



Sprinkler Protection for Balconies, Canopies, Porte-cochères, and Decks

FIRE-9-3

The purpose of this Technical Bulletin is to establish the minimum requirements for the design and installation of sprinklers for balconies, canopies, porte-cochères, and decks. Depending on the type of sprinkler system provided, sprinklers may or may not be required for balconies, canopies, porte-cochères, decks, exterior roofs, and similar projections. See below for the requirements for sprinklers for NFPA 13, 13R and 13D systems.

I. DEFINITIONS

For the purposes of this policy the following definitions apply.

Balcony: A platform that projects from the wall of a building and is surrounded by a railing, balustrade, or parapet. This policy considers patios, decks, and porches to be synonymous with balconies. For the purposes of this policy, rooms that are recessed from the wall of the building, even if identified as “balconies”, “porches”, or “decks” on the drawings will be treated as rooms.

Canopy: A permanent structure or architectural projection of rigid construction over which a covering is attached that provides weather protection, identity or decoration.

Open: Exposed to outside temperature on at least one side.

II. NFPA 13 SYSTEMS

NFPA 13 systems require sprinklers under roofs, canopies, porte-cochères, balconies, decks or similar projections depending on the construction of the projection or the use of the space below the projection.

A. Sprinklers are required when the projection is greater than 2 feet in width when combustibles are stored underneath. Storage such as planters, delivered packages or newspaper machines is not considered combustible storage for the purposes of this requirement. The following assumptions shall be used in determining if sprinklers may be eliminated.

1. For apartments or condominiums, combustibles shall be considered stored and handled under all balconies, exterior roofs or attached canopies.
2. For hotels or motels, combustibles shall not be considered stored or handled under all balconies, roofs or attached canopies.

B. Sprinklers are required under roofs, canopies, porte-cochères, balconies, decks or similar projections greater than 4 feet in width except for

Documents Referenced in this Technical Bulletin

- 2013 California Building Code (CBC)
- 2013 California Fire Code (CFC)
- National Fire Protection Association Standard for the Installation of Sprinkler Systems (NFPA 13)
- National Fire Protection Association Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes (NFPA 13D)
- National Fire Protection Association Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies (NFPA 13R)

the following situations:

1. If the projection is constructed with noncombustible, limited-combustible or fire retardant-treated wood per NFPA 703.
2. If the projection is constructed with combustible construction but the exposed finish material is noncombustible, limited-combustible or fire retardant treated wood per NFPA 703, and only contain sprinkler concealed spaces or the following unsprinklered combustible concealed spaces:
 - a. Combustible concealed spaces filled entirely with noncombustible insulation.
 - b. Light/ordinary hazard occupancies where noncombustible or limited combustible ceilings are directly attached to the bottom of solid wood joists so as to create enclosed joist spaces 160 ft³ or less in volume, included in the space below the insulation that is laid directly on top or within the ceiling joists in an otherwise sprinklered attic.
 - c. Concealed spaces over small roofs or canopies not greater than 55 ft² in area.

III. NFPA 13R SYSTEMS

NFPA 13R systems require sprinklers for all projections when the building is of Type V construction as defined by the California Building Code. In addition, NFPA 13R systems require sprinklers under roofs, canopies, porte-cochères, balconies, decks or similar projections where the projection is not considered open as defined in Section I.

IV. NFPA 13D SYSTEMS

NFPA 13D systems require sprinklers for patios, decks and porches that are not considered open per the definition in Section I.