SECTION 211213 - FIRE-SUPPRESSION HOSES AND NOZZLES

Revise this Section by deleting and inserting text to meet Project-specific requirements.

1. GENERAL
   * + 1. RELATED DOCUMENTS
          1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
       2. SUMMARY
          1. Section Includes:

NPS 1-1/2 rack-type hose stations.

NPS 1-1/2 by NPS 2-1/2 rack-type hose stations.

NPS 1-1/2 reel-type hose stations.

Monitors.

* + - * 1. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Section 211200 "Fire-Suppression Standpipes" for fire hose valves.

* + - 1. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the

General Conditions.

* + - * 1. Manufacturer’s installation instructions shall be provided along with product data.
        2. Submittals shall be provided in the order in which they are specified and tabbed (for

combined submittals).

* + - * 1. Product data for each type of product: catalog sheets, specifications, and installation instruction. indicating UL or FM approved for each product.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

* + - 1. CLOSEOUT SUBMITTALS
         1. Operation and Maintenance Data: For each product type to include in operation and maintenance manuals.

1. PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about named manufacturers and products.

* + - 1. NPS 1-1/2 RACK-TYPE HOSE STATIONS

Coordinate cabinet-mounted units with requirements in Section 104413 "Fire Protection Cabinets."

* + - * 1. Hose Rack:

Standard: UL 47 “Semiautomatic Fire Hose Storage Devices”.

Material: [**Brass or bronze with polished chrome-plated**] [**Steel with red-enamel**] finish.

Type: Hose-rack assembly. Include hose valve, hose rack, water-retention device, hose pins, and hose.

Operation: Semiautomatic.

Sized to hold fire hose.

* + - * 1. Hose Valve:

Standard: UL 668 “Hose Valves for Fire-Protection Service”, NPS 1-1/2, for connecting fire hose.

If retaining first option in "Type" Subparagraph below, also retain pressure-control device and insert outlet pressure setting in appropriate subparagraphs below.

Type: [**Adjustable**] [**Nonadjustable**].

Pressure-Control Device: [**Pressure reducing**] [**or**] [**pressure restricting**].

Design Outlet Pressure Setting: [**Not applicable**] <**Insert psig**>.

Hose Valve and Trim Finish: [**Polished chrome-plated**] [**Rough brass or bronze**] [**Rough chrome-plated**].

Pressure Rating: 300 psig minimum.

Pattern: Angle.

Material: Brass or bronze.

Pressure-Control Device: UL 1468 “Direct Acting Pressure Reducing and Pressure Restricting Valves” integral or for field installation if indicated.

Size: NPS 1-1/2.

Inlet: Female pipe threads.

Outlet: Male hose threads according to NFPA 1963 “Standard for Fire Hose Connections” and matching local fire-department threads.

* + - * 1. Hose:

Standards: NFPA 1961 “Standard on Fire Hose” and UL 219 “Lined Fire Hose for Interior Standpipes” lined fire hose with swivel inlet, coupling, gaskets, and nozzle.

Size: NPS 1-1/2.

Length: [**50 feet**] [**75 feet**] [**100 feet**] <**Insert dimension**>.

Jacket: [**Combination of natural and synthetic threads**] [**Natural thread**] [**Synthetic thread**].

Lining: [**Rubber, plastic, or combination of rubber and plastic compounds**] [**Combination of rubber and plastic compounds**] [**Rubber compound**] [**Plastic compound**].

Cover: Rubber, plastic, or combination of rubber and plastic compounds.

Nozzle: UL 401 “Portable Spray Hose Nozzles for Fire-Protection Service”.

Material: [**Brass**] [**Polished brass**] [**Rough chrome-plated brass**] [**Polished chrome-plated brass**] [**Polycarbonate plastic**].

Type: [**Plain, for nonadjustable water stream**] [**Spray, adjustable from shutoff to fog spray or straight stream**] [**Spray, adjustable from shutoff to full fog; for use on electrical fires**].

