



FIRE SPRINKLER GUIDELINES

Please note:

Livermore : All plans are submitted through the City of Livermore Permit Center located at 1052 S. Livermore Ave. (925) 960-4410

Pleasanton: All plans, other than those eligible and submitted for over the counter plan check at the Fire Department office, are submitted through the City of Pleasanton Building Department located at 200 Old Bernal Ave. (925) 931-5300.

The following are guidelines to assist you in preparing and submitting sprinkler drawings:

1. All sprinkler and fire main installations shall meet all requirements of the, 2013 California Building and Fire Codes, and the local Livermore Ordinance 1985 or Local Pleasanton Ordinance 2083. Please be aware that the NFPA 13 with changes has been adopted in the cities of Livermore and Pleasanton.
2. All sprinkler plans shall include the water flow information on the plans, the person who provided the information, and the date and location of the flow test. Water flow request form completed by the Fire Department is also acceptable.
3. Sprinklers shall be standard ½ inch or 17/32-inch orifices unless the Fire Marshal and building owner accept special sprinklers based on special conditions. Extended coverage sprinklers shall not be used.
4. A State of California Title 19 fire sprinkler inspection within the past five years is required.
5. Storage of ordinary combustibles higher than 12 feet, storage of plastic materials higher than 5 feet, require a Fire Code High Piled Combustible Storage Permit from the Fire Department.
6. Complete pipe hanger and earthquake sway brace details shall be shown on the drawings. Attachments to trusses shall be approved by the truss manufacturer. Calculations for all hangers including fastener type and size for all pipe sizes showing weight of water filled pipe plus 250 pounds shall be submitted to the Building Department with the sprinkler plans. Calculations for all earthquake bracing shall be provided. Fire protection plan check shall comply with NFPA 13 and will not be completed if structural details are not provided . Structural review and approval form completed and stamped by engineer of record and truss manufacturer **MUST** be submitted with the sprinkler plans.



7. Approved Livermore-Pleasanton Fire Department supervision of all fire sprinkler system water flow alarms and control valves shall be complete and in service prior to final inspection of all fire sprinkler systems for shell buildings and tenant improvements.
8. All sprinkler risers shall be inside the building or in a sprinklered enclosure on the building exterior. No exposed fire protection risers are permitted. If an enclosure is used, it shall have prior approval from the City Planning Department.
9. A weld inspection is required before the pipe is installed.
10. All exterior exposed pipe shall be insulated. Examples include loading dock canopies, gas station island canopies, etc.
11. Plans for fire sprinkler alarms, fire sprinklers, underground fire mains, storage racks, high-piled combustible storage, hazardous materials, and any other fire protection items shall be approved by the Fire Prevention Bureau prior to installation.
12. Plans and permits are required for all fire sprinkler installations regardless of size, including Title 19 inspection corrections. Plans shall be drawn to standard engineering scale dimensions. Contractor must have current Fire Department operating permit.
13. All locations with more than one fire sprinkler riser require a check valve on each riser (including rack sprinklers and wet pipe hose stations, etc).
14. See City web site for copy of Fire and Building Department ordinances.
15. See City Standard detail book for double detector check valve assemblies, fire hydrants, bollards, etc. These standards apply to both private and public water mains and other devices.
16. Fire sprinkler plans for tenant improvements shall show information required by NFPA 13 including which walls are new or existing, which walls are ceiling height, which walls are roof height, adequate fire sprinkler protection on both sides of all new and/or existing walls, sprinkler design and maximum spacing. A complete section view showing details of construction and sprinklers in all concealed spaces, all new and existing fire sprinkler piping in the area involved, and complete hanger details are required. Plans lacking sufficient detail of existing field conditions will not be reviewed until the information is provided.

Requirements for a one- and two- family dwelling (Group R—Division 3)



1. The number of design sprinklers shall include all sprinklers within a compartment to a maximum of two sprinklers.
2. Pilot sprinklers shall be provided in the attic. Pilot sprinklers shall be intermediate rated residential sprinklers. Pilot sprinklers shall be located at maximum 30 feet centers (maximum 15 feet from outside walls) and shall be located at all heat and fire sources including furnaces, hot water heaters, above kitchen ranges, etc.
3. Fire sprinklers shall be provided in garages. Fire sprinklers shall be intermediate rated, quick response, with a maximum spacing of 130 square feet per sprinkler.
4. Fire sprinklers shall be provided in extensions over porches, balconies, breezeways and entryways. Fire sprinklers shall be intermediate rated.

Requirements for a large one- and two- family dwelling (Group R—Division 3) more than 7,500 square feet.

1. The number of design sprinklers shall include all sprinklers within a compartment to a maximum of four sprinklers. When the number of design sprinklers is less than four for a compartment.
2. Pilot sprinklers shall be provided in the attic. Pilot sprinklers shall be intermediate rated residential sprinklers. Pilot sprinklers shall be located at maximum 30 feet centers (maximum 15 feet from outside walls) and shall be located at all heat and fire sources including furnaces, hot water heaters, above kitchen ranges, etc.
3. Fire sprinklers shall be provided in garages. Fire sprinklers shall be intermediate rated, quick response, with a maximum spacing of 130 square feet per sprinkler.
4. Fire sprinklers shall be provided in extensions over porches, balconies, breezeways and entryways. Fire sprinklers shall be intermediate rated.

Multifamily residential buildings with 4 or more units or 7,500 square feet and up to four stories in height, automatic fire sprinkler shall be installed throughout in accordance with NFPA 13R.

1. Sprinklers shall be provided in the attic. Fire sprinklers shall be spaced a maximum 130 square feet per sprinkler and over all furnaces, water heaters, etc. All attic areas shall be covered (some buildings have several attic areas). Attic sprinklers shall be intermediate rated residential sprinklers.
2. Sprinklers shall be provided in the garage. Sprinklers in garages shall be intermediate rated, quick response type, with a maximum spacing of 130 square feet per sprinkler.
3. This guideline does not apply to motels, hotels, or day care centers with more than 12 occupants or other multi-family residential occupancies greater than four stories. These types of buildings shall be designed per NFPA 13.



4. Local water flow alarms shall be provided on all sprinkler systems. Water flow alarms and valve tamper shall be connected to an Underwriters Laboratory (UL) listed Central Station Service under the following conditions:
 - (a) All buildings with eight or more units or;
 - (b) When there are four or more buildings per complex or;
 - (c) When there are more than 64 units per complex.

All other fire related questions should be directed to Ryan Rucker, Fire Marshal at 925-454-2330 or Danielle Stefani, Assistant Fire Marshal at 925-454-2331.