

Smoke Detectors & Installation Information

Oregon State Fire Marshal's direction

What are the minimum requirements for the location of alarms in a single family home?

- Smoke alarms must be installed outside the sleeping area.
- If the home has more than one level, a smoke alarm must be installed on each level.
- Install smoke alarms on the ceiling at least four inches from the nearest wall or high on a wall, four to 12 inches from the ceiling. Single family dwellings are required to meet the applicable requirements of the State Building Code at the time of construction.

NFPA's direction

The right way to install smoke alarms

- Install smoke alarms in every sleeping room, outside each sleeping area and on every level of the home. For the best protection, interconnect all smoke alarms throughout the home. When one sounds, they all sound. Ionization smoke detection is generally more responsive to flaming fires and photoelectric smoke detection is generally more responsive to smoldering fires. Both types of technologies have improved home fire safety. NFPA has convened a task group to consider a range of issues including false alarms and the speed of detector response for both types of alarms. In the interim it is recommended that both types of detection be installed in homes.
- Hard-wired smoke alarms operate on your household electrical current. They can be interconnected so that every alarm sounds regardless of the fire's location. This is an advantage in early warning, because it gives occupants extra time to escape if they are in one part of the home and a fire breaks out in another part. Alarms that are hard-wired should have battery backups in case of a power outage, and should be installed by a qualified electrician.
- If you sleep with bedroom doors closed, have a qualified electrician install interconnected smoke alarms in each room so that when one alarm sounds, they all sound.
- If you, or someone in your home is deaf or hard of hearing, consider installing an alarm that combines flashing lights, vibration and/or sound.
- Mount smoke alarms high on walls or ceilings (remember, smoke rises). Ceiling mounted alarms should be installed at least four inches away from the nearest wall; wall-mounted alarms should be installed four to 12 inches away from the ceiling.
- If you have ceilings that are pitched, install the alarm near the ceiling's highest point.
- Don't install smoke alarms near windows, doors, or ducts where drafts might interfere with their operation.
- Never paint smoke alarms. Paint, stickers, or other decorations could keep the alarms from working.