

## **PART 1 - GENERAL**

### **1.1 RELATED REQUIREMENTS**

- .1 Section 26 56 19.02 - Site Lighting.

### **1.2 REFERENCES**

- .1 CSA International
  - .1 CSA C22.1-12, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations.

### **1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets for photoelectric devices and include product characteristics, performance criteria, physical size, finish and limitations.

### **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
  - .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
  - .3 Storage and Handling Requirements:
    - .1 Store materials indoors and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
    - .2 Store and protect photoelectric devices from nicks, scratches, and blemishes.
    - .3 Protect metal accessories and trim from being bent or damaged.
    - .4 Replace defective or damaged materials with new.
  - .4 Packaging Waste Management: remove for reuse packaging materials as specified in Construction Waste Management Plan Waste Reduction Workplan in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
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## **1.5 LEED 2009 REQUIREMENTS**

- .1 LEED Documentation:
  - .1 Submit Material Safety Data Sheets (MSDS) or product data sheets, for all site applied interior paints, coatings, adhesives, sealants, sealant primers, concrete curing compounds, etc. to ensure compliance with LEED Requirements for low emitting materials as per Section 01 35 21.

## **PART 2 - PRODUCTS**

### **2.1 PHOTOELECTRIC LIGHTING CONTROL**

- .1 Photoelectric Lighting Controls: to CSA C22.1.
  - .1 Integral with luminaire as indicated in the Luminaire Schedule.
  - .2 Voltage variation: plus or minus 10%.
  - .3 Temperature range: minus 40 degrees C to plus 40 degrees C.
  - .4 Switching on lights at 70 lx.
  - .5 Switching off lights at 100 lx.
  - .6 Rated for 5000 operations.

### **2.2 LEED 2009 REQUIREMENTS**

- .1 All site applied interior paints, coatings, adhesives, sealants, sealant primers, concrete curing compounds, etc. to comply with LEED Requirements for low emitting materials as per Section 01 35 21 - LEED 2009 Requirements.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for lighting control device installation in accordance with manufacturer's written instructions.
  - .1 Visually inspect substrate in presence of Departmental Representative.
  - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
  - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

### **3.2 INSTALLATION**

- .1 Install photoelectric controls in accordance with manufacturer's written instructions and to CSA C22.1.
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### **3.3 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### **3.4 PROTECTION**

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by lighting control devices installation.