

PART 1 - GENERAL

1.1 REFERENCE STANDARDS

- .1 National Fire Prevention Association (NFPA)
 - .1 NFPA (Fire) 13, Standard for the Installation of Sprinkler Systems.
 - .2 NFPA (Fire) 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2017 Edition.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

PART 2 - PRODUCTS

2.1 DESIGN REQUIREMENTS

- .1 Design and provide each system to give full consideration to blind spaces, piping, electrical equipment, ducts, and other construction and equipment in accordance with detailed shop drawings.
- .2 Locate sprinkler heads in consistent pattern with ceiling grid, lights, and air supply diffusers.
- .3 Devices and equipment for fire protection service: ULC approved for use in wet pipe sprinkler systems.

2.2 PIPE, FITTINGS AND VALVES

- .1 Pipe:
 - .1 Ferrous: to NFPA 13.
- .2 Fittings and joints to NFPA 13:
 - .1 Ferrous: screwed, welded, flanged or roll grooved.
 - .1 Grooved joints designed with two ductile iron housing segments, pressure responsive gasket, and zinc-electroplated steel bolts and nuts. Cast with offsetting angle-pattern bolt pads for rigidity and visual pad-to-pad offset contact.
 - .2 Rubber gasketed grooved-end pipe and fittings with mechanical couplings are permitted in pipe sizes 32 mm and larger.
 - .3 Fittings: ULC approved for use in wet pipe sprinkler systems.
 - .4 Ensure fittings, mechanical couplings, and rubber gaskets are supplied by same manufacturer.
 - .5 Sprinkler pipe and fittings: metal.
- .3 Pipe hangers:
 - .1 ULC listed for fire protection services in accordance with NFPA.

2.3 SPRINKLER HEADS

- .1 General: to NFPA 13 and ULC listed for fire services.

2.4 CONCEALED SPRINKLER

- .1 Fully concealed pendent, quick response for hazard coverage as indicated, 5.6 K factor, enclosed escutcheon, separate two-piece design of mounting cup and coverplate, internal threaded closure, 68°C rated, 13 mm adjustment, FM approved, white enamel finish, glass bulb type and white finish cover.

2.5 SEMI-RECESSED SPRINKLER

- .1 Semi-recessed pendent, quick response for hazard coverage as indicated, 5.6 K factor, extended adjustable escutcheon, chrome finish, FM approved, glass bulb type; 68°C rated, 13 mm orifice.

2.6 UPRIGHT SPRINKLER

- .1 Upright bronze, quick response for hazard coverage as indicated, 5.6 K factor, FM approved, chrome finish, glass bulb type c/w wire guard; 68°C rated, 13 mm orifice.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet.

3.2 INSTALLATION

- .1 Install, inspect and test to acceptance in accordance with NFPA 13 and NFPA 25.

3.3 PIPE INSTALLATION

- .1 Install piping straight and true to bear evenly on hangers and supports. Do not hang piping from plaster ceilings.
- .2 Keep interior and ends of new piping and existing piping thoroughly cleaned of water and foreign matter.
- .3 Keep piping systems clean during installation by means of plugs or other approved methods. When work is not in progress, securely close open ends of piping to prevent entry of water and foreign matter.
- .4 Inspect piping before placing into position.