

## Addison Fire Department Fire Sprinkler Installation\*

\*Aboveground only For underground sprinkler requirements contact the Infrastructure & Development Services Department at 972-450-2871.

The purpose of this document is to identify minimum requirements necessary to establish acceptable installation practices for fire sprinkler systems. These standards can be found in detail in NFPA 13 & Addison City ordinances.

- A minimum Safety Factor of 10 psi is required.
- Provide a minimum of 4 feet of pipe between the check valve and the inside wall of the Fire Department connection.
- The FDC shall be within 100 feet of a fire hydrant
- The FDC shall be clear and unobstructed with a minimum of 3-foot clearance on all sides.
- Only Metal Wall Plates (FDC) shall be installed.
- Buildings with multiple risers shall provide a single FDC location. No multiple FDC locations allowed for a single building.
- Large buildings and buildings over one-story may be required to zone sprinkler systems by floor or area or both depending on the size and layout of the facility. Contact us before submitting.
- All Inspector's test, ball drips, and main-drains shall be piped directly to the outside of the building.
- At least one inspection test valve shall be located at the remote system area.
- Anti-freeze systems or loops are not allowed in Addison.
- Risers shall be located in heated areas. Riser room electrical heaters shall be hard wired.
- All piping and components shall be installed and/or insulated as necessary to protect from freezing.
- Drip drums shall be located in heated areas.
- Dry system air compressors shall be hard wired.
- A high and low pressure alarm is required for all dry systems. (supervisory only)
- The riser room shall be large enough to facilitate maintenance and testing of the sprinkler system.
- Pressure reducing valves shall be used on any system that exceeds 175 psi. These valves shall reduce static and residual pressure. (These are not to be pressure or flow "restricting" valves)
- Systems with pressure reducing valves shall have minimum 3-inch pipe to drain directly to the outside.
- Fire pumps shall be equipped with a properly sized test header.
- Pump controllers shall be manual shutdown only. (No timers)
- A fire sprinkler riser shall be no farther than 5 feet from an outside wall.
- Fire sprinkler heads shall be a minimum of 18" from center of ceiling fans.
- In clothes closets/equipment closets, keep fire sprinkler heads close to the door to avoid shelves/equipment, etc.
- Bathrooms and closets in all "R" occupancies shall be sprinklered regardless of size.
- All Stairwell Landings shall have fire sprinkler protection.
- Straps/Hangers should be close to heads, 90's and T's to limit head/pipe movement.
- Do not install the fire sprinkler heads into the pipe (CPVC) until after all glue joints have dried completely.

- If possible, install fire sprinkler pipe into interior walls to help prevent from freezing. If an exterior wall must be used, the pipe shall be insulated properly and it will be required for the fire sprinkler pipe fitter or a responsible party to sign off on proper installation.
- For Hydro Test Two Gauges remote of each other are required for most jobs.
- Double Check Valves/Backflows Pipe for Forward Flow Testing.

It is the responsibility of the fire sprinkler contractor to recognize, understand and practice the installation standards prescribed in NFPA 13 to ensure the reliability, survivability and serviceability of fire sprinklers standpipes, fire pumps and other life safety systems that are specific to a fire sprinkler contractor.

Any omission by the Fire Department should not be misinterpreted as permission to install a system incorrectly.

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