

This Tip Sheet reflects code requirements of the 2015 International Residential Code (IRC)

Smoke and carbon monoxide alarms must be provided in all required locations and must be:

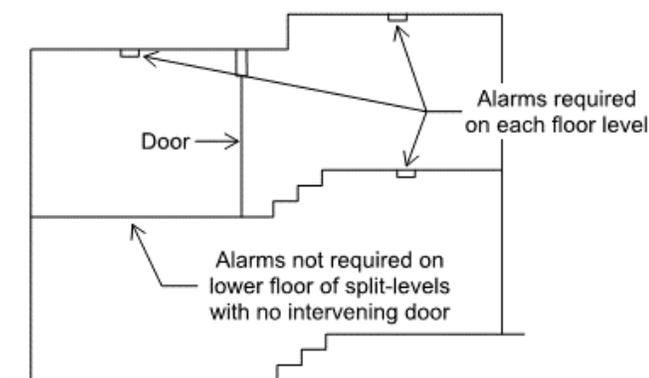
- In compliance with sections R314 and R315
- Audible in all parts of the house
- Installed per manufacturer's instructions
- Comply with NFPA 72 and R314
- Required smoke alarms and carbon monoxide alarms must be connected to the main electrical system and be provided with a battery backup.

Existing Homes where alterations, repairs, or additions are being done

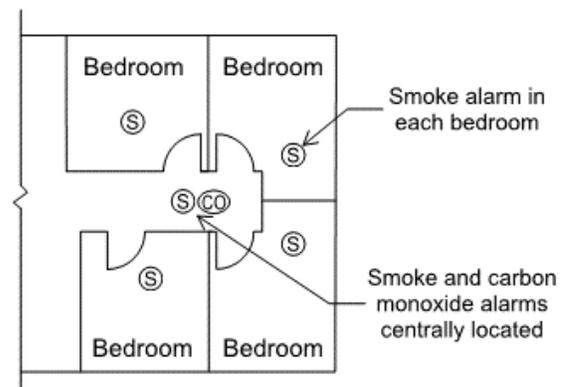
Required Smoke Alarms and carbon monoxide alarms must be installed in locations as required for new homes (interconnection and hard-wire power may or may not be required). There are exceptions in the following sections if the work is limited to the exterior or plumbing/mechanical systems, see: R314.2.2, R314.4, R314.6, R315.2.2, R315.5

Required Locations:

- Smoke alarms shall be located in each sleeping room
- Smoke alarms and carbon monoxide alarms shall be located outside each sleeping area in the immediate vicinity of the bedrooms.
- Smoke alarms shall be located on every floor level, including basements (does not include crawlspace and uninhabitable attics).
- In split level floor plans, at the upper level, provided there is no intervening door between adjacent levels and the lower level is less than a full story below the upper level.
- A carbon monoxide alarm is required in a bedroom when a fuel-burning appliance is installed in the bedroom or its attached bathroom.
- A combination alarm (combined smoke and carbon monoxide alarm) is acceptable in any required location.



Section View



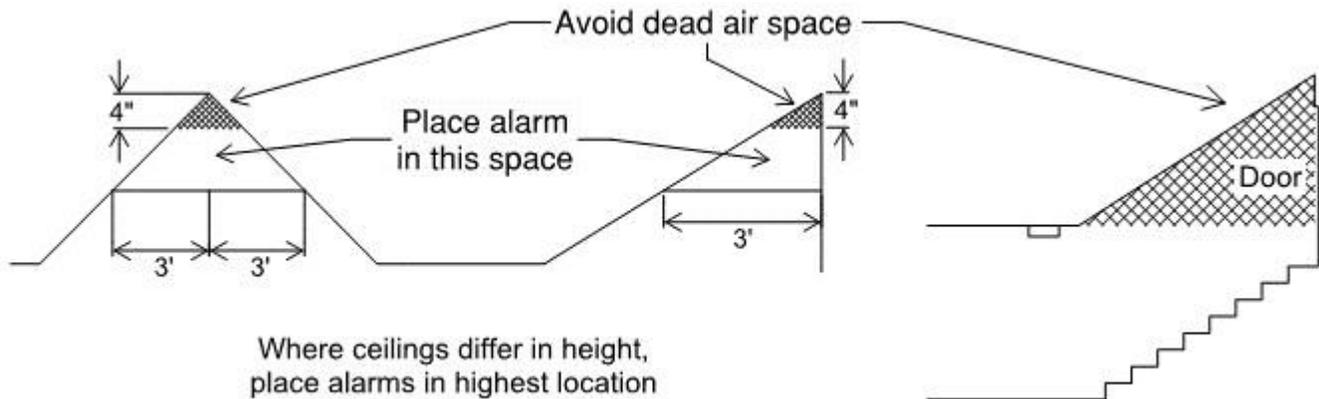
Plan View

GENERAL INFORMATION:

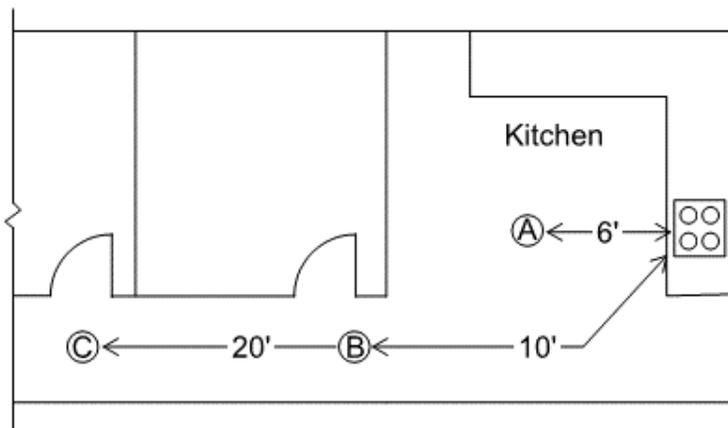
- The intent of this Tip Sheet is to provide a general understanding of the code requirements and does not address the subject in great detail.

Typical Smoke Alarm Location Limitations (Installation instructions will govern)

- Wall mounted alarms must be not more than 12 inches from the adjoining ceiling surface.
- Avoid placing alarms less than 3 feet from supply registers of a forced air heating or cooling system and do not place alarms in the direct airflow of the registers.
- Avoid placing alarms within 3 feet horizontally from doors to bathrooms containing a bathtub or shower.
- Do not place alarms in spaces where temperatures may be above or below the alarm's operating temperature range.
- Do not place alarms within 3 feet of the blades of a ceiling fan.
- Alarms in peaked or sloped ceilings must be within 3 feet of the peak, measured horizontally, but not in the highest 4 inches of the ceiling, measured vertically. (See figure below)
- Avoid placing alarms in dead air spaces. (See figure below)



Smoke Alarms near Cooking Appliances



- A. Photoelectric smoke alarms must not be less than 6 feet from a permanent cooking appliance.
- B. Ionization smoke alarms with an alarm-silencing switch must not be less than 10 feet from a permanent cooking appliance.
- C. Ionization smoke alarms without an alarm-silencing switch must not be less than 20 feet from a permanent cooking appliance.

Typical Carbon Monoxide Alarm Location Limitations (Installation instructions will govern)

- Do not place alarms directly above or beside fuel-burning appliances.
- Do not place alarms in direct sunlight.
- Do not place alarms in low areas where children can reach. Do not place alarms behind curtains or any structure that might prevent carbon monoxide from reaching the sensor.

GENERAL INFORMATION:

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