



Residential Fire Sprinkler System Plan Submittals

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Design Requirements:

- Residential Fire Sprinkler Systems shall be designed in accordance with 2010 CRC Section R313 or NFPA Standard-13D.
- Fire sprinkler systems shall be designed by a California licensed Fire Protection Contractor (C-16), or by a California licensed Professional Engineer (Civil, Mechanical or Fire Protection).
- Residential Fire Sprinkler Systems shall be installed by a California licensed Fire Protection Contractor (C-16).

Plan Submittal Requirements:

- All Residential Fire Sprinkler Systems submittals **shall** include **two** copies of the following:
 - Manufactures' material information sheets for the sprinkler heads, piping, alarm device, flow switch and hangers.
 - Hydraulic calculations that comply with the calculation procedure and format of the 2010 CRC, Section 313.3.6.2.2, or that of the 2010 NFPA Standard-13D, Section 8.4.10.2.
 - A Site Plan drawn to scale with the **following items shown** on the plan:
 1. All property lines, the outline of all buildings on the lot, roads adjacent to the lot, the driveway, a **north arrow** and the scale the plan is drawn to note.
 2. Point of connection to public or private water system and size of any water main.
 3. Elevation differential between the point of connection (to the public or private water system) in relation to the point of entry to the dwelling served by the system.
 4. If served by a public water system, a letter of acknowledgement from the agency indicating that their infrastructure/meter will accommodate the proposed fire sprinkler system.
 5. Alternate water supply components such as well, pump and any tanks.
 6. The point of entry of the water service to the dwelling.
 7. The size & type of all pipe and fittings, with the length of each segment of the underground supply line.
 8. The location, size and arrangement of all required devices such as meter and backflow device.
 9. On combination laterals serving fire sprinklers and domestic water, show the location of the fire service take off, the master shutoff valve, and the point of added domestic flow allowance.
 10. Flow test/pressure data used for hydraulic calculations. Include the location of test, elevation relative to finished floor at service point of entry and source of information. Reference points corresponding to matching locations in the hydraulic calculations.
 11. Reference points corresponding to matching locations in the hydraulic calculations.
- A Floor Plan drawn to scale of the building fire sprinkler system piping plan with the following:
 1. Labeled all rooms and indicate the use of any room where sprinkler protection **is not** being provided.

2. The location of the sprinkler system riser.
3. All sprinkler locations and spacing dimensioned on the floor plan.
4. Size & type of all pipe fittings, with length of each segment.
5. The location and type of all pipe hangers and other means of support.
6. The location of all heat producing devices with their heat zone noted on the plan.
7. The location of all ceiling electrical fixtures. **Indicate** the size and depth of all fixtures not flush with the ceiling.
8. The location, size, depth and spacing of any exposed beams.
9. Provide ceiling elevations, or cross sections, to indicate any sloped, beamed, or special shaped ceilings.
10. The location of the alarm bell.
11. Specify the method of freeze protection when piping is to be located in areas **not maintained** above 40 degrees.
12. Reference points corresponding to matching locations in the hydraulic calculations.

- A Fire Sprinkler Riser detail **showing** the following:

1. The location of main control valve for the domestic and fire sprinkler systems.
2. The location of the domestic tie-in showing the domestic control valve.
3. The location of the water flow switch, check valve, pressure gauges, and test/drain assembly.
4. The location of all transitions between piping materials.
5. Reference points corresponding to matching locations in the hydraulic calculations.

****Note:** All Residential Fire Sprinkler System Plans are to be **first** submitted to the:

El Dorado County Bldg Department
 2850 Fairlane Court
 Placerville, Ca 95667
 Office: (530) 621-5315
 Email: bldgdept@co.el-dorado.ca.us

Any further questions, comments or concerns, please feel free to contact our office Monday thru Friday (*9: AM-1: PM) at the listed telephone number below.

Robert L. Gill, Fire Chief/CEO
Pioneer Fire Protection District
 7061 Mt. Aukum Road (Station-38)
 Somerset, Ca 95684-0128
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