



**City of Carmel-by-the-Sea
Building Safety Division
Standard Operating Guidance**

17-05 Residential Fire Sprinkler Requirements

Background

Residential fire sprinklers enhance public safety, control fire protection costs to the community, and improved durability in the built environment by reducing injuries, deaths, and damage from home fires. The City of Carmel and State of California have adopted requirements for the installation of residential fire sprinklers in new and remodel construction. This SOG provides guidance on the implementation of residential fire sprinkler retrofit requirements.

Citations

Carmel Municipal Code Title 8.32.100, Section 102.1(5)

Guidance

The City of Carmel contracts with the Monterey Fire Department for fire protection services, including fire protection system review, permitting, and inspection. All fire protection system plans, specifications, and calculations shall be approved by the Fire Marshal at the Monterey Fire Department prior to beginning work on the system.

New Construction:

Residential fire sprinklers are required to be installed in all Group R occupancies as defined in the CA Building Code (CBC). Plans submitted for building permits for new residential construction are required to contain a note specifying that fire sprinklers will be installed and indicating the type of system proposed for the project (13, 13R, or 13D as applicable to the Group R occupancy).

Remodel Construction:

Fire sprinklers are required to be installed retroactively in Group R occupancies undergoing additions, alterations, or repairs that involve the addition, removal, or replacement of fifty percent (50%) or greater of the linear length of the walls of the existing building (exterior plus interior) within a five year period.

When a project involves the addition, removal, or replacement of walls, the design professional in responsible charge for the project shall provide wall calculations demonstrating whether fire sprinkler system retrofit is required. When a remodel project for which a permit has been approved is revised to include the addition, removal or replacement of walls the calculations shall be updated to reflect the revised conditions and fire sprinkler requirement based on the revised project scope.

Fire System Permit Required:

A permit is required for the installation and modification of fire sprinkler systems. When the fire system plans, calculations, and specifications are not submitted at the time of the building permit application, the fire sprinkler permit shall be designated as a deferred submittal on a City of Carmel, Deferred Submittal Agreement.

When the fire system permit documents are ready for submittal, they shall be submitted directly to the Fire Marshal at the Monterey Fire Department, 600 Pacific St. in Monterey, CA. Submittals shall be accompanied by a City of Carmel-by-the-Sea, Fire System Permit Application form.

System Inspections:

Inspections of fire systems during construction are also conducted by the Monterey Fire Department. Inspections typically include a rough inspection, prior to concealing the system in the buildings construction, where the following are inspected:

- Rough piping installation;
- Head locations; and
- Hydrostatic pressure test for 2 hours. prior; and a final inspection upon completion of the system.

A final inspection is conducted prior to final approval of the building permit and issuance of the Certificate of Occupancy. The final inspection includes:

- Verify water meter size;
- Water line size;
- Static pressure;
- Verifying no sprinkler head obstructions;
- Test of the system flow-alarm bell;
- Verification of the bell circuit; and
- Verification of compliance with NFPA 13R or 13D as applicable to the project.

Contact the Fire Marshal at the Monterey Fire Department to schedule fire system inspections.

For further information on residential fire sprinkler requirements contact the contract Fire Marshal at Monterey Fire Department, 831-646-3900.