Smoke Detectors and Carbon Monoxide Alarms in Existing Single Family Dwellings
(Sections R314.8, and R315 - 2016 California Residential Code (CRC))

Additions, alterations, or repairs to group R occupancies. When the valuation of an addition, alteration, or repair to a group R occupancy exceeds $1,000 and a permit is required, or when one or more sleeping rooms are added or created in existing group R occupancies, smoke detectors and Carbon Monoxide Alarms shall be installed in accordance with the following:

Location within dwelling units. In dwelling units, a detector/alarm shall be installed in each sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a detector shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke detector shall be installed on the upper level, except that when the lower level contains a sleeping area, a detector shall be installed on each level. When sleeping rooms are on an upper level, the detector shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room. Detectors shall sound an alarm audible in all sleeping areas of the dwelling unit in which they are located.

LOCATIONS: See Sections R314.8 Smoke Alarms & Section R315.3 Carbon Monoxide Alarms for more specific detailed requirements.

A. Centrally located in the hallway (if no hallway, the area adjacent to the bedroom door) giving access to the bedrooms.
B. In any room that opens into the hallway that has a ceiling level, at any location, 24 inches higher than the lowest ceiling level of the hallway.
C. On the ceiling in close proximity to the stairway.
D. On the lower level ceiling in close proximity to the stairway.
E. In the sleeping rooms
**NOTE:** Hallway (*corridor*) - A passageway giving access to rooms. Usually enclosed by walls between 3 feet and 5 feet in width.

**AUDIBILITY:** All detectors must be audible in the bedrooms. Connecting the detectors in series is not required.

**NOTE:** If any area of a bedroom is more than 30 feet from a detector, an additional detector shall be installed in the bedroom.

**POWER SOURCE:** Smoke detectors and/or Carbon Monoxide Alarms may be solely battery operated when installed in the existing building.

All smoke detectors are to be installed in accordance with the approved manufacturer's instructions. The above information is not intended to violate any manufacture's specifications or instructions, but is to be used for interpretation of the Building Code.