



Smoke Alarms

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Name _____

What type should I buy?

There are two types of smoke alarms available:

1. **Photoelectric:** Uses a photoelectric bulb that sends forth a beam of light. When smoke enters, light from the beam is reflected from the smoke particles into a photocell and the alarm is triggered.
2. **Ionization chamber:** Contains a small, safe radiation source that produces electrically charged air molecules called ions. When smoke enters the chamber, it causes a change in the flow of ions, triggering the alarm.

Both are equally effective, and neither requires that you be familiar with its inner workings. As long as you buy an alarm that is tested by a major testing laboratory, such as Underwriters' Laboratories Inc. (UL), you can be assured it has met certain testing requirements.

Where should I install my alarm?

Smoke rises. So, the best place to install an alarm is on the ceiling or high on an inside wall just below the ceiling. If the ceiling is below an un-insulated attic or in a mobile home, the alarm should be placed on the wall 4 inches to 12 inches (10 centimeters to 30 centimeters) below the ceiling. Install alarms inside and outside each sleeping area, right outside the kitchen, and on every level of your home.

Remember:

- **Do not** install an alarm within 3 feet (92 centimeters) of an air supply register that might blow away the smoke.
- **Do not** install an alarm between an air return and the sleeping area. The smoke will be re-circulated and diluted, resulting in a delayed alarm.

If you are installing more than one alarm, you may want to consider purchasing units that can be interconnected. That way, when one unit detects smoke, all the alarms will sound. This is often required by newer building codes.





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How are alarms powered?

Alarms are powered two ways:

1. **Battery alarms** are the easiest to install. They require no outlets or wiring connection; however, batteries must be replaced once a year (approximately). All UL-listed battery-operated alarms are required to sound a trouble signal when a replacement is needed. The signal usually lasts seven days, so you should check the alarm if you have been away from your home for a week or more.
2. **Household current alarms** can be powered with household current two ways: They can be plugged into any wall socket or they can be wired permanently into your home's electrical system.

How can I best care for my alarms?

Everyone in the home who is old enough should take an active role in caring for the smoke alarms and making sure they work properly. Dirt, extreme changes in temperature, and cooking exhaust can cause a false alarm or malfunction of a smoke alarm. To prevent false alarms, locate the smoke alarm away from air vents, air conditioners and fans. Keep the grillwork free of dirt with occasional vacuuming and dusting. Do not paint them. Test your smoke alarm every 30 days, or more often if necessary, to make sure it is working. This is usually done with the test button. Change the batteries in your alarms at least once a year and replace alarms every 10 years because they become less sensitive over time.

