



INSTALLATION OF SPRINKLER SYSTEMS IN ONE AND TWO FAMILY DWELLINGS WORKING PLANS AND DESIGN REQUIREMENTS

DATE: March 3, 2016

INFORMATION BULLETIN: C-11-001

APPROVED BY: W. Schellhous

NFPA 2013 Edition 13D; Business and Professions Code 7026.12

**The following guidelines will give you an idea of what needs to be included in a submittal:
(This is not all inclusive)**

- A. A site plan showing the footprint of the structure, any access roads and the size and location of the water supply including the water meter.
- B. A reflected ceiling plan showing sprinkler head location in relation to walls, beams and other obstructions that may affect sprinkler spray. Include descriptions of all rooms and spaces, label any spaces in which no sprinklers are installed.
- C. A piping plan which includes pipe size, type and center to center dimensions if not “cut length” dimensions.
- D. The piping plan may be shown as part of the reflected ceiling plan, if it does not make the drawing too confusing.
- E. Show type and location of hangers.
- F. Show hydraulic reference points if used or indicate design heads.
- G. Show the model of all sprinkler heads that are used.
- H. Alarm equipment (bell, flow switch) type and location must be shown.
- I. The piping plan must show riser detail including all valves, fittings and other equipment.
Note: Two single check valves or one dual check valve is required at the riser.
- J. Any building that has other than flat smooth ceilings throughout shall include sectional drawings that show the head location in relation to the “heat traps” or obstructions.

- K. Include hydraulic calculations that can easily be related to the piping plan. The isometric drawing (common to plumbing plans) is one of the best styles of which can be used to relate calc. to piping. Hydraulic calculations shall include the friction loss for the meter.
- L. Include copies of all the technical data sheets of the material that are used in the project.
- M. All plan submittals shall be scaled prints made from original drawing; no cut and paste, or marked-up blue prints. A minimum of three sets of prints shall be submitted.
- N. All plans must be complete to the water supply.
- O. All plans must include a title block to include the name, address and phone number of the designer and/or installer, the name of the property, address of the property and point of compass and scale of the drawing.
- P. All plans shall follow N.F.P.A. 13D 2013 edition for design and installation requirements.

OWNER/BUILDER RESIDENTIAL FIRE SPINKLER SYSTEMS

Section 7026.12 of the Business & Professions Code states: “The installation of a fire protection system, excluding an electrical alarm system, shall be performed only by a contractor holding a fire protection contractor classification as defined in the regulations of the board or by an owner-builder of an owner-occupied, single family dwelling, if not more that two single-family dwellings on the same parcel are constructed within one year, plans are submitted to and approved by the city, county or city and county authority, and the city, county, or city and county authority inspects and approves the installation.”

As owner-builder, the permit for the installation of the residential fire sprinkler system will be issued to you and you are responsible for the construction and inspection of said system.

If you sub out the installation of the fire sprinkler system to any contractor, that contractor must possess a valid C-16 license.

SYSTEM ACCEPTANCE

The system shall have a hydrostatic test at 200 psi for a minimum of 15 minutes to visually check for leakage during the piping inspection. When the piping inspection is complete the system will be drained to check that the gauge goes back to zero.

During the hydrostatic test, approved plugs shall be used and the fire sprinkler heads shall not be installed during this time. For the final inspection have all fire sprinklers installed and exposed for visual inspection. 2013 NFPA 13D, Section 11.2