

Capital Projects Group

Fire Extinguishers Specification

Specification 21 20 05

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1. GENERAL

1.1. SCOPE OF WORK

1.1.1. Provide fire extinguishers as required, scheduled and specified herein.

1.2. RELATED WORKS

1.2.1. Section 20 05 05 - Mechanical Work General Instructions.

1.2.2. Metrolinx Design Requirements Manual Section F - "Fire Protection" under "Service Room Requirements (General)".

1.3. REFERENCE STANDARDS

1.3.1. Standards and codes to be latest editions adopted by and enforced by local governing authorities.

1.3.2. CAN/ULC-S504, Standard for Dry Chemical Fire Extinguishers.

1.3.3. CAN/ULC S508, Standard for the Rating and Testing of Fire Extinguishers.

1.3.4. National Fire Code of Canada.

1.3.5. NFPA 10, Standard for Portable Fire Extinguishers.

1.4. WARRANTY

1.4.1. Products to be guaranteed by manufacturer, for a minimum of 2 years after acceptance by Metrolinx.

1.4.2. Refer to requirements within Section to any extended warranties.

1.5. DELIVERY, STORAGE AND HANDLING

1.5.1. Handle and store products in accordance with manufacturer's instructions, in locations approved by Metrolinx. Include one copy of these instructions with product at time of shipment.

1.6. SUBMITTALS

1.6.1. Refer to submittal requirements in Section 20 05 05.

1.6.2. Product Data

a) Submit product data sheets for products specified in this Section indicating:

- 1) technical data, supplemented by bulletins, component illustrations, detailed views, technical descriptions of items, and parts lists;

- 2) performance criteria, compliance with appropriate reference standards, characteristics, limitations, and troubleshooting protocol;
- 3) product transportation, storage, handling, and installation requirements;
- 4) Product identification in accordance with Metrolinx requirements.

1.6.3. Shop Drawings

- a) Submit shop drawings for products specified in this Section indicating:
 - 1) capacity and ratings;
 - 2) mounting details to suit locations shown, indicating methods and hardware to be used.

1.7. QUALITY ASSURANCE

1.7.1. Manufacturers Qualifications

- a) Manufacturer shall be ISO 9000, 9001 or 9002 certified. Manufacturer of product shall have produced similar product for a minimum period of five years. When requested by Consultant, an acceptable list of installations with similar product shall be provided demonstrating compliance with this requirement.

1.7.2. Regulatory Requirements

- a) Products and work to comply with applicable local governing authority regulations, bylaws and directives.
- b) Include for required inspections and certificate of approvals of installation work from local governing authorities.

2. PRODUCTS

2.1. GENERAL

2.1.1. Fire extinguishers are to be pressurized (stored pressure) rechargeable type, in accordance with NFPA 10, ULC S504 and ULC S508. Extinguishers are to be ULC listed and labelled for the class of fires and hazard locations for which they are specified.

2.1.2. Each extinguisher is to be complete with:

- a) manufacturer's identification label indicating extinguisher model number, rating, and operating instructions;
- b) anodized aluminum or chrome plated forged brass valve with positive squeeze grip on-off operation and a pull-pin safety lock;

- c) discharge hose with nozzle or horn and hose securing clip;
- d) for wall mounting extinguishers, a wall mounting bracket.

2.1.3. Fire extinguishers in fire hose cabinets will be supplied with the cabinet and are specified in Section entitled Fire Protection Standpipe System.

2.2. 2A RATED WATER EXTINGUISHERS

2.2.1. Water extinguishers rated 2A are to be 175 mm (7") dia., 9.5 L (2 gallon) capacity, each complete with a polished stainless steel cylinder with tire valve for pressuring and a waterproof stainless steel pressure gauge.

2.3. CARBON DIOXIDE EXTINGUISHERS

2.3.1. 5B:C carbon dioxide extinguishers are to be 133 mm (5-7/32") dia., 2.23 kg (5 lb.), each complete with a steel cylinder with a safety red baked enamel finish.

2.3.2. 10B:C carbon dioxide extinguishers are to be 178 mm (7") dia., 4.5 kg (10 lb.), each complete with a steel cylinder with a safety red baked enamel finish.

2.3.3. 10B:C carbon dioxide extinguishers are to be 178 mm (7") dia., 6.8 kg (15 lb.), each complete with a steel cylinder with a safety red baked enamel finish.

2.4. DRY CHEMICAL EXTINGUISHERS

2.4.1. Multi-purpose 3A10B:C dry chemical extinguishers are to be 111 mm (4-3/8") dia., 2.23 kg (5 lb.), each complete with a steel cylinder with a safety red baked enamel finish and a waterproof stainless steel pressure gauge.

2.4.2. Multi-purpose 4A60B:C dry chemical extinguishers are to be 125 mm (5") dia., 4.5 kg (10 lb.), each complete with a steel cylinder with a safety red baked enamel finish and a waterproof stainless steel pressure gauge.

2.4.3. Multi-purpose 4A80B:C dry chemical extinguishers are to be as above but 175 mm (7") dia., 9 kg (20 lb.).

2.5. CLEAN AGENT FIRE EXTINGUISHERS

2.5.1. Ansul Inc. or approved equivalent, model CleanGuard FE13 clean agent extinguisher, 6 kg (13.25 lb.), ULC listed and labelled to 2-A:10-B:C, suitable for fires involving live electrical equipment and will not damage the equipment, each complete with required wall mounting brackets and securing hardware.

2.6. MANUFACTURERS OF FIRE EXTINGUISHERS

2.6.1. Standard of quality assurance manufacturers are:

- a) Ansul Inc.;

- b) Sentry;
- c) Kidde;
- d) or approved equivalent.

3. EXECUTION

3.1. INSTALLATION OF FIRE EXTINGUISHERS

- 3.1.1. Provide fire extinguishers of type(s) in accordance with requirements of NFPA 10 and Metrolinx standards.
- 3.1.2. Unless otherwise shown or specified, wall mount extinguishers using wall brackets supplied with extinguishers.
- 3.1.3. Do not install extinguishers until after wall finishing work is complete.
- 3.1.4. Be responsible for maintaining fire extinguishers until Substantial Completion of the Work.
- 3.1.5. If extinguishers are indicated adjacent to a door, locate extinguishers at the latch/strike side of the door.

END OF SECTION