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## **PART 1 GENERAL**

### **1.1 SUMMARY**

- .1 Section Includes.
  - .1 Requirements and procedures for identification of devices, sensors, wiring, tubing, conduit and equipment, for building Energy Monitoring and Control System (EMCS) Work and nameplates, materials, colours and lettering sizes.

### **1.2 RELATED SECTIONS**

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 25 05 01 - EMCS: General Requirements.

### **1.3 REFERENCES**

- .1 Canadian Standards Association (CSA International).
  - .1 CSA C22.1, The Canadian Electrical Code, Part I, Safety Standard for Electrical Installations.

### **1.4 DEFINITIONS**

- .1 For acronyms and definitions refer to Section 25 05 01 - EMCS: General Requirements.

### **1.5 SYSTEM DESCRIPTION**

- .1 Language Operating Requirements: provide identification for control items in English.

### **1.6 SUBMITTALS**

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures and Section 25 05 02 – EMCS: Submittals and Review Process supplemented and modified by requirements of this Section.
- .2 Submit to Owner's Representative for approval samples of nameplates, identification tags and list of proposed wording.

## **PART 2 PRODUCTS**

### **2.1 NAMEPLATES FOR PANELS**

- .1 Identify by plastic laminate, 3 mm thick melamine, matt white finish, black core, square corners, lettering accurately aligned and engraved into core, mechanically attached with self-tapping screws.
- .2 Sizes: 25 x 67 mm minimum.

- .3 Lettering: minimum 7 mm high, black.
- .4 Inscriptions: machine engraved to identify function.

## **2.2 NAMEPLATES FOR FIELD DEVICES**

- .1 Identify by plastic encased cards attached by plastic tie.
- .2 Sizes: 50 x 100 mm minimum.
- .3 Lettering: minimum 5 mm high produced from laser printer in black.
- .4 Data to include: point name and point address, make, model number.
- .5 Companion cabinet: identify interior components using plastic enclosed cards with point name and point address.

## **2.3 NAMEPLATES FOR ROOM SENSORS**

- .1 Identify by stick-on labels using point identifier.
- .2 Location: as directed by Department Representative.
- .3 Letter size: to suit, clearly legible.

## **2.4 WARNING SIGNS**

- .1 Equipment including motors, starters under remote automatic control: supply and install orange coloured signs warning of automatic starting under control of EMCS.
- .2 Sign to read: "Caution: This equipment is under automatic remote control of EMCS" as reviewed by Department Representative.

## **2.5 WIRING**

- .1 Supply and install numbered tape markings on wiring at panels, junction boxes, splitters, cabinets and outlet boxes.
- .2 Colour coding: to CSA C22.1. Use colour coded wiring in communications cables, matched throughout system.
- .3 Power wiring: identify circuit breaker panel/circuit breaker number inside each EMCS panel.

## **2.6 PNEUMATIC TUBING**

- .1 Numbered tape markings on tubing to provide uninterrupted tracing capability.

## **2.7 CONDUIT**

- .1 Colour code EMCS conduit.

- .2 Pre-paint box covers and conduit fittings.
- .3 Coding: use fluorescent orange paint and confirm colour with Department Representative during "Preliminary Design Review".

### **PART 3 EXECUTION**

#### **3.1 NAMEPLATES AND LABELS**

- .1 Ensure that manufacturer's nameplates, CSA labels and identification nameplates are visible and legible at all times.

#### **3.2 EXISTING PANELS**

- .1 Correct existing nameplates and legends to reflect changes made during work.

**END OF SECTION**