* + - 1. NPS 1-1/2 BY NPS 2-1/2 RACK-TYPE HOSE STATIONS
         1. Hose Rack:

Standard: UL 47 “Semiautomatic Fire Hose Storage Devices”.

Material: [**Brass or bronze with polished chrome-plated**] [**Steel with red-enamel**] finish.

Type: Hose-rack assembly. Include hose valve, reducer adapter, hose rack, water-retention device, hose pins, and hose.

Operation: Semiautomatic.

Sized to hold fire hose.

* + - * 1. Hose Valve:

Standard: UL 668 “Hose Valves for Fire-Protection Service”, NPS 2-1/2, for connecting fire hose.

If retaining first option in "Type" Subparagraph below, also retain pressure-control device and insert outlet pressure setting in appropriate subparagraphs below.

Type: [**Adjustable**] [**Nonadjustable**].

Pressure-Control Device: [**Pressure reducing**] [**or**] [**pressure restricting**].

Design Outlet Pressure Setting: [**Not applicable**] <**Insert psig**>.

Hose Valve and Trim Finish: [**Polished chrome-plated**] [**Rough brass or bronze**] [**Rough chrome-plated**].

Pressure Rating: 300 psig minimum.

Pattern: Angle.

Material: Brass or bronze.

Pressure-Control Device: UL 1468 “Direct Acting Pressure Reducing and Pressure Restricting Valves”, integral or for field installation if indicated.

Size: NPS 2-1/2.

Inlet: Female pipe threads.

Outlet: Male hose threads according to NFPA 1963 “Standard for Fire Hose Connections” and matching local fire-department threads.

Reducer Adapter: NPS 2-1/2 by NPS 1-1/2.

* + - * 1. Hose:

Standards: NFPA 1961 “Standard on Fire Hose” and UL 219 “Lined Fire Hose for Interior Standpipes”, lined fire hose with swivel inlet, coupling, gaskets, and nozzle.

Size: NPS 1-1/2.

Length: [**50 feet**] [**75 feet**] [**100 feet**] <**Insert dimension**>.

Jacket: [**Combination of natural and synthetic threads**] [**Natural thread**] [**Synthetic thread**].

Lining: [**Rubber, plastic, or combination of rubber and plastic compounds**] [**Combination of rubber and plastic compounds**] [**Rubber compound**] [**Plastic compound**].

Cover: Rubber, plastic, or combination of rubber and plastic compounds.

Nozzle: UL 401 “Portable Spray Hose Nozzles for Fire-Protection Service” spray nozzle unless plain nozzle is indicated.

Material: [**Brass**] [**Polished brass**] [**Rough chrome-plated brass**] [**Polished chrome-plated brass**] [**Polycarbonate plastic**].

Type: [**Plain, for nonadjustable water stream**] [**Spray, adjustable from shutoff to fog spray or straight stream**] [**Spray, adjustable from shutoff to full fog; for use on electrical fires**].

* + - 1. NPS 1-1/2 REEL-TYPE HOSE STATIONS
         1. Hose Reel:

Standard: UL 47 “Semiautomatic Fire Hose Storage Devices”.

Hose Reel and Bracket Material: Steel.

Type: Hose-reel assembly. Include hose valve, wall bracket, hose reel, water-retention device, hose pins, and hose.

Operation: Semiautomatic.

Sized to hold fire hose.

Finish: Red enamel.

* + - * 1. Hose Valve:

Standard: UL 668 “Hose Valves for Fire-Protection Service”, NPS 1-1/2, for connecting fire hose.

If retaining first option in "Type" Subparagraph below, also retain pressure-control device and insert outlet pressure setting in appropriate subparagraphs below.

Type: [**Adjustable**] [**Nonadjustable**].

Pressure-Control Device: [**Pressure reducing**] [**or**] [**pressure restricting**].

