



BUILDING DIVISION REQUIREMENTS

Following is a list of the general requirements for the installation of smoke alarms and carbon monoxide alarms for residential buildings based on the 2022 California Building Code, 2022 California Residential Code, and the 2022 California Fire Code. This brochure is intended to provide general information, contact the Building Safety 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 (and shall be on the lighting circuit connected within the same room as the smoke alarm). 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.

Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise with all intervening doors closed. (CBC 907.2.11.5, CRC R314.4, 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. (2022 CEC 210.12)

Alterations

When a permit is required for any repair or alterations, smoke alarms and carbon monoxide alarms shall be installed in accordance with the following location and maintenance provisions. In alterations where interior walls or ceiling finishes are removed, smoke alarms and carbon monoxide shall receive their primary power from the permanent building electrical power system and be interconnected. Refer to CRC R314.6 and 315.6 for exceptions where smoke alarms and carbon monoxide alarms may be battery operated. Refer to CRC R314.4 and 315.5 for exceptions where smoke alarms and carbon monoxide are not required to be interconnected. (CBC 907.2.11, CRC 314, CRC 315)

Rooms/Spaces that Require Smoke Alarms and Carbon Monoxide Alarms

Room/Space	Smoke Alarm Required? (CBC 907.2 and CRC 314)	Carbon Monoxide Alarm Required? (CBC 907.2 and CRC 315)
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 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
Bedroom with fuel-burning appliance	Yes	Yes

Smoke Alarm and Carbon Monoxide Alarm Device Location

Smoke alarms shall be installed on the ceiling or wall between 4” and 12” of the ceiling. Carbon monoxide alarms shall be installed on the ceiling or wall above the door header.

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. (CFC 907.9 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. (CBC 907.2.11.2, CRC 314, CRC 315)