CONSTRUCTION STANDARD SPECIFICATION SECTION 10522

FIRE EXTINGUISHERS, CABINETS, AND ACCESSORIES

		<u>Page</u>
PART	Γ1 - GENERAL	
1.01 1.02 1.03 1.04	Summary	3
PART	Γ 2 - PRODUCTS	
2.01 2.02 2.03 2.04	Manufacturers	3 3
PART	Γ 3 - EXECUTION	
3.01	Examination	5
3.02	Installation Of Fire Extinguishers	5
3.03	Installation Of Fire Extinguisher Cabinets	
3.04	Signage	6
3.05	Adjusting, Cleaning, And Protection	6

CONSTRUCTION STANDARD SPECIFICATION SECTION 10522

FIRE EXTINGUISHERS, CABINETS, AND ACCESSORIES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes the following:
 - 1. Portable fire extinguishers
 - 2. Cabinets for portable fire extinguishers
- B. Related Sections include the following
 - 1. Section 09900, "Painting".

1.02 REFERENCES

A. American Disability Act (ADA)

ADA Accessibility Guidelines (ADAAG)

B. American Society for Testing and Materials (ASTM)

A1008/A1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon,

Structural, High-Strength Low-Alloy and High-Strength

Low-Alloy with Improved Formability

C1036 Standard Specification for Flat Glass

E814 Standard Test Method for Fire Tests of Through-Penetration

Fire Stops

C. Federal Standard (FED-STD)

FED-STD-795 Uniform Federal Accessibility Standards (UFAS)

10522-2 FIRE EXTINGISHERS, CABINETS, AND ACCESSORIES

- D. National Fire Protection Association (NFPA)
 - NFPA 10 Portable Fire Extinguishers
- E. International Building Code (IBC)
- F. International Fire Code (IFC)

1.03 SUBMITTALS

A. Submit brochure and product data.

1.04 QUALITY ASSURANCE

- A. NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10.
- B. Fire Extinguishers: Listed and labeled by Underwriter's Laboratory (UL) or Factory Mutual (FM) for type, rating, and classification.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
 - 1. Ansul Inc.
 - 2. Larsen's Manufacturing Co.
 - 3. Encon Safety Products

2.02 MATERIALS

A. Cold-Rolled Steel Sheet: Carbon steel, complying with ASTM A1008/A1008M, commercial quality, stretcher leveled, temper rolled.

2.03 PORTABLE FIRE EXTINGUISHERS

- A. General: Provide fire extinguishers of type, size, and capacity for each cabinet and other locations indicated.
 - 1. Product: A 10-lb, multi-purpose, UL listed, dry chemical fire extinguisher with a minimum rating of 4-A:40-B:C..

- B. Mounting Brackets: Manufacturer's standard steel bracket, designed to secure extinguisher, of sizes required for types and capacities of fire extinguisher indicated, with plated or baked-enamel finish.
- C. Fire extinguishers installed outside shall be located in approved weather-tight fire extinguisher cabinets.

2.04 FIRE EXTINGUISHER CABINETS

A. General: Unless specified otherwise on construction drawings, provide fire extinguisher cabinet of type, size, and rating as indicated below, or equivalent.

Trim Style & Projection	Inside Box Dimensions (H x W x D)	Manufacturer	Model #	Fire-Rated Model #	SNL Extinguisher Type
Recessed 5/16	24 x 9½ x 6	Larsen's	2409-R2	FS-2409-R2	I, III
Semirecessed 2½	24 x 9½ x 6	Larsen's	2409-6R	FS-2409-6R	I, III
Semirecessed 4½	24 x 9½ x 6	Larsen's	2409-RM	FS-2409-RM	I, III
Semirecessed 41/2	27 x 12 x 8	Larsen's	2712-RM	FS-2712-RM	II
Surface Mounted (outdoor use only)	27¼ x 11½ x 8½	Encon Safety Products	01337003	N/A	I, II, III

