

## SECTION 104400 - FIRE-PROTECTION SPECIALTIES

### PART 1 - GENERAL

#### 1.1 M.S.U. ISSUES

- A. To the greatest extent possible, a cabinet shall be installed in an accessible corridor for every fire extinguisher required. Travel distance to a cabinet/extinguisher shall not exceed 75 feet, except that it shall not exceed 50 feet in areas that house flammable liquids.
- B. Fire extinguishers are supplied and installed by M.S.U. Department of Police and Public Safety. Cabinets will be sized to accommodate the following:
  - 1. One (1) 2½-gallon water pressurized fire extinguisher manufactured by Amerex Corporation (used in residence halls only).
  - 2. One (1) 5 pound carbon dioxide extinguisher manufactured by Amerex Corporation (special use only).
  - 3. One (1) 10 pound dry chemical fire extinguisher manufactured by Amerex Corporation.
- C. Fire extinguisher cabinets will be recessed unless existing conditions make semi-recessed or surface mounting necessary. Cabinets will be non-rated unless being installed in a fire rated wall.
- D. Although fire extinguishers may be wall hung in mechanical rooms, cabinets are preferred.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Fire-protection cabinets for the following:
    - a. Portable fire extinguishers.
- B. Owner-Furnished Material: Fire extinguishers.

#### 1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fire-protection cabinets.
  - 1. Fire-Protection 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.
- B. Maintenance Data: For fire-protection cabinets to include in maintenance manuals.

#### 1.4 COORDINATION

- A. Coordinate size of fire-protection cabinets to ensure that type and capacity of fire extinguishers indicated are accommodated.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. 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.
- B. Stainless-Steel Sheet: ASTM A 666, Type 304.
- C. Wire Glass: ASTM C 1036, Type II, Class 1, Form 1, Quality q8, Mesh m1 (diamond), 6 mm thick.

#### 2.2 FIRE-PROTECTION CABINET

- A. Manufacturers:
  - 1. JL Industries, Inc.
  - 2. Larsen's Manufacturing Company.
  - 3. Modern Metal Products; Div. of Technico.
  - 4. Watrous; Div. of American Specialties, Inc.
  - 5. Or approved equal.
- B. Cabinet Material: Aluminum or Stainless-steel sheet.
- C. Door Style:
  - 1. In academic buildings: wired glass panel in frame.
  - 2. In residence halls: solid metal door.
- D. Door Hardware:
  - 1. Friction or magnetic catch and a pull handle.
  - 2. Provide continuous hinge, of same material and finish as trim permitting door to open 180 degrees.
- E. Accessories:
  - 1. Identification: Identify fire extinguisher in fire-protection cabinet with the words "FIRE EXTINGUISHER" in raised 2" lettering, applied to cabinet door.
- F. Finishes:

1. Aluminum: Clear anodic satin or dark duranodic.
2. Stainless Steel: No. 4 finish.

## 2.3 FABRICATION

- A. Fire-Protection Cabinets: Provide manufacturer's standard box, with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated.
  1. Weld joints and grind smooth.
- B. Cabinet Doors: Fabricate doors according to manufacturer's standards, from materials indicated and coordinated with cabinet types and trim styles selected.
  1. Fabricate doorframes with tubular stiles and rails and hollow-metal design, minimum 1/2 inch thick.
  2. Miter and weld perimeter doorframes.
- C. Cabinet Trim: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.

## 2.4 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. Finish fire-protection cabinets after assembly.
- D. 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.

## 2.5 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 611.

## 2.6 STAINLESS-STEEL FINISHES

- A. General: Remove tool and die marks and stretch lines or blend into finish.

- B. Bright, Directional Polish: No. 4 finish.
- C. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine walls and partitions for suitable framing depth and blocking where recessed and semi-recessed cabinets will be installed.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION

- A. General: Install fire-protection specialties in locations and at mounting heights indicated or, if not indicated, at heights acceptable to authorities having jurisdiction.
- B. Fire-Protection Cabinets: Fasten fire-protection cabinets to structure, square and plumb.

END OF SECTION 104400