-down zone such that when it is mounted at a height of 2.3m, a broad coverage area of not less than 11m by 11m can be achieved.

Provide presence detectors that can operate in harsh environmental conditions with relative humidity up to 95%, operating temperature of between - 29°C to + 49°C.
Provide presence detectors with solid state relay and normally-closed contacts for alarm signaling and tamper protection monitoring and designed to provide radio frequency interference immunity for frequencies from 26 MHz to 950 MHz at 50 v/m.

15.8 Hold-up Alarm Devices

The hold-up alarm devices shall be the personal attack kick bar type which shall be foot operated switch, constructed with kick bar covered with black rubber and housed in a cast aluminium casing finished to the Architect's requirement. An indicator flag which locks in when the alarm is tripped shall be provided on the table or reception desk/counter and shall be self locking in operated position which can only be reset by a key. The activation of any of the foot operated switch shall initiate an alarm which shall initiate an alarm which shall be transmitted to the central controller.

15.9 CCTV Camera