

Residential Fire Sprinklers

The fire sprinkler contractor is to be a licensed C16 contractor. Normally the fire sprinkler contractor submits the required plans and obtains a building permit. Owner builder is allowed to submit sprinkler drawings for the sprinkler contractor.

The fire sprinkler contractor normally installs the overhead plumbing and sprinkler heads as well as a sprinkler riser consisting of the main shut off valve, domestic connection if required, check valve, water flow switch, combination drain and test valve and pressure gauge. This riser is the connection between the underground water supply and the overhead sprinkler plumbing in the building.

The sprinkler contractor may, but usually will not install the water supply (meter or tank), the required pump, or underground water line from the source to the base of the riser.

The fire sprinkler contractor will not do the electrical wiring necessary to power the flow switch or alarm devices.

Underground plumbing, tanks, and pumps may be shown on the plans for reference only. Look for a note/s on the plans stating something similar to the "underground/ pump by others or owner" If you are not sure, contact the contractor for an explanation prior to installation.

Be aware that smaller pipe sizes (3/4 inch vs. 1 inch) do not necessarily save money. It may require a larger and more costly pump to ensure sufficient water flow.

The contractor is also required to provide a cabinet containing spare sprinkler heads and approved wrench to remove or install a sprinkler head, all required signs and labels, instructions how to test the system monthly, and a set of plans for future reference.

It is the sprinkler contractor's responsibility to call for timely inspections and have a representative present at the time of inspection, unless otherwise arranged by the sprinkler contractor and the fire inspector.

If you have a water meter there may be a double check valve on your system. This device reduces the available water flow and pressure. Be sure your contractor accounts for this device in his sprinkler calculations.

Commercial Fire Sprinklers

New Construction

Commercial fire sprinkler systems are designed to NFPA 13 ²⁰¹⁶ standards. Commercial fire sprinkler systems have many complicated and very specific guidelines to follow. Fire sprinkler design and calculations must be performed by a licensed C16 contractor only with no exceptions. Many times a sprinkler contractor will have a fire protection engineer design the system and provide the drawings to the contractor for submittal to the fire department for review.

Commercial fire sprinklers are designed to the specific use of the building. Problems occur when a building designed to office space and warehouse and then changed to a high pile storage facility. This small change in a facility, which was thought to be a minor change in occupancy, will require a greater water supply for the protection of the commodity being stored. The reason for the increase of water supply is the fire load now. In order for the sprinkler system to meet the needs of any type of occupancy and possible future development consult with a licensed sprinkler contractor.

Existing Commercial Buildings

The expertise of a fire sprinkler contractor or a fire protection consultant may be needed for existing buildings. Existing buildings may have been designed to a specific type of hazard. A change of hazard, which would result in the building being more hazardous than the previous occupancy, may require major upgrades to the fire sprinkler system. This could include underground and aboveground piping, fire pump, and sprinkler head type.

Fire Sprinklers are required after 50 years of service to be tested or replaced. Fire Sprinkler Systems are required to be re-certified every five years. Existing buildings may be required to provide proof of the above before a final inspection would be performed.