



BUILDING SAFETY DEPARTMENT
www.ci.medford.or.us

CITY OF MEDFORD
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Fire Alarm and Fire Sprinkler contractors:

The Building Safety Department and Medford Fire-Rescue will not accept plans for Fire alarm systems or Fire Sprinkler Systems without the following information:

1. Full name, postal address, email address and phone number of contractor;
2. Full name, exact street address and phone number to the property where the system(s) will be installed;
3. Valuation of job;
4. Supporting documentation, including, but not limited to:

Fire Alarm Systems:

- a) Scaled floor plan(s), with cross-sectional views and a graphic scale, that indicates the use of all rooms.
- b) Location of alarm-initiating devices.
- c) Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
- d) Location of fire alarm control unit, transponders and notification power supplies.
- e) Annunciators.
- f) Power Connection.
- g) Battery Calculations
- h) Conductor type and size.
- i) Voltage drop calculations.
- j) Manufacturers' data sheets indicating model numbers and listing information for equipment, devices and materials.
- k) Details of ceiling height and construction.
- l) The interface of fire safety control functions.
- m) Classification of the supervising station.

Fire Sprinkler Systems:

- a) Scaled floor plan(s), with cross-sectional views and a graphic scale, that indicates the use of all rooms
- b) Owners Information Certificate, per NFPA 13, Chapter 4, signed by building owner or their designee.
- c) Location and detail of all components, including sprinkler heads, piping, hangers, bracing, riser, vault, etc.
- d) Hydraulic calculations (Per NFPA 13)
- e) Seismic bracing calculations, detail, and documentation (Per NFPA 13)
- f) If storage, storage arrangement, storage & roof height, rack detail, commodity type etc.
- g) All other necessary supporting documentation (see back of this page for complete details from NFPA 13 regarding Working Plans)

**If incomplete plans are submitted, they will be returned the contractor and/or rejected.
Thank you for your cooperation.**

Fire sprinkler working plans list:

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. (NFPA 13, 2013 Sec 23.1.1)

- (1) Name of owner and occupant.
- (2) Location, including street address.
- (3) Point of compass.
- (4) Full height cross section, or schematic diagram, including structural member information if required for clarity including ceiling construction and method of protection for nonmetallic piping.
- (5) Location of partitions.
- (6) Location of fire walls.
- (7) Occupancy class of each area or room.
- (8) Location and size of concealed spaces, closets, attics, and bathrooms.
- (9) Any small enclosures in which no sprinklers are to be installed.
- (10) Size of city main in street and whether dead end or circulating; if dead end, direction and distance to nearest circulating main; and city main test results and system elevation relative to test hydrant.
- (11) Other sources of water supply, with pressure or elevation.
- (12) Make, type, model, and nominal K-factor of sprinklers including sprinkler identification number.
- (13) Temperature rating and location of high-temperature sprinklers.
- (14) Total area protected by each system on each floor.
- (15) Number of sprinklers on each riser per floor.
- (16) Total number of sprinklers on each dry pipe system, preaction system, combined dry pipe-preaction system, or deluge system.
- (17) Approximate capacity in gallons of each dry pipe system.
- (18) Pipe type and schedule of wall thickness.
- (19) 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
- (20) Location and size of riser nipples.
- (21) Type of fittings and joints and location of all welds and bends. The contractor shall specify on drawing any sections to be shop welded and the type of fittings or formations to be used.
- (22) Type and locations of hangers, sleeves, braces, and methods of securing sprinklers when applicable.
- (23) All control valves, check valves, drain pipes, and test connections.
- (24) Make, type, model, and size of alarm or dry pipe valve.
- (25) Make, type, model, and size of preaction or deluge valve.
- (26) Kind and location of alarm bells.
- (27) Size and location of standpipe risers, hose outlets, hand hose, monitor nozzles, and related equipment.
- (28) Private 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.
- (29) Piping provisions for flushing.
- (30) Where the equipment is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear.
- (31) For hydraulically designed systems, the information on the hydraulic data nameplate.
- (32) A graphic representation of the scale used on all plans.
- (33) Name and address of contractor.
- (34) Hydraulic reference points shown on the plan that correspond with comparable reference points on the hydraulic calculation sheets.
- (35) The minimum rate of water application (density or flow or discharge pressure), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside.
- (36) The total quantity of water and the pressure required noted at a common reference point for each system.
- (37) Relative elevations of sprinklers, junction points, and supply or reference points.
- (38) If room design method is used, all unprotected wall openings throughout the floor protected.
- (39) Calculation of loads for sizing and details of sway bracing.
- (40) The setting for pressure-reducing valves.
- (41) Information about backflow preventers (manufacturer, size, type).
- (42) Information about listed antifreeze solution used (type and amount). Item 42 was revised by a tentative interim amendment (TIA)
- (43) 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.
- (44) Size, location, and piping arrangement of fire department connections.
- (45) Ceiling/roof heights and slopes not shown in the full height cross section.
- (46) Edition year of NFPA 13 to which the sprinkler system is designed.

A signed copy of the owner's certificate and 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. (Sec. 23.)