

Project Specification, Section 10 44 00 Fire Extinguishers and Cabinets (excerpt)

Project: [REDACTED] · **Issue:** [REDACTED] · Part 2 of Section 10 44 00

SECTION 10 44 00 - FIRE EXTINGUISHERS AND CABINETS

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

A. Source Coordination: Provide fire-protection cabinets, accessories, and fire extinguishers as a coordinated system from qualified manufacturers.

B. Fire-Rated Cabinets: Where installed in fire-resistance-rated wall assemblies, provide cabinets listed and labeled for the required wall fire-resistance rating and tested in accordance with applicable firestop or cabinet listing requirements.

C. Electrical Components: Where electrical components, devices, or accessories are provided, list and label them for the intended location and application in accordance with applicable electrical-code requirements.

2.2 FIRE-PROTECTION CABINET

A. Cabinet Type: Cabinet suitable for housing the specified portable fire extinguisher.

B. Cabinet Construction:

1. Non-rated unless a fire-rated cabinet is required by the wall construction.
2. Where fire-rated construction is required, provide a double-wall steel cabinet with integral fire-barrier material and factory-prepared mounting provisions.

C. Cabinet Material: Cold-rolled steel sheet.

1. Shelf: Same metal and finish as cabinet unless otherwise indicated.

D. Installation Configuration:

1. Recessed Cabinet: Trimless or concealed-flange configuration with door overlapping the wall finish.
2. Semirecessed Cabinet: One-piece trim and perimeter door frame overlapping the wall surface, with approximately 1-1/4 to 1-1/2 inch wall return where required.

E. Door:

1. Material: Steel sheet, finished to match the cabinet.
2. Style: Vertical duo-panel door with frame.
3. Glazing: Clear transparent acrylic sheet.

F. Door Hardware:

1. Manufacturer's standard operating hardware suitable for the cabinet and door configuration.
2. Projecting pull and friction latch.
3. Continuous hinge permitting the door to open approximately 180 degrees.

G. Accessories:

1. Mounting Bracket: Steel bracket sized and configured to secure the extinguisher within the cabinet, with a corrosion-resistant or baked finish.
2. Identification: Mark cabinet door with the words "FIRE EXTINGUISHER" in code-compliant lettering. Provide durable contrasting lettering in a vertical orientation where required by the design.

H. Materials:

1. Cold-Rolled Steel: Commercial-quality cold-rolled steel sheet complying with applicable ASTM requirements.
 - a. Finish: Baked enamel or powder-coat system suitable for architectural metalwork.
 - b. Prepare, pretreat, and coat exposed metal surfaces in accordance with coating manufacturer's written instructions.
 - c. Color: Neutral standard color as selected by the Architect.
2. Stainless Steel: Type 304 stainless steel with No. 4 directional satin finish.
3. Transparent Acrylic Sheet: Clear cell-cast acrylic sheet, approximately 1.5 mm thick, with smooth or polished finish.

2.3 CLEAN-AGENT PORTABLE FIRE EXTINGUISHER

- A. Type: Clean-agent portable fire extinguisher in a steel container with durable polyester powder-coated finish.
- B. Rating: UL-rated not less than 2-A:10-B:C.
- C. Capacity: Nominal capacity approximately 7 kg (15.5 lb), or a comparable listed capacity capable of achieving the specified rating.
- D. Extinguishing Agent: Halocarbon-based clean agent with inert material, suitable for occupied spaces and compatible with the specified extinguisher rating.
- E. Pressure Indication: Provide pressure-indicating gauge.
- F. Primary Configuration: Listed clean-agent extinguisher meeting the requirements above. No proprietary manufacturer or model is designated.

G. Acceptable Alternate Configurations:

1. Other listed halocarbon-based clean-agent fire extinguishers providing equivalent or better ratings and performance.
2. A combination consisting of:
 - a. Carbon-dioxide fire extinguisher with minimum 10-B:C rating; and
 - b. Stored-pressure water fire extinguisher with minimum 2-A rating.

2.4 FABRICATION

- A. Fire-Protection Cabinets: Provide manufacturer's standard cabinet box, trim, frame, door, and hardware suitable for the indicated cabinet type and installation configuration.
1. Weld joints and grind exposed welds smooth.

2. Provide factory-prepared mounting holes or equivalent mounting provisions.

B. Cabinet Doors:

1. Fabricate doors in accordance with manufacturer's standards and coordinate materials with cabinet type and trim.
2. Provide rigid frame construction with formed or tubular stiles and rails.
3. Miter and weld perimeter frames where applicable and grind exposed welds smooth.

C. Cabinet Trim: Fabricate trim as a continuous assembly where practical, with corners mitered, welded, and ground smooth.

2.5 FINISHES

A. Apply architectural metal finishes in accordance with recognized industry practices for metal products.

B. Protect exposed finished surfaces from damage during shipment and installation with removable temporary protection.

C. Finish fire-protection cabinets after assembly where required for a uniform appearance.

D. Appearance of Finished Work: Noticeable variations within the same exposed component are not acceptable. Minor variations between adjoining components are acceptable when within the normal range of the specified finish and arranged to minimize contrast.