

**SECTION 10520**  
**FIRE-PROTECTION SPECIALTIES**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This Section includes the following:
  - 1. Fire-protection cabinets to hold portable fire extinguishers.
  - 2. Fire-protection accessories.
- B. Provided by Owner: Portable fire extinguishers shall be provided by Owner.
- C. Related Sections:
  - 1. Division 7 Section "Through Penetration Firestopping" for firestopping sealants at fire-rated cabinets.
  - 2. Division 15 Section "Standpipe and Sprinkler Systems" for hose systems and racks.
  - 3. Division 16 Section "Interior Lighting" for fire extinguisher location lights.

**1.2 SUBMITTALS**

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fire-protection specialties.
  - 1. Cabinets: Include roughing-in dimensions, details showing mounting methods, relationships of box and trim to surrounding construction, door hardware, cabinet type, trim style, and panel style.

**1.3 QUALITY ASSURANCE**

- A. Source Limitations: Obtain fire extinguisher cabinets through one source from a single manufacturer.

**1.4 COORDINATION**

- A. Coordinate size of cabinets to ensure that type and capacity of fire extinguishers provided by Owner are accommodated.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS**

- A. Basis-of-Design Products for Building 8600, CLO: The fire extinguisher cabinet specified is based on the product named. Subject to compliance with requirements, provide either the named product below or a comparable product by one of the other listed manufacturers specified below.
  - 1. Type: Trimless, fully recessed cabinet manufactured by Larsen's Manufacturing Company; Model 2409
- B. Basis-of-Design Products for other Buildings: The fire extinguisher cabinet specified is based on the product named. Subject to compliance with requirements, provide either the named product below or a comparable product by one of the other listed manufacturers specified below.
  - 1. Type FEC-1: Surface mounted; Larsen's Manufacturing Company; Model 2409-SM
- C. Other Listed Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. J.L. Industries, Inc.
  - 2. Potter-Roemer; Div. of Smith Industries, Inc.

## 2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: Carbon steel, complying with ASTM A 366/A 366M, commercial quality, stretcher leveled, temper rolled.
- 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.
  - 2. Extruded Shapes: ASTM B 221.

## 2.3 FIRE-PROTECTION CABINETS

- A. Surface Mounted Cabinet Construction: Provide manufacturer's standard box (tub), with frame, door, and hardware to suit cabinet type, style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.
  - 1. Fire-Rated Cabinets: Listed and labeled to meet requirements of ASTM E 814 for fire-resistance rating of wall where it is installed.
    - a. Construct fire-rated cabinets with double walls fabricated from 0.0478-inch-thick, cold-rolled steel sheet lined with minimum 5/8-inch-thick, fire-barrier material.
    - b. Provide factory-drilled mounting holes.
  - 2. Cabinet Metal:
    - a. Provide aluminum cabinet for cabinets with aluminum doors.
    - b. Provide stainless steel cabinet for cabinets with stainless steel doors. Provide No. 4 finish.
  - 3. Cabinet Type: Suitable for fire extinguisher.
  - 4. Surface Mounted: Cabinet box fully exposed and mounted directly on wall.
  - 5. Cabinet Trim Material: Same metal and finish as door.
  - 6. Door Material: Provide the following types as indicated on Drawings:
    - a. Aluminum sheet.
    - b. Stainless steel sheet with No. 4 finish.
  - 7. Door Style: Fully glazed panel with frame.
  - 8. Door Glazing: 1/4" clear cast acrylic plastic glazing.
  - 9. Door Construction: Fabricate doors according to manufacturer's standards, of materials indicated, and coordinated with cabinet types and trim styles selected.
    - a. Provide minimum 1/2-inch-thick door frames, fabricated with stiles and rails.
  - 10. Door Hardware: Provide manufacturer's standard door-operating hardware of proper type for cabinet type, trim style, and door material and style indicated. Provide either lever handle with cam-action latch, or exposed or concealed door pull and friction latch. Provide concealed or continuous-type hinge permitting door to open 180 degrees.
    - a. Provide manufacturer's standard lock which permits opening in the event of an emergency.
- B. Recessed, Trimless Cabinet Construction: Provide manufacturer's standard box (tub), with frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.
  - 1. Fire-Rated Cabinets: Listed and labeled to meet requirements of ASTM E 814 for fire-resistance rating of wall where it is installed.
    - a. Construct fire-rated cabinets with double walls fabricated from 0.0478-inch- (1.2-mm-) thick, cold-rolled steel sheet lined with minimum 5/8-inch- (16-mm-) thick, fire-barrier material.
    - b. Provide factory-drilled mounting holes.
  - 2. Cabinet Metal: Stainless-steel sheet.
  - 3. Cabinet Type: Fire extinguisher.
  - 4. Cabinet Mounting: Recessed: Cabinet box recessed in walls of sufficient depth to suit style of trim indicated.

5. Cabinet Trim Style: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.
  - a. Trimless: Surface of surrounding wall finishes flush with exterior finished surface of cabinet frame and door, without overlapping trim attached to cabinet.
  - b. Provide recessed flange, of same material as box, attached to box to act as plaster stop.

## 2.4 ACCESSORIES

- A. Mounting Brackets: Manufacturer's standard steel, designed to secure extinguisher, of sizes required for types and capacities of extinguishers indicated, with plated or baked-enamel finish.
  1. Provide brackets for extinguishers not located in cabinets.
- B. Identification: Provide lettering to comply with authorities having jurisdiction for letter style, color, size, spacing, and location. Locate as indicated by Construction Manager.
  1. Identify fire extinguisher in cabinet with the words "FIRE EXTINGUISHER" applied to door. For cabinets with locks provide manufacturer's standard lettering, "IN CASE OF FIRE ONLY – PULL FIRMLY ON HANDLE".
    - a. Application Process: Silk-screened.
    - b. Lettering Color: Red.
    - c. Orientation: Horizontal.

## 2.5 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Cabinet and Door Finishes: Provide manufacturer's standard baked-enamel paint for the following:
  1. Exterior of cabinets and doors, except for those surfaces indicated to receive another finish.
  2. Interior of cabinets and doors.

## 2.6 FINISH

- A. Surface Preparation: Clean surfaces of contaminants that could impair paint bond using manufacturer's standard methods.
- B. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard two-coat, baked-enamel finish consisting of prime coat and thermosetting topcoat. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 2 mils.
  1. Color and Gloss: As selected by Construction Manager from manufacturer's full range.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine roughing-in for hose valves, hose racks, and cabinets to verify actual locations of piping connections before cabinet installation.

- B. Examine walls and partitions for suitable framing depth and blocking.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing fire-protection specialties.
- B. Install in locations and at mounting heights indicated or, if not indicated, at heights acceptable to authorities having jurisdiction.
  - 1. Prepare recesses for cabinets as required by type and size of cabinet and trim style.
  - 2. Fasten mounting brackets to structure and cabinets, square and plumb.
  - 3. Fasten cabinets to structure, square and plumb.

### 3.3 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust cabinet doors that do not swing or operate freely.
- B. Refinish or replace cabinets and doors damaged during installation.
- C. Provide final protection and maintain conditions that ensure that cabinets and doors are without damage or deterioration at the time of Substantial Completion.

**END OF SECTION 10520**