



RESIDENTIAL SMOKE & CARBON MONOXIDE ALARMS

BUILDING INSPECTION REQUIREMENTS

Following are general requirements for the installation of smoke alarms and carbon monoxide alarms in residential buildings based on the 2019 California Building Code, 2019 California Residential Code, and the 2019 California Fire Code. Please contact the Building Inspection Division for any questions or additional information.

New Construction and Additions

In new construction and additions, required smoke alarms and carbon monoxide alarms shall receive their primary power from the permanent building electrical power system. Where two or more smoke alarms or carbon monoxide alarms are required, they shall be interconnected in such a manner that actuation of one shall cause actuation of all detectors in the dwelling unit. (CBC 907.2.11, CRC R314, CRC R315)

All new electrical outlets (including smoke alarms, carbon monoxide alarms, receptacles, switches, lighting, etc.) shall be on circuits protected with a combination arc-fault circuit interrupter. (CEC 210.12)

Remodeled Dwelling Units

When a permit is required for any repair, alteration, or addition, smoke alarms and carbon monoxide alarms shall be installed in accordance with the following location and maintenance provisions. In existing dwelling units, smoke alarms and carbon monoxide alarms may be solely battery operated in the following circumstances (CBC 907.2.11, CRC R314, CRC R315):

- No construction is taking place.
- There is no commercial power source.
- Interior wall or ceiling finishes are not removed.
- Scope of work is limited to the exterior of the residence.

Rooms/Spaces that Require Smoke Alarms and Carbon Monoxide Alarms:

Room/Space	Smoke Alarm Required? (CBC 907.2 and CRC R314)	Carbon Monoxide Alarm Required? (CBC 907.2 & CRC R315)
Outside of each separate sleeping area in the immediate vicinity of bedrooms (i.e. hallway)	Yes	Yes
In each sleeping room	Yes	No
In each sleeping room with fuel burning appliance	Yes	Yes
In each story within a dwelling unit, including basements	Yes	Yes
In enclosed common stairwells of apartment complexes and other multiple-dwelling complexes	Yes	No
In a group R-3.1 (i.e. adult residential facilities), in addition to the above, smoke alarms shall be provided throughout the habitable areas of the dwelling unit except kitchens	Yes	No

Smoke Alarm and Carbon Monoxide Alarm Device Location

Smoke and Monoxide Alarms (CBC 907.2.11, CRC 314.3, CRC 315.1)

Smoke alarms shall be installed per manufacturer's installation instructions in all sleeping rooms, each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. All battery powered smoke alarms shall have a 10-year battery.

Carbon monoxide alarms shall be installed per manufacturer's installation instructions in each area/hallway adjacent to sleeping rooms, each bedroom containing (or opening to a bathroom containing) a fuel burning appliance, each story of the building, and any basement. Carbon monoxide alarms are not required if there is no fuel-burning appliance or fire place, and the garage is detached from the house.

Maintenance

The owner shall be responsible for testing and maintaining detectors in hotels, motels, lodging houses, and common stairwells of apartment complexes and other multiple dwelling complexes. The smoke alarm shall be operable at the time that the tenant takes possession. The apartment complex tenant shall be responsible for notifying the manager or owner if the tenant becomes aware of an inoperable smoke alarm within his or her unit. The owner or authorized agent shall correct any reported deficiencies in the smoke alarm and shall not be in violation of this section for a deficient smoke alarm when he or she has not received notice of the deficiency. (CRC R314.8.2 and California Health and Safety Code 13113.7)

Smoke Alarm Batteries and Replacement

All newly installed smoke alarms shall have a 10-year battery. Smoke alarms shall be replaced 10 years from the date of manufacture marked on the unit. (SB 745, 2014)