OBJECTIVE


This standard outlines the procedure to be followed when submitting sprinkler plans and defines the Departments requirements for sprinkler system installations that may be more restrictive or not included in existing codes and standards.

PROCEDURE


**Part One – Commercial Occupancies:**

**Fire Department Connections**

1. Fire department connections shall be visible, accessible, and installed on the address side of buildings in approved locations, and provided with metal caps and fasteners.
2. Fire department connections shall be located between 10 and 40 feet from an accessible fire hydrant. The fire department connection and hydrant shall be located on the same side of the access roadway.

   Exception: The Chief may allow a greater distance between the hydrant and fire department connection, however the distance shall not exceed more than 150 feet. The intent of this exception is to allow the use of existing fire hydrants.

3. Fire department connections shall be located a minimum of 36 inches to a maximum of 48 inches above finish grade.

4. Fire department connections shall be located free of interference from nearby objects including buildings, fences, posts, trees, etc., and in regard to overhead hazards such as transformers or transmission lines.

5. Vehicle protection shall be provided for fire department connections subject to vehicular damage.

6. The fire department connection shall serve only one building.

   Exception: Multiple buildings on a single parcel may have one fire department connection upon approval of the Fire Chief.

7. Address numbers are required on the fire department connection to indicate the area or building served by the fire department connection. The address numbers shall be 2 inch black numbers on a white reflective background and located on the fire department connection facing the public street or fire access lane.

11. Fire department connections located on a back-flow device shall be installed in a manner approved by the Fire Department and the City Public Works Department.

Piping Installation

1. Where domestic and fire sprinkler systems share a backflow device, a solenoid valve interconnected to the riser flow switch shall be installed to cease the flow of domestic water isolating the fire sprinkler system.

2. Where installed, a solenoid valve shall be fail-safe.

Fire Control Room
1. System riser shall be inside the fire control room constructed as follows:

   A. Fire control room shall contain all fire sprinkler system risers, fire alarm control panels, spare sprinklers and wrench, and other fire equipment required by the Chief.

   B. Fire control rooms shall be located within the building on an outside wall at a location approved by the Chief, and shall be provided with a means to access the room directly from the exterior with an approved door of minimum dimensions of 36" x 80".

   C. Durable signage shall be provided on the exterior side of the access door to identify the fire control room. The sign shall indicate "FIRE CONTROL ROOM" with 3" letters that contrast with their background.

   D. A horn/strobe device shall be installed outside the fire control room and shall activate whenever any “alarm” condition is present at the fire alarm control panel.

   E. A key shall be located within a Knox key box located adjacent to, and on the latch side of, the access door on the exterior of the building at 6’ above the finished floor.

   F. Fire control rooms shall have a minimum dimension of 5' and not be less than 35 square feet in usable area.

   G. The fire sprinkler riser shall be located in the room on the exterior wall between 12" and 18" from that wall and at least 12" from any other wall.

   H. The fire control room may contain other building service equipment. This other equipment shall not be within 3' in front of any fire equipment in the room.

**Hydraulic Calculation Procedures**

1. All fire sprinkler plans shall be engineered to the results of a flow test from the nearest hydrant taken within the last 6 months and certified by the Fire Department.

**Water Supplies**
FIRE SPRINKLER STANDARD

1. A strand of 3" wide non-detectable blue tape marked "Water" shall be placed 12 inches above all piping.

2. All sections of ductile iron pipe or ductile iron fittings shall be encased in either 8-mil linear low density (LLD) or 4-mil high-density, cross-laminated (HDCL) polyethylene sheets or tubes in accordance with American Water Works Association Standard C105/A21.5-05, Polyethylene Encasement for Ductile-Iron Pipe Systems. Any fasteners shall be made of low-alloy steel.

Fire Pumps

1. A fire pump shall serve only one building.

   Exception: Multiple buildings on a single parcel may have a single fire pump upon approval of the Fire Chief.

2. A hydraulic demand data plate shall be installed on all fire department connections on systems requiring a fire pump.

Part Two - One- and Two- Family Dwellings and Manufactured Homes:

1. Sprinkler systems in manufactured homes are the responsibility of the California Department of Housing and Community Development.

   A. The seller of the manufactured home shall provide written verification that the site water supply is capable of providing the minimum flow (gallons per minute) and pressure (pounds per square inch) at the base of the fire sprinkler system riser, as indicated on the Fire Sprinkler Information Label, located in the water heater compartment. This documentation must be provided prior to the issuing of the Certificate of Release by the Fire Department, which is required to obtain the building permit from the Building Department.

   B. The seller of the manufactured home shall provide written verification that the system has been installed, tested and approved by the California Department of Housing and Community Development. This documentation must be provided prior to the final inspection and approved by the Fire and Building Departments.

Bryan Jonson, Fire Marshal