



Open Free-Standing Accessory Structures

The California Building Code's and California Fire Code's criteria for an open accessory structure.

CODE REFERENCE

2016 California Building Code (CBC), 2016 California Residential Code (CRC), and NFPA 13

BACKGROUND

There have been questions regarding what code requirements should be applied to an open free-standing accessory structure with roof canopy. The code requirements of concern include:

- Building occupancy (CBC 310, 311 or 312),
- Allowable building area and height (CBC 503, 506 or 508),
- Building type of construction (CBC 601 or 602),
- Opening protection due to the location to the property line (CBC 705), and
- Roofing classification (CBC 1505).

These code sections may require the structure to have fire-rated construction and opening protections due to its construction type and distance to the property line or to other buildings on the same lot.

Per NFPA 13, section 8.15.13, a sprinkler head must be installed below a roof or a suspended open grid that is less than 70% open. A grid that is more than 70% open will not trap enough heat to activate a sprinkler.

Pursuant to the Oakland Hills Fire of 1991, the Office of the State Fire Marshall passed emergency legislation to prohibit non-rated roof coverings. The intent of this legislation was to address the spread of fire to adjacent buildings from flying embers.

Compliance with the City of San Jose zoning code is not included in this policy. The designer is referred to Title 20 of the San Jose Municipal Code for setbacks, PD conditions, and other restrictions.

FINDINGS

A roof that is open 70% or more - Will be deemed to be substantially open; therefore, the structure will not be regulated for location on property, occupancy separations, fire resistive construction, and allowable area.

A roof that is less than 70% open - Must meet all requirements of a covered building. However, a roof that is at least 50% open is deemed sufficiently open that the framing members cannot pass fire to one another, therefore the State Fire Marshall restrictions on a non-rated roof would not apply. Additionally, an open structure accessory to R3 occupancies shall be located no closer than 2 feet to property line or imaginary property line.

A roof that is less than 50% open - Must use materials that meet the flame spread requirements for roofs in accordance with CBC Table 1505.1, or are non-combustible. One-hour construction is required based on fire separation distance to property line, which is 2 feet for a structure that is accessory to the R3 occupancy. Where the roof of an open structure is at least 50% open and is installed on buildings that are fire rated construction, the use of non-combustible construction is an acceptable substitute.