



FIRE PREVENTION MANUAL

FIRE SPRINKLER SYSTEMS

405.025 FIRE DEPARTMENT CONNECTION REQUIREMENTS

EFFECTIVE: MAY 2014

SCOPE

Fire department connection requirements.

PURPOSE

The purpose of this policy is to clarify the Department's requirements related to the installation of fire department connections.

BACKGROUND

As noted in *National Fire Protection Association (NFPA) Standard 13 (2016 ed. With California Amendments)*, Section 8.17.2, fire department connections are required to supplement pressure to an automatic fire sprinkler system.

Additionally, the fire code official has the authority to require various sizes of fire department connections, their location, marking, etc., which they deem necessary based upon local conditions.

REQUIREMENTS

Based upon the need for uniformity in application across the Department's diverse service delivery area, and after careful deliberation regarding the various capabilities of the affected water purveyors and their associated transmission means, the Department has determined the following:

1. Fire department connections shall not be installed within five feet (5') of any building opening, excluding a fire department riser access door.
2. Fire department connections shall be located within forty feet (40') of a fire apparatus access lane.
3. The minimum size of all fire department connections shall be based upon the system type. No connection shall be less than 2 ½" in size.

A single, 2 ½” connection shall be permitted for NFPA 13R and City of Fresno reduced hydraulic demand fire sprinkler systems.

For systems with a demand of up to 749 gpm, a single, dual 2 ½” outlet connection shall be provided, which includes a minimum 4” lead in to the riser.

Any fire sprinkler system having a demand of 750 gpm or more (system demand and hose allowance) shall be fitted with a large diameter (4½”) fire department connection. The large diameter connection shall consist of a female swivel with a plug, threaded with National Hose Threads, located in an approved location.

4. Sprinkler plans with a system that has a demand of 750 gpm or more (system demand and hose allowance) shall also have a note on the plans stating the following:

“The fire department connection shall be a large diameter (4 ½”) connection, female swivel with a plug, National Hose Thread, located in an approved location.”

See FFD policy number 401.011 *Fire Sprinkler Plan Specifications*.

Note: These requirements apply to both required and voluntary systems.

REFERENCES

National Fire Protection Association (NFPA) 13 – Automatic Sprinkler Systems (2016 ed. With California Amendments)
Fresno Fire Department Policy 401.011 Fire Sprinkler Plan Specifications