

# SECTION 21 12 00 FIRE-SUPPRESSION STANDPIPES

# PART 1 - GENERAL

### 1.1 SUMMARY

A. Section includes entire standpipe system from fire department connection to fire hose connection.

### **1.2 REFERENCES**

- A. General: Comply with appropriate standards.
  - 1. American Welding Society: AWS.
  - 2. Underwriter Laboratories, Inc.: U.L.
  - 3. Factory Mutual Standards: FM.

### **1.3 SUBMITTALS**

- A. Submit data on all materials, including manufacturers' installation instructions.
- B. Shop Drawings: Indicate supports, components, accessories, and sizes.
- C. Product Data: Submit manufacturer's catalog sheet for equipment indicating rough-in size, finish, and accessories.
- D. Field Test Reports: Indicate compliance with specified performance.
- E. Manufacturer's Installation Instructions: Submit with product data.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.
- G. Operation and Maintenance Data: Submit spare parts lists, exploded assembly views and recommended maintenance intervals.

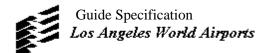
### 1.4 WARRANTY

A. Provide one-year minimum.

### **PART 2 - PRODUCTS**

### 2.1 FIRE HOSE CABINETS

- A. Manufacturers:
  - 1. Potter-Roemer.
  - 2. Larsen.



# **3.** American Fire Hose & Cabinets.

- B. Hose Cabinets:
  - 1. Style: Recessed, Semi-recessed, or Surface mounted. Fire rated when installed in fire rated assemblies.
  - 2. Tub: 20 gauge thick steel with 18 gauge steel frame, prepared for pipe and accessory rough in.
  - 3. Door: 20 gage thick steel, flush, or glazed, with 1/4 inch thick wired glass full panel, hinged, positive latch device.
  - 4. Finish: Prime Coated or Enameled.
- C. Hose Rack: Steel; with polished chrome finish; swivel or stationary type with pins and water stop.
- D. Hose: 1 inch or 1-1/2 inch diameter; mildew and rot-resistant.
- E. Nozzle: Chrome plated brass combination fog, straight stream, and adjustable shut-off.

# 2.2 VALVES

- A. Manufacturers:
  - 1. Clow.
  - 2. Nibco.
  - 3. Viking.
- B. Hose Station Valve: Angle type, brass or chrome plated finish, 1-1/2 inch nominal size, with automatic ball drip.
- C. Hose Connection Valve: Angle type; brass or chrome plated finish; 2-1/2 inch size, thread to match fire department hardware, 300 psi working pressure, with threaded cap and chain of chrome plated finish.
- D. Pressure reducing Valve: Angle or Straight away type; brass finish with inner hydraulic controls. 1-1/2 inch size, fire department thread, 400 psi inlet pressure, with threaded cap and chain of chrome plated finish.
- E. Hose Connection Valve Cabinets:
  - 1. Style: Recessed, Semi-recessed, or Surface mounted. Fire rated when installed in fire rated assemblies.
  - 2. Tub: 20 gauge thick steel with 18 gauge steel frame, prepared for pipe and accessory rough in.
  - 3. Door: 20 gauge thick steel, flush, or glazed, with 1/4 inch thick wired glass full panel, hinged, positive latch device.
  - 4. Finish: Prime Coated or Enameled.



# 2.3 FIRE DEPARTMENT CONNECTION

- A. Type: Flush mounted wall type with brass or chrome plated finish. Free standing type shall be with ductile iron pedestal with red enamel finish.
- B. Outlets: Two-way with fire department thread size. Threaded dust cap and chain of matching material and finish.
- C. Drain: 3/4 inch automatic drip, outside connected to approved receptor.
- D. Label: "Standpipe Fire Department Connection".

### **PART 3 - EXECUTION**

### 3.1 EXAMINATION

A. Verify blocking in place for cabinet installation.

#### 3.2 INSTALLATION

- A. Install cabinets plumb and level. Secure to adjacent surfaces.
- B. Install hose station valve in cabinet between 36 to 60 inches above floor. Install hoseconnection valve under hose station valve and not closer than 4 inches from side or bottom of cabinet.
- C. Connect standpipe system to water source ahead of domestic water connection.
- D. Where static pressure exceeds 100 psi but is less than 100 psi at any hose station, furnish pressure orifice disc in discharge of hose station valve to prevent pressure on hose exceeding 90 psi.
- E. Install two-way Fire Department outlet on roof.

### 3.3 CLEANING

A. Flush entire system of foreign matter.

### END OF SECTION 21 12 00