

SMOKE ALARMS

New construction

Single and multiple-station smoke alarms shall be installed:

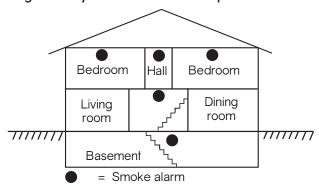
- 1. In each sleeping room.
- 2. Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
- 3. On each additional story of the dwelling, including basements and cellars, but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels 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.

When more than one smoke 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 unit. Manufacturer's instructions must be followed for proper location.

Power source

In new construction, the required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source. When primary power is interrupted, it shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for over-current protection. Smoke alarms may be battery-operated when installed in buildings without commercial power, or in buildings that undergo alterations, repairs or additions.

Single-family home smoke alarm placement



Alterations, repairs or additions

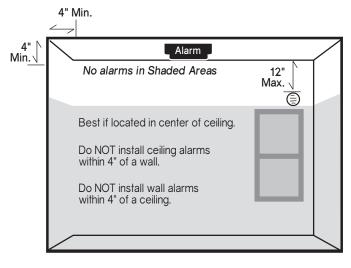
When alterations, repairs or additions require a permit, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings. The smoke alarms shall be interconnected and hardwired.

Exceptions:

- Smoke alarms in existing areas shall not be required to be interconnected and hardwired where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure.
- 2. Work on the exterior surfaces of dwellings, such as roofing or siding, or the addition of an open porch or deck, or chimney repairs.

Installation in existing homes

Smoke alarm placement in sleeping room



- Smoke alarms must be mounted on the ceiling at least four inches from a wall or on a wall with the top of the alarm not less than four inches, or more than 12 inches, below the ceiling.
- Smoke alarms should not be located within kitchens, garages or in other spaces where temperatures can fall below 32° F or exceed 100° F.
- Smoke alarms should not be located within three feet of supply registers for a forced air heating or

(continued)

Smoke alarm placement (cont.)

cooling system and doors to a kitchen or bathroom with tub or shower because these conditions cause excessive, erratic and unreliable operations.

- Smoke alarms in rooms with ceiling slopes greater than 1-foot rise per 8 feet horizontally shall be located at the high side of the room.
- A smoke alarm installed in a stairwell should be located to ensure that smoke rising in the stairwell cannot be prevented from reaching the detector by an intervening door or obstruction.
- If there are no bedrooms in the basement, the recommended location of the detector is then in close proximity to the stairway leading to the floor above.
- Smoke alarms should not be located within 36 inches horizontally of ceiling fan blades.
- Life expectancy of smoke alarms is about 10 years. When replacing a hardwired smoke alarm the replacement must also be hardwired.
- Smoke alarms must be adequately secured.
- In all cases install smoke alarms according to the manufacturer's instructions.

CARBON MONOXIDE ALARMS

New construction

For new construction, every one-family dwelling unit, two-family dwelling unit, and each townhouse dwelling unit shall have an approved and operational carbon monoxide alarm installed when one of the following conditions occur:

- 1. Fuel-fired appliances are installed; or
- 2. Have attached garages.

Alterations, repairs or additions

Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with alarms located as required for new dwellings.

Exceptions:

- Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition of an open porch or deck, or chimney repairs.
- Installation, alteration or repairs of plumbing, electrical, or mechanical systems are exempt from the requirements of this section.

Installation and alarm requirements

Carbon monoxide alarms shall be installed outside and not more than 10 feet from each separate sleeping area or bedroom. Alarms shall be installed on each level containing sleeping areas or bedrooms.

Carbon monoxide detection systems

Carbon monoxide detection systems that include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720, shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner and shall be monitored by an approved supervising station.

Single-station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with the manufacturer's installation instructions.

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