

# SMOKE ALARM Q&A SHEET

## What is the difference between smoke alarms and smoke detectors?

**Smoke alarms** are defined as self-contained, single or multiple-station smoke-sensing devices.

**Smoke detectors** are defined as smoke-sensing devices that are not self-contained. Smoke detectors operate as part of a central control system.

## What is the difference between an ionization alarm and a photoelectric alarm?

**Ionization smoke alarms** contain material that ionizes the air, making an electrical path. When products of combustion enter the device, the molecules attach themselves to the ions. The change in electric current flow triggers the alarm. **All ionization** smoke alarms sold in Oregon are required to have the hush feature and a ten-year battery. (ORS 479.297)

**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.

## 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.

## Do smoke alarms need to be installed in the bedrooms?

Only if required by Building Codes at the time of construction; **BUT**, the Office of State Fire Marshal encourages everyone to install smoke alarms in their bedrooms to help ensure ultimate protection.

## Where must smoke alarms not be placed?

Smoke alarms should not be installed in kitchens, bathrooms, garages or unheated areas because moisture, frost, cooking vapors and exhaust fumes could cause the unit to sound a false alarm.

## What are the minimum requirements for installation of smoke alarms in an apartment?

- Smoke alarms must be installed outside the sleeping area.
- If the apartment 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.
- Apartment buildings are required to meet the applicable requirements of the State Building Code at the time of construction.

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

**All ionization** smoke alarms not connected to a commercial fire alarm system, whether 110 v (hard-wired) or solely battery operated, need to have a hush feature. Only ionization smoke alarms that are solely battery operated need a ten-year battery.

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

**No**, you **can not** replace a 110 v (hard-wired) system with a solely battery operated smoke alarm(s).

## What to look for when purchasing an ionization smoke alarm?

Purchase an alarm that has a hush feature, a low battery warning signal, a loud alarm and if it is solely battery operated, a ten-year battery. Only purchase an alarm that has been tested by a nationally recognized testing laboratory.