

## **PART 1 - GENERAL**

### **1.1 REFERENCES**

- .1 Underwriter Laboratory of Canada (ULC).
  - .1 CAN/ULC-S503, Standard for Carbon Dioxide Fire Extinguishers.
  - .2 CAN/ULC-S504, Standard for Dry Chemical Fire Extinguishers.
  - .3 CAN/ULC-S508, Standard for the Rating and Fire Testing of Fire Extinguishers.
  - .4 CAN/ULC-S554, Standard for Water-Based Agent Fire Extinguishers.
- .2 National Fire Protection Association (NFPA).
  - .1 NFPA 10 - 2013, Standard for Portable Fire Extinguishers.
  - .2 NFPA 170 - 2012, Standard for Fire Safety and Emergency Symbols.
- .3 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
  - .1 Material Safety Data Sheets (MSDS).

### **1.2 SUBMITTALS**

- .1 Submit manufacturer's printed product literature, specifications, and datasheet in accordance with Architectural Specifications.
  - .2 Technical Specifications:
    - .1 Submit technical specifications and documentation from manufacturer. Shop drawings must provide the following information: product characteristics, performance criterion, dimensions, constraints, and finish.
    - .2 Submit two copies of Materials Safety Data Sheets required as per WHMIS (Workplace Hazardous Materials Information System), and in accordance with Architectural Specifications.
  - .3 Submit required shop drawings.
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### **1.3 CLOSEOUT SUBMITTALS**

- .1 Specs sheets and operation and maintenance literature, which will be appended to the manual mentioned in the Architectural Specifications.

### **1.4 ACCEPTABLE PRODUCTS AND MATERIALS**

- .1 Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products.

## **PART 2 - PRODUCTS**

### **2.1 CARBON DIOXYDE EXTINGUISHERS**

- .1 Carbon dioxide extinguishers, with aluminum cylinder, equipped with insulated handle, hose and horn discharge assembly, self-closing lever or squeeze-grip operation, fully charged.
- .2 Characteristics:
  - .1 Approval: CAN/ULC-S503.
  - .2 Fire Classes: B and C.
  - .3 Minimum ULC Class: 20B-C.
  - .4 Minimum capacity: 9 kg.
  - .5 Activation: permanent pressure.
- .3 Acceptable Products:
  - .1 Strike First, model SF-15CO2.
  - .2 Ansul, model Sentry 15 - CD15A-1.
  - .3 Amerex, model 330.
  - .4 Replacement materials or products: approved by addendum according to Instructions to bidders.

### **2.2 EXTINGUISHER BRACKETS**

- .1 Brackets as recommended by extinguishers manufacturer.
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## **2.3 IDENTIFICATION**

- .1 Identify extinguishers in accordance with recommendations of NFPA 10 and CAN/ULC-S508.
- .2 Attach bilingual tag or label to extinguishers, indicating month and year of installation. Provide space for service dates.

## **PART 3 - EXECUTION**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Conformity: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet.

### **3.2 INSTALLATION**

- .1 Install or assemble extinguishers on brackets or in cabinets, as specified, while complying with NFPA 10 Standard.
  - .1 Install fire extinguishers in order that the top of the extinguisher is not higher than 1.53 m above ground level and that the bottom of the extinguisher is not lower than 102 mm from the ground level.
  - .2 Install fire extinguishers in such way that extinguishers are visible from any point.
  - .3 Install a sign to indicate the location of the fire extinguisher, visible at any point, as per Architect's instructions.
- .2 Install cabinets in accordance with manufacturer's recommendations.

### **3.3 FIELD QUALITY CONTROL**

- .1 Ensure that all portable extinguishers are filled before installing.
- .2 Field quality control from manufacturer:
  - .1 The manufacturer must state his recommendations regarding the operation of the products and carry out periodical visits to verify that implementation is achieved as per recommendations.

**END OF SECTION**

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