



Smoke and Carbon Monoxide Alarms in New and Existing Single and Two Family Dwellings

2025 California Residential Code, Section R310 –R311 and NFPA 72

Smoke alarms (smoke detectors) and carbon monoxide alarms save lives. They provide the opportunity for escape by early detection of smoke, fire or carbon monoxide gases.

Smoke and carbon monoxide alarms are required in new and existing dwellings ***anytime*** a permit with a job valuation of more than \$1,000.00 is issued for an addition, repair or alteration.

Smoke and carbon monoxide alarm locations:

1. Outside each sleeping area (hallway) in the immediate vicinity of bedrooms.
2. On every story of the dwelling, including basements and habitable attics. Split levels are considered one story.

Additional smoke alarms are required in each sleeping room and any room with a closet.

Power source: Smoke and carbon monoxide alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in removal of interior walls and ceilings affecting the work area. In new construction and bedroom additions, smoke and carbon monoxide alarms shall receive their primary power from building wiring, shall be interconnected with other required alarms and equipped with battery backup.

Installation guide lines: Smoke and carbon monoxide alarms shall be installed in accordance with the manufacturer's installation instructions. Smoke alarms and combination smoke/carbon monoxide alarms shall be installed as follows:

- **Flat ceilings:** centrally located in sleeping room.
- **Peaked ceiling:** within 36" horizontally of the peak and not closer than 4" vertically to peak.
- **Sloped ceiling:** within 36" horizontally of the high side of the ceiling and not closer than 4" to the adjoining wall.
- **Coffered ceiling:** highest flat portion or sloped portion within 12" from highest point.
- **Wall mounting:** not farther than 12 inches from adjoining ceiling and no closer than 4".
- Alarms shall not be installed within 36" of a bathroom containing a tub or shower.
- Alarms shall not be installed within 36" of a supply register of a forced air heating/cooling system.
- Alarms shall not be installed within 36" of a paddle-type ceiling fan blade.

Updated 1/21/2026

Smoke alarms in existing residences*

- Maintained per manufacturer's installation instructions
- Alarms that no longer function must be replaced
- Must be replaced after 10 years from the date marked from the manufacturer
- Conventional ionization smoke alarms solely battery operated must be equipped with a ten-year battery and have a silence feature.
 - Must also be listed as complying with ANSI/UL 217.

Updated 1/21/2026

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