



OREGON

Theodore R. Kulongoski, Governor

Oregon State Police
Office of State Fire Marshal
4760 Portland Road NE
Salem, OR 97305-1760
(503) 378-3473
Fax (503) 373-1825 fax
TTY (503) 390-4661
E-mail: Oregon.sfm@state.or.us
www.Oregon.gov/OSP/SFM

SMOKE ALARM Q & A SHEET

Why should my home have smoke alarms?

- Most fire deaths are caused by smoke – not flames.
- Most fire deaths and injuries occur between midnight and 8 a.m. when people are asleep.
- **Seconds count!** You have approximately three minutes to escape a house fire.
- The earlier a smoke alarm alerts you to a fire, the more likely you will get out alive.

What is the difference between smoke alarms and smoke detectors?

- **Smoke alarms** are self-contained, single or multiple-station smoke-sensing devices.
- **Smoke detectors** are smoke-sensing devices that are not self-contained. Smoke detectors operate as part of a central control system.

What is the difference between ionization and photoelectric smoke alarms?

- **Ionization smoke alarms** are quicker at sensing flaming, fast moving fires
- **Photoelectric smoke alarms** are quicker at sensing smoldering fires

What are the requirements for the location of smoke alarms?

- Outside sleeping areas
- On each level
- On the ceiling at least four inches from the nearest wall or high on a wall, 4 to 12 inches from the ceiling
- Meet the applicable requirements of the State Building Code at the time of construction

Are smoke alarms required to be installed in all bedrooms?

- If required by State Building Code at the time of construction or remodel.
Note: Some local ordinances have additional requirements. Check with your local building department and/or housing agency.
- **However**, the Office of State Fire Marshal encourages installing smoke alarms in all bedrooms for increased protection

Where should smoke alarms not be installed?

- Kitchens
- Bathrooms
- Garages
- Unheated areas (where moisture, frost, cooking vapors and exhaust fumes could cause the unit to sound a false alarm)

What about 110 v (hard-wired) smoke alarms?

- **All ionization** only smoke alarms not connected to a commercial fire alarm system, whether 110 volt (hard-wired) or solely battery operated, need to have a hush feature
- Only ionization smoke alarms, that are solely battery powered must be sold with a ten-year long life battery

Can 110 v (hard-wired) smoke alarms be replaced with solely battery operated smoke alarms?

- No

Alarm Types

- **Ionization smoke alarms:** Contain material that ionizes the air, making an electrical path. When products of combustion enter the alarm, the molecules attach themselves to the ions. The change in electric current flow triggers the alarm. **All ionization** only smoke alarms **sold** in Oregon are required to have a hush feature. If that alarm is solely battery powered, it is required to have a long life battery designed to last ten years.* (ORS 479.297) Ionization smoke alarms have one of the following on either the front or the back of the alarm:
 - A lower case letter “i”
 - The word “ionization”
 - The phrase “contains radioactive material”
 - A “fan-looking” symbol
- **Photoelectric smoke alarms:** Contain a light source and photocell, which is activated by light. Light from the bulb reflects off the smoke particles and is directed towards the photocell. The photocell is then activated to trigger the alarm. Photoelectric smoke alarms are exempt from the ten-year battery and hush feature requirements. Replace the 9 volt battery at least once per year.* Photoelectric smoke alarms have one of the following on either the front or the back of the alarm:
 - A capital letter “P”
 - The word “photoelectric”
 - The phrase “photoelectric technology”
- **Hard-wired smoke alarms with battery back-up:** These alarms are wired directly into the homes electrical system. They do not require a ten-year battery. Replace the 9 volt battery at least once per year.*
- **Hard-wired smoke alarms without battery back-up:** These alarms are wired directly into the homes electrical system. If the electrical power to the home fails, the alarms will not function.*

- **Combination or dual sensor smoke alarms:** Ionization and photoelectric technology in one alarm to sense flaming and smoldering fires.* These alarms have one or more of the following on either the front or back of the alarm:
 - May use the words “photo & ion”
 - A capital letter “P” and lower case letter “i”
 - The words “photoelectric” and “ionization”
 - The phrase “photoelectric technology”
 - The phrase “contains radioactive material”

- **Ionization Smoke/Carbon monoxide alarms:** Activated by smoke or carbon monoxide. Replace the 9 volt battery at least once per year.** These alarms have one or more of the following on either the front or back of the alarm:
 - States “Smoke and Carbon Monoxide Alarm”
 - A lower case letter “i”
 - The word “ionization”
 - The phrase “contains radioactive material”

- **Photoelectric Smoke/Carbon monoxide alarm:** Activated by smoke or carbon monoxide. Replace the 9 volt or double AA batteries at least once per year.**
 - States “Smoke and Carbon Monoxide Alarm”
 - A capital letter “P”
 - The word “photoelectric”
 - The phrase “photoelectric technology”

- **Photoelectric Smoke/Carbon monoxide with voice:** Activated by smoke or carbon monoxide. Speaks the type and location of danger in your home, when programmed. Replace the 9 volt or double AA batteries at least once per year.**
 - States “Smoke and Carbon Monoxide Alarm”
 - A capital letter “P”
 - The word “photoelectric”
 - The phrase “photoelectric technology”

- **Explosive Gas & Carbon monoxide alarm:** Activated by carbon monoxide, propane or methane gas. Replace the 9 volt or double AA batteries at least once per year.**
 - States “Smoke and Carbon Monoxide Alarm”
 - A capital letter “P”
 - The word “photoelectric”
 - The phrase “photoelectric technology”

- **Visual (strobe light) and tactile (shaker):** For people who are deaf or hard of hearing. Replace the 9 volt or double AA batteries at least once per year.*

How often do I replace my smoke alarm?

- * National Fire Protection Association National Fire Alarm Code 72-10.4.7
“Replacement of Smoke Alarms in One- and Two-Family Dwellings. Unless otherwise recommended by the manufacturer’s published instructions, single- and multiple station smoke alarms installed in one- and two-family dwellings shall be replaced when they fail to respond to operability test, but shall not remain in service longer than 10-years from the date of manufacture.” (Adopted as part of the Oregon Fire Code 2007 Edition, October 2007. (10.4.6))
- ** Carbon monoxide/Smoke Alarm combinations are recommended to be replaced 5-years from date of manufacture.

How do I keep my smoke alarm working?

- Test smoke alarms monthly
- Vacuum smoke alarms regularly to remove dust and cobwebs
- Never disconnect or remove smoke alarm batteries for other use.
- Determine alarm type. Replace alarm or battery based on the “Alarm Type” and “How often do I replace my smoke alarm?” sections. Please see above sections

What do I do if my smoke alarm goes off and there is a fire?

- Get out and stay out. Never go back inside for people or pets
- Get low and go under the smoke to your way out
- Feel the knob and door before opening a door
- Call the fire department from outside your home

What do I do if my smoke alarm goes off and it is a false alarm?

- Do not disable smoke alarms when activated by cooking or other non-fire causes
- Use the smoke alarm’s hush feature if available
- Open windows and doors to clear smoke from your home

For more information on carbon monoxide and Oregon’s smoke alarm law, visit:
http://www.oregon.gov/OSP/SFM/CommEd_SA_Program.shtml or call 503-934-8366.