

## **SECTION 11 44 13 – FIRE EXTINGUISHERS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. Section includes furnishing and installing portable fire extinguishers and fire-protection cabinets.
- B. Related Work of Other Sections:
  - 1. Section 06 10 53 "Miscellaneous Rough Carpentry."
  - 2. Section 09 21 16 "Gypsum Board Assemblies."

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
  - 1. Fire Extinguishers: Include rating and classification.
  - 2. Fire Protection Cabinets: Include construction details, installation details, material descriptions, dimensions of individual components and profiles, trim style, panel style, and finishes for manufactured products and accessories.
- B. Samples: For each exposed cabinet finish.

#### **1.4 FIELD CONDITIONS**

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with fire protection cabinets by field measurements before fabrication.

#### **1.5 QUALITY ASSURANCE**

- A. NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10, "Portable Fire Extinguishers."
- B. Fire Extinguishers: Listed and labeled for type, rating, and classification by an independent testing agency acceptable to authorities having jurisdiction.
- C. Fire-Rated Fire-Protection Cabinets: Listed and labeled to comply with requirements of ASTM E 814 for fire-resistance rating of walls where they are installed.

#### **1.6 COORDINATION**

- A. Apply vinyl lettering on field-painted fire-protection cabinets after painting is complete.

## 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of portable fire extinguishers that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Failure of hydrostatic test according to NFPA 10.
    - b. Faulty operation of valves or release levers.
  - 2. Warranty Period: Six years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B.
- B. Aluminum: Alloy and temper recommended by aluminum producer and manufacturer for type of use and finish indicated, and as follows:
  - 1. Sheet: ASTM B 209 (ASTM B 209M).
  - 2. Extruded Shapes: ASTM B 221 (ASTM B 221M).
- C. Stainless-Steel Sheet: ASTM A 666, Type 304.
- D. Tempered Float Glass: ASTM C 1048, Kind FT, Condition A, Type I, Quality q3, 3-mm thick, Class 1 (clear).

### 2.2 PORTABLE FIRE EXTINGUISHERS

- A. Available Manufacturers:
  - 1. Ansul Incorporated.
  - 2. JL Industries, Inc.
  - 3. Kidde Fyrnetics.
  - 4. Larsen's Manufacturing Company.
  - 5. Potter Roemer; Div. of Smith Industries, Inc.
- B. General: Provide fire extinguishers of type, size, and capacity for each fire-protection cabinet indicated.
  - 1. Instruction Labels: Include pictorial marking system complying with NFPA 10, Appendix B and bar coding for documenting fire extinguisher location, inspections, maintenance, and recharging.
- C. Multipurpose Dry-Chemical Type in Steel Container (Type FE-1): UL-rated 2-A:10-B:C, 5-lb nominal capacity, with monoammonium phosphate-based dry chemical in enameled-steel container.

- D. Multipurpose Dry-Chemical Type in Steel Container (Type FE-2): UL-rated 4-A:60-B:C, 10-lb nominal capacity, with monoammonium phosphate-based dry chemical in enameled-steel container.

### **2.3 FIRE-PROTECTION CABINET (FEC-1)**

- A. Basis-of-Design Product: Provide fire extinguisher cabinets where indicated, of the following types and suitable size for housing fire extinguishers of types and capacities indicated. The following are the type and sizes of cabinets required for this Project. Equivalent units produced by J. L. Industries, Ansul Fire Protection, or Potter-Roemer, Inc. will be acceptable as approved:
  - 1. Manufacturer's standard 18 gage enameled steel flat-trim, fully-recessed box and solid flush door; Larsen's Model No. FS-2409-R2, 24" H x 9-1/2" W x 6" D, with 5/16" flat trim, and black die-cut vinyl "FIRE EXTINGUISHER" lettering vertical on door.
- B. Cabinet Construction: Fire-rated.

### **2.4 FABRICATION**

- A. Fire-Protection Cabinets: Provide manufacturer's standard box (tub), with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth.
  - 1. Construct fire-rated cabinets with double walls fabricated from 0.0428-inch- (1.1-mm-) thick, cold-rolled steel sheet lined with minimum 5/8-inch- (16-mm-) thick, fire-barrier material. Provide factory-drilled mounting holes.
- B. Cabinet Doors: Fabricate doors according to manufacturer's standards, from materials indicated and coordinated with cabinet types and trim styles selected.
  - 1. Fabricate door frames with tubular stiles and rails and hollow-metal design, minimum 1/2-inch thick.
  - 2. Miter and weld perimeter door frames.
- C. Cabinet Trim: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Examine roughing-in for cabinets to verify actual locations of piping connections before cabinet installation.
- B. Examine walls and partitions for suitable framing depth and blocking where recessed cabinets will be installed.
- C. Examine fire extinguishers for proper charging and tagging. Remove and replace damaged, defective, or undercharged units.

### **3.2 PREPARATION**

- A. Prepare recesses for fire-protection cabinets as required by type and size of cabinet and trim style.

### **3.3 INSTALLATION**

- A. Install fire-protection specialties in locations and at mounting heights indicated or, if not indicated, at heights acceptable to authorities having jurisdiction and to comply with manufacturer's installation instructions.
- B. Fire-Protection Cabinets: Fasten fire-protection cabinets to structure, square and plumb.
  - 1. Unless otherwise indicated, provide recessed fire-protection cabinets. If wall thickness is not adequate for recessed cabinets, provide semirecessed fire-protection cabinets.
  - 2. Fasten mounting brackets to inside surface of fire-protection cabinets, square and plumb.
- C. Mounting Brackets: Fasten mounting brackets to surfaces, square and plumb, at locations indicated.
- D. Identification: Apply vinyl lettering at locations indicated.

### **3.4 ADJUSTING**

- A. Adjust fire-protection cabinet doors to operate easily without binding. Verify that integral locking devices operate properly.
- B. Replace fire-protection cabinets that have been damaged or have deteriorated beyond successful repair.

**END OF SECTION 10 44 13**