

# Sprinkler System Working Plan Requirements

*The following information is required for permit approval.*

*Working plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system:*

- Make, type, model, and nominal K-factor of sprinklers including sprinkler identification number
- Temperature rating and location of high-temperature sprinklers
- Total area protected by each system on each floor
- Number of sprinklers on each riser per floor
- Total number of sprinklers on each dry pipe system, preaction system, combined dry pipe-preaction system, or deluge system
- Approximate capacity in gallons of each dry pipe system
- Pipe type and schedule of wall thickness
- Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions). Where typical branch lines prevail, it shall be necessary to size only one typical line
- Location and size of riser
- Type and locations of hangers, sleeves, braces, and methods of securing sprinklers when applicable, seismic bracing
- Show location of gauges, test valves, main and auxiliary drains
- Make, type, model, and size of alarm or dry pipe valve
- Make, type, model, and size of preaction or deluge valve
- Model and mounting location of exterior horn or strobe device
- Size and location of standpipe risers, hose outlets, hand hose, monitor nozzles, and related equipment
- Fire service main sizes, lengths, locations, weights, materials, point of connection to city main; the sizes, types and locations of valves, valve indicators, regulators, meters, and valve pits; and the depth that the top of the pipe is laid below grade
- Where the equipment is to be installed as an addition to an existing system, provide the design of the existing system indicated on the plans to make all conditions clear
- The information on the hydraulic data nameplate must be permanently affixed to all hydraulically designed systems
- A graphic representation of the scale used on all plans

- Hydraulic reference points shown on the plan that correspond with comparable reference points on the hydraulic calculation sheets
- The total quantity of water and the pressure required noted at a common reference point for each system
- The setting for pressure-reducing valves
- Information about backflow preventers (manufacturer, size, type)
- Information about antifreeze solution used (type and amount)
- Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in flow tests shall be shown
- Size, location, and piping arrangement of fire department connections
- Seal on the plans
- Catalog cut sheets for all sprinkler, pipe fittings, hangers, and all related equipment

The working plan submittal shall include the manufacturer's installation instructions for any specially listed equipment, including descriptions, applications, and limitations for any sprinklers, devices, piping, or fittings.

Must provide three (4) sets of plans.