Design Outlet Pressure Setting: [**Not applicable**] <**Insert psig**>.

Hose Valve and Trim Finish: [**Polished chrome-plated**] [**Rough brass or bronze**] [**Rough chrome-plated**].

Pressure Rating: 300 psig minimum.

Pattern: Angle.

Material: Brass or bronze.

Pressure-Control Device: UL 1468 “Direct Acting Pressure Reducing and Pressure Restricting Valves”, integral or for field installation if indicated.

Size: NPS 1-1/2.

Inlet: Female pipe threads.

Outlet: Male hose threads according to NFPA 1963 “Standard for Fire Hose Connections” and matching local fire-department threads.

* + - * 1. Hose:

Standards: NFPA 1961 “Standard on Fire Hose” and UL 219 “Lined Fire Hose for Interior Standpipes” lined fire hose with swivel inlet, coupling, gaskets, and nozzle.

Size: NPS 1-1/2.

Length: [**50 feet**] [**75 feet**] [**100 feet**] <**Insert dimension**>.

Jacket: [**Combination of natural and synthetic threads**] [**Natural thread**] [**Synthetic thread**].

Lining: [**Rubber, plastic, or combination of rubber and plastic compounds**] [**Combination of rubber and plastic compounds**] [**Rubber compound**] [**Plastic compound**].

Cover: Rubber, plastic, or combination of rubber and plastic compounds.

Nozzle: UL 401 “Portable Spray Hose Nozzles for Fire-Protection Service”.

Material: [**Brass**] [**Polished brass**] [**Rough chrome-plated brass**] [**Polished chrome-plated brass**] [**Polycarbonate plastic**].

Type: Spray, adjustable from shutoff to [**fog spray or straight stream**] [**full fog; for use on electrical fires**].

* + - 1. MONITORS

Currently, no UL standard exists for monitors.

* + - * 1. Type: Stationary.
        2. Nozzle: UL 401 “Portable Spray Hose Nozzles for Fire-Protection Service”, NPS 2-1/2, brass, adjustable from fog spray to straight stream to shutoff.
        3. Horizontal Rotation: 360 degrees with locking device.
        4. Vertical Rotation: 80-degree elevation and 60-degree depression with locking device.
        5. Waterway: [**Double**] [**Single**] brass or stainless-steel tube.
        6. Waterway Size: [**NPS 2-1/2**] <**Insert value**> minimum.
        7. Water Stream Flow: [**500 gpm**] [**750 gpm**] [**1000 gpm**] <**Insert value**>.
        8. Operation: [**Lever**] [**Wheel**].
        9. Base Inlet Size: [**NPS 2-1/2**] [**NPS 3**] [**NPS 4**].
        10. Finish: Red-painted body with brass trim.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of fire hoses, reels, racks, and monitors.
          2. Examine roughing-in for standpipe systems to verify actual locations of piping connections before installation.
          3. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. HOSE-STATION INSTALLATION

Indicate hose-station locations, sizes, and special devices on Drawings.

* + - * 1. Install freestanding hose stations for access and minimum passage restriction.
        2. Install NPS 1-1/2 hose-station valves with flow-restricting device unless otherwise indicated.
        3. Install NPS 2-1/2 hose connections with quick-disconnect NPS 2-1/2 by NPS 1-1/2 reducer adapter and flow-restricting device unless otherwise indicated.
        4. Install freestanding hose stations with support or bracket attached to standpipe.
        5. Install wall-mounted, rack hose stations in cabinets. Include pipe escutcheons, with finish matching valves, inside cabinet where water-supply piping penetrates cabinet. Install valves at angle required for connection of fire hose. Comply with requirements for cabinets in Section 104413 "Fire Protection Cabinets."
        6. Install hose-reel hose stations on wall with bracket.
      1. MONITOR INSTALLATION
         1. Install monitors on standpipe piping.

END OF SECTION 211213