

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

17-11 Determining Res. Fire Sprinkler Retrofit Requirements

Background

The City of Carmel-By-The-Sea and State of California have adopted regulations related to the installation of fire sprinkler systems in existing residential buildings undergoing remodeling or alterations. Because retrofit of sprinkler protection in existing buildings can be expensive, it's important that applicant's are aware of the requirements relative to their project before the building permits are issued. This SOG provides guidance on determining when retrofit of residential fire sprinkler systems is required.

Citations

Carmel Municipal Code (CMC), Title 8.32 Carmel Municipal Code, Title 15.08.130

Guidance

CMC 8.32.100 (3) states that the construction and design provisions of this code shall apply to: "(5) Existing structures to which additions, alterations or repairs are made 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."

The Chapter continues with: "(24) 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided in all buildings with a Group R fire area, including, but not limited to, one- and two-family dwellings, townhomes, and manufactured homes and mobile homes located outside of licensed mobile home parks hereafter constructed, moved into, or relocated within the jurisdiction, including all additions to buildings already equipped with automatic fire sprinkler systems."

To verify the sprinkler requirements for residential remodel or addition projects applicants shall submit with their building permit application a calculation of the wall lengths as described in 8.32.100.

Total existing Building Wall Length (EWL) = (Includes the total length of all interior and exterior walls)
Total length of all walls being added, removed, or replaced in the project (MWL) =
Total length of all walls added, removed, or replaced in the previous 5 years =
MWL / EWL =
Figure 1

If the quotient of MWL/EWL equals or exceeds 50% (.50) then a fire sprinkler system shall be installed throughout the residence.

Applicants are required to provide the information in Figure 1 above on the cover sheet of their plans when the project involves ANY addition, removal or replacement of walls.