- B. Cabinet Size: The minimum inside box dimensions shall be 24"H x 9½W x 6"D for SNL Type I and Type III fire extinguishers, and 27"H x 12"W x 8"D for SNL Type II fire extinguishers.
- C. Cabinet Construction: Provide manufacturer's standard box, with trim, 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.
- D. Fire-Rated Cabinets: Listed and labeled to meet requirements of ASTM E814 for fire-resistance rating of wall where it is installed. 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. Provide factory drilled mounting holes.
 - 1. Cabinet Metal: Enameled-steel sheet.
 - 2. Shelf: Same metal and finish as cabinet.
- E. Cabinet Mounting: Suitable for the following:
 - 1. Recessed: Cabinet box recessed in walls of sufficient depth to suit style of trim indicated.

- 2. Semirecessed: Cabinet box partially recessed in walls of shallow depth to suit style of trim indicated.
- 3. Surface Mounted: Cabinet box fully exposed and mounted directly on wall.
- F. Cabinet Trim Style: Fabricate cabinet trim in one piece with corners mitered, welded and ground smooth.
- G. Cabinet Trim Material: Steel sheet.
- H. Door Material: Steel sheet.
- I. Door Glazing: Clear Float Glass, ASTM C1036, Type 1, Class 1
- J. Door Style: Vertical duo panel with frame.
- K. Door Construction: Provide a minimum ½-inch (13 mm) thick door frames.
- L. Door Hardware: Provide manufacturer's standard door-operating hardware of proper type for cabinet type, trim style, and door material and style indicated. Provide recessed door pull and friction latch. Provide continuous-type hinge permitting door to open 180 degrees.
- M. Cabinet and Door Finishes: Provide manufacturer's standard baked-enamel paint for the exterior and interior of the cabinet and doors.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine walls and partitions for suitable framing depth and blocking where recessed and semirecessed cabinets are to be installed. Verify that rough openings for cabinets are correctly sized and located.
- B. Examine fire extinguishers for proper charging and tagging. Remove and replace damaged, defective, or undercharged units.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION OF FIRE EXTINGUISHERS

- A. Comply with manufacturer's written instructions for installing fire extinguishers and mounting brackets.
- B. Mounting Height: Install extinguishers at heights indicated below.
 - 1. Install fire extinguishers mounted on hangers or brackets attached to a wall so that the top of the fire extinguisher is not more than 3½ ft. above the floor.

- 2. In no case shall the clearance between the bottom of the fire extinguisher and the floor be less than 4 inches.
- C. Locations: Install extinguishers at locations indicated below.
 - 1. Install fire extinguishers at locations specified on the drawings or as directed by the authority having jurisdiction.
 - 2. Fire extinguishers shall be conspicuously located, along normal paths of travel, including exits from areas. Extinguishers shall not be obstructed or obscured from view.
- Install portable fire extinguishers on the hanger or in the bracket supplied, or place D. in the fire extinguisher cabinets provided. Verify that the extinguisher operating instructions face outward.

3.03 INSTALLATION OF FIRE EXTINGUISHER CABINETS

- Α. Comply with manufacturer's written instructions for installing fire extinguisher cabinets.
- Mounting Height: Install fire extinguisher cabinets at the height required so that the B. top of the fire extinguisher is not more than 54 inches above the floor.
- **C**. Install fire extinguisher cabinets at locations specified on the drawings.
- D. Fire extinguisher cabinets shall protrude no more than 4 inches into corridors, passageways, or aisles.
- E. Repair/paint wall surfaces surrounding fire extinguisher cabinet damaged during installation to match existing wall surface.

3.04 **SIGNAGE**

- Identify bracket-mounted extinguishers with the words "FIRE EXTINGUISHER" A. in red letter decals applied to wall surface.
- Identify fire extinguisher in cabinet with the words "FIRE EXTINGUISHER" B. applied to door.

1. Application Process: Decals

2. Lettering Color: Red

3. Orientation: Vertical

3.05 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 protection and maintain conditions that ensure that cabinets and doors are without damage or deterioration at the time of Construction Completion.

END OF SECTION