

Southwest Washington Chapter of ICC

This construction detail is illustrative of the minimum standard of construction based upon the 2021 IRC / WAC 51-51

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R314.2.1 New construction.

Smoke alarms shall be provided in dwelling units. A heat detector or heat alarm shall be provided in new attached garages.

R314.2.2 Alterations, repairs and additions.

Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, or where an accessory dwelling unit is created within an existing dwelling unit, each dwelling unit shall be equipped with smoke alarms as required for new dwellings.

Exceptions:

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

R314.2.3 New attached garages.

A heat detector or heat alarm rated for the ambient outdoor temperatures and humidity shall be installed in new garages that are attached to or located under new and existing dwellings. Heat detectors and heat alarms shall be installed in a central location and in accordance with the manufacturer's instructions.

Exception: Heat detectors and heat alarms shall not be required in dwellings without commercial power.

R3 I 4.3 Location.

Smoke alarms shall be installed in the following locations:

- 1. In each sleeping room.
- 2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- 3.On each additional story of the dwelling, including basements and habitable attics and 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.
- 4. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally 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 Section R314.3.
- 5. In napping areas in a family home child care.
- 6.In the hallway and in the room open to the 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 (610 mm) or more.
- 7. Within the room to which a loft is open, in the immediate vicinity of the loft.



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R314.3.1 Installation near cooking appliances.

Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section R3 I 4.3.

- I .lonization smoke alarms shall not be installed less than 20 feet (6096 mm) horizontally from a permanently installed cooking appliance.
- 2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet (3048 mm) horizontally from a permanently installed cooking appliance.
- 3. Photoelectric smoke alarms shall not be installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking appliance.
- 4.5moke alarms listed and marked "helps reduce cooking nuisance alarms" shall not be installed less than 6 feet (1828 mm) horizontally from a permanently installed cooking appliance.

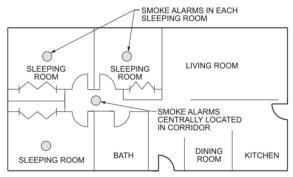
R314.4 Interconnection.

Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R3 I 4.3, 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. Where an accessory dwelling unit is created within an existing dwelling unit all required smoke alarms, in the accessory dwelling unit and the primary dwelling unit, shall be interconnected in such a manner that the actuation of one alarm will activate all alarms in both the primary dwelling unit and the accessory dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

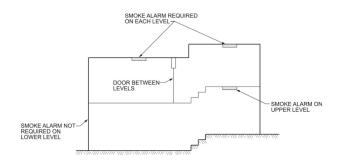
Exception: Smoke alarms and alarms installed to satisfy Section R3 I 4.4. I shall not be required to be interconnected to existing smoke alarms where such existing smoke alarms are not interconnected or where such new smoke alarm or alarm is not capable of being interconnected to the existing smoke alarms.

R3 | 4.4. | Heat detection interconnection.

Heat detectors and heat alarms shall be connected to an alarm or a smoke alarm that is installed in the dwelling. Alarms and smoke alarms that are installed for this purpose shall be located in a hallway, room, or other location that will provide occupant notification.



SMOKE ALARMS REQUIRED ON EACH STORY, INCLUDING BASEMENT





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R315.2.1 New construction.

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units and on each level of the dwelling in accordance with the manufacturer's recommendation.

R3 I 5.2.2 Alterations, repairs and additions.

Existing dwellings shall be equipped with carbon monoxide alarms in accordance with Section R3 | 5.2. |. An inspection will occur where alterations, repairs, or additions requiring a permit occur, or where one or more sleeping rooms are added or created.

Exceptions:

- I. Work involving only 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, is exempt from the inspection requirements of this section.
- 2.Installation, alteration or repairs of nonfuel burning plumbing or mechanical systems or electrical systems are exempt from the inspection requirements of this section.
- 3. Owner-occupied single-family residences legally occupied before July 26, 2009. RCW 19.27.530 (2)(b).

R3 I 5.3 Location.

Carbon monoxide alarms in dwelling units shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each level of the dwelling and in accordance with the manufacturer's recommendations. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

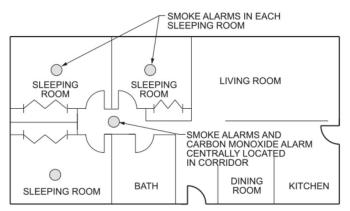
R3 I 5.4 Combination alarms.

Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms.

R3 | 5.5 Interconnectivity.

Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R3 I 5.3, 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. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for interconnection without the removal of interior finishes.



CARBON MONOXIDE ALARMS REQUIRED OUTSIDE EACH SLEEPING AREA