

2022 California Residential Code • Smoke & Carbon Monoxide Alarms

Smoke Alarms

R314.2.2 Alterations, repairs, and additions: Where alterations, repairs, or additions requiring a permit occur, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

General guidelines for the installation of alarms shaft comply with the following requirements: Section R314 - Smoke

R314.3 - Alarm Locations

- In each sleeping room.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces
 and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between
 the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level
 provided that the lower level is less than one full story below the upper level.
- Installation near bathrooms: Smoke alarms shall be installed not less than a 3-foot horizontal distance from the door or
 opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm
 required by other sections of the code.
- In hallway and in the room opening to hallway in dwelling units where the ceiling height of a room open to a hallway serving bedrooms exceeds that of the hallway by 24 inches or more.
- Smoke alarms and smoke detectors shall not be installed within a 36in. horizontal path from the supply registers of a forced air heating or cooling system and shall be installed outside of the direct airflow from those registers.
- Smoke alarms and smoke detectors shall not be installed within a 36 in. horizontal path from the tip of the blade of a ceiling-suspended (paddle) fan.
- For tray-shaped ceilings (coffered ceilings), smoke alarms and smoke detectors shall be installed on the highest portion of the ceiling within 12 in. vertically down from the highest point.
- Smoke alarms shall receive their primary power from the building wiring and be equipped with a battery backup.

R314.4 Interconnectivity: Smok alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery.

R314.6 Power source: Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery.

Rev. 09-07-2022

Carbon Monoxide Alarms

R315.2.1 – Existing buildings and new construction: For existing buildings and new construction, carbon monoxide alarms shall be provided in dwelling units where either or both the following conditions exist.

- The dwelling unit contains a fuel-fired appliance or fireplace.
- The dwelling unit has an attached garage with an opening that communicates with the dwelling unit.

R315.2.2 Alteration, repairs, and additions.: Where an addition is made to an existing dwelling or a fuel-fired heater, appliance or fireplace is added to an existing dwelling, not previously required to be provided with carbon monoxide alarms, new carbon monoxide alarms shall be installed in accordance with Section R315.

Exceptions:

- Working involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
- Installation, alteration, or repair of plumbing systems
- Installation, alteration, or repairs of mechanical systems that are not fuel-fired.

R315.3 - Carbon Monoxide Alarms Location

- Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- On every occupiable level of a dwelling unit, including basements.
- Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed.

R315.5 Interconnectivity: Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit.

R315.6 Power source: Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery.

Exception:

• Carbon monoxide alarms installed in accordance with section R315.22 shall be permitted to be battery power.