A permit is required for the installation of fire suppression systems, fire alarm system, or component of such systems, and to comply with the minimum standards necessary to safeguard public health, safety and welfare. In addition, fire permits are required prior to altering, adding or replacing any existing fire suppression. A fire permit is not required for the maintenance of fire suppression systems.

Sprinkler/Suppression/Standpipe systems - Designer of record (installing C-16 contractor) or California licensed Fire Protection or Mechanical Engineer. a valid worker’s compensation certificate, and a business license in the city of work.

Fire Underground systems – Designer of record (installing C-16, C-34, C-36 or General Engineering Contractors A or California licensed Civil or Fire Protection Engineer).

Commercial and Residential Fire Sprinkler plans that exceed five heads may be submitted directly to our third party review contract, Engineered Fire. Engineered Fire, will work with you directly if any revisions are required for the final approval. Once the process is completed with Engineered Fire, they will provide you with an approval letter and a stamped set of plans. The approval letter and the stamped set of plans will then be submitted to the city the work is being performed in to process for a operational permit.

Plants can be directly submitted for review for five sprinkler heads or more to:
Engineered Fire EFS, Inc. 530-274-9400 info@efs1.com
11832 Tammy Way Grass Valley CA 95949

Contact information for each city for submitting plans:

<table>
<thead>
<tr>
<th>Monterey City</th>
<th>Carmel-By-The-Sea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit electronically: <a href="mailto:gogreen@Monterey.org">gogreen@Monterey.org</a></td>
<td>Submit electronically: <a href="mailto:building@ci.carmel.ca.us">building@ci.carmel.ca.us</a></td>
</tr>
<tr>
<td>Payment: paid for by calling 831-646-3908 or mail/check to the City of Monterey 610 Pacific Street Monterey, CA 93940</td>
<td>Payment: paid for by calling 831-620-2018 or mail/check to the City of Carmel-by-the-Sea PO Box CC Carmel, CA 93921</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pacific Grove</th>
<th>Sand City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit electronically: <a href="mailto:building@cityofpacificgrove.org">building@cityofpacificgrove.org</a>  Payment: paid for by calling 831-648-3191 or mail/check to the City of Pacific Grove 300 Forest Ave. 2nd Floor Pacific Grove, CA 93950</td>
<td>Submit electronically: <a href="mailto:gogreen@Monterey.org">gogreen@Monterey.org</a>  Payment: paid for by calling 831-646-3908 or mail/check to the City of Monterey 610 Pacific Street Monterey, CA 93940</td>
</tr>
</tbody>
</table>

Monterey Fire Department Fire Prevention Bureau will be notified of approval and payment. Contractor and or Owner responsibility to schedule an inspections by calling or emailing:

831-646-3908 or fireprevention@monterey.org
The following information is the minimum required for approval of a residential or commercial fire sprinkler submittal. All fire sprinkler plans submitted shall have the following information on plans.

**General**
1. Property address
2. Accessors Parcel Number (APN)
3. Name and address of the property owner and/or general contractor
4. Name, address, phone, email, and license number of installing sprinkler contractor
5. City water pressure information. Indicate the source of the information.
6. Well, pump, and storage tank information. Include a well report and data sheet for the pump and or tank
7. Full height building cross section showing the location of the sprinkler heads and piping
8. Symbol legend
9. Sprinkler legend including totals for the project

**Site Plan**
1. Relevant property lines
2. Outline of residence and any additional structures located on the property
3. North arrow
4. Streets adjoining property
5. Access roads, driveways, etc.
6. Location, size, pipe type, and length of underground supply line from the city main to the water meter
7. Location and size of the water meter
8. Location, size, pipe type, and length of underground supply line from water meter to house
9. Location and size of the fire sprinkler riser
10. Elevation difference between the base of the fire sprinkler riser and the city connection
11. Hydraulic reference points

**Fire Sprinkler Riser Detail**
1. Location of main control valve for the domestic and fire sprinkler systems
2. Location of the domestic tie-in showing the domestic control valve
3. Location of the water flow switch, check valve, pressure gauges, and test/drain assembly
4. Location of transitions between all piping materials
5. Hydraulic reference points
FIRE SPRINKLER PLAN SUBMITTAL & INSPECTION REQUIREMENTS

Piping Plans

1. All plans must be drawn to an indicated scale on a minimum sheet size of 24” x 36”
2. Completely dimension the plans. Dimension the sprinkler heads off of all adjacent walls
3. Location and type of all light fixtures. Indicate the size and depth of all fixtures that are not flush with the ceiling
4. Location of all heat producing devices (i.e. fireplaces, wood stoves, ovens, ranges, diffusers, furnace, water heaters, etc.) Show the heat zone of each device and maintain the proper distances from these devices.
5. Show location of ceiling fans
6. Ceiling elevations. Clearly indicate any sloped, beamed, or special shaped ceilings. Indicate the degree of slope (or rise/run) on all sloped ceilings.
7. Size, depth, and spacing of any exposed beams
8. Provide room names
9. Clearly indicate the use of any area or room where sprinkler protection is not being provided
10. The location of all sprinkler heads
11. All sprinklers must be spaced along the slope of the ceiling
12. Indicate the type, size, and length of all pipe
13. Indicate the type and location of all pipe hangers
14. Riser location
15. Location of the alarm bell
16. Method of freeze protection
17. Hydraulic reference points
18. Indicate the basis for the hydraulic design (i.e. 16 x 16 spacing, 18 x 18 spacing, etc.)
19. All sprinklers must comply with the current UL 1626 requirements providing a minimum density of .05-gpm/sq ft. (The discharge requirements and number of design sprinklers shall be in accordance with the manufacturer’s literature).
20. Pilot sprinkler shall be installed at 20-foot (maximum) intervals along all roof ridgelines.
21. The fire sprinkler system flow switch shall be interconnected with the smoke detection system for audible alerting purposes.
22. A 200-psi hydrostatic test will be required.
23. A final inspection will be conducted to verify head installation, verify pressure and meter size
23.1.1* Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or remodeled.

23.1.2 Deviation from approved plans shall require permission of the authority having jurisdiction.

23.1.3 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:

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 and 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 preventer (manufacturer, size, type).

(42) Information about listed antifreeze solution used (type and amount).

(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.
INSPECTION REQUIREMENTS

1. Rough/Hydro; 200 psi holding for 2 hours & visual inspection of all piping.
2. Final Fire Sprinkler; flow of system at inspectors test valve with bell activation.
3. Verification system pressure and correct meter size.
4. Main refrigerator on same circuit as fire bell for residential/separate dedicated circuit for commercial.
5. If project has a monitored fire alarm, the fire alarm shall be tested at the same inspection.
6. 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.

AS BUILTS REQUIRED IF MODIFYING INSTALLATION FROM APPROVED PLANS

Water Supply Connection

1" Minimum combination domestic and fire service connection