Purchasing and Installing Your Smoke Detector

How to Shop for a Smoke Detector
When shopping for a smoke detector, consider these suggestions:

- Look for a laboratory seal of approval or a statement on the package or unit itself. A seal of approval indicates that the detector has been tested and certified by a recognized testing organization. Such a seal ensures that the unit meets certain standards of operation and sensitivity. The seal from Underwriter’s Laboratories (UL) is a common seal.

- Be certain that the detector has clear and detailed instructions that tell you how to install it, suggest where to place it, and provide directions for testing and maintenance.

Protect Your Family From Fire
- Purchase one or more smoke detectors.
- Install smoke detectors near where individuals sleep.
- Take care of your smoke detector.
- Develop and rehearse an escape plan so when your detector sounds, family members react appropriately.

Where Should I Install Smoke Detectors?
Where you place smoke detectors depends on the size and layout of your home, and where people sleep in your home. Since the primary job of a smoke detector is to awaken sleeping persons and warn them of urgent danger, put your detector as close as possible to the bedrooms or other places where people frequently sleep. If two sleeping areas are separated, each should have its own detector. The hallway next to the bedrooms or other sleeping areas should be a priority location for detectors.

In a one-floor plan with only one sleeping area, the smoke detector should be placed between the sleeping area and the rest of the house.

In homes with more than one sleeping area on the same level or on different levels, a smoke detector should be installed to protect each separate sleeping area.

If bedroom doors are normally closed at night, detector locations within each bedroom might be considered, particularly if the occupant smokes in bed. Closed doors usually offer some protection against both fire and smoke from outside the room. However, they may make it more difficult to hear a detector alarm outside the bedroom. More significantly, they can keep smoke produced by a fire in a bedroom from reaching a detector in the hall.

In single floor homes, the detector should be placed in the hallway near the bedrooms. In a house where the bedrooms are upstairs, one detector should be near the top of the stairs to the bedroom area. The simplest rule for locating one smoke detector in your home should be “between the bedrooms and the rest of the house, but closer
to the bedrooms.” If you are installing multiple detectors, put one near each sleeping area. It is also a good idea to make certain there is one on each level of the house. The basement ceiling, near the steps to the rest of the house, is another good location.

Don’t put detectors within six inches of where walls and ceilings meet, or near heating and cooling ducts. Detectors located in these areas may not receive the flow of smoke required to activate the alarm.

**How to Take Care of Your Smoke Detector**

Smoke detectors don’t need much attention. Regular testing and prompt replacement of batteries or bulbs is generally all that is needed. However, if you neglect these few requirements, your detector won’t do its job if a fire starts.

**Monthly Testing**

At least once every month, test your detector by holding a candle six inches under it. If you’re testing an ionization detector, let the flame burn. To test a photoelectric unit, extinguish the candle and let visible smoke drift into the detector. Heavy tobacco smoke also will work. The unit’s alarm should begin to sound within twenty seconds. To stop the alarm, fan the smoke away from the detector. Soon the detector will become silent, and you can walk away knowing it’s still on guard.

Using real smoke is more dependable than pressing the “test” button found on many older smoke detectors. In some older units, the button only starts the warning sound, and does not tell you whether the detector circuit itself is working. Some newer detectors have more refined test systems that simulate the presence of smoke in the chamber. These don’t need to be tested with real smoke. Check the package or instructions of your detector to see if it has this feature.

Some authorities suggest testing every two weeks. This should not reduce battery life significantly. Testing more often than this may shorten your battery’s life.

**Replace Batteries and Lamps At Once**

Batteries will last approximately one year. If your battery-powered detector begins to emit its low-power warning sound, remove the weak battery and replace it immediately with a fresh one. Have a new battery on hand always.

Replacement lamps for photoelectric detectors also should be kept on hand so no delay occurs in restoring their function. Owner neglect of testing and part replacement has been a cause of smoke detector failure, often resulting in tragedy.

**Don’t Play “False Alarm”**

The detector is not a toy. Remind everyone in your family that it should not be operated, or even touched, except to test, maintain, and clean. Some authorities suggest using the detector test feature to operate the alarm as part of a family “fire drill” on occasion. Operating the alarm excessively draws heavily on battery power, and may cause a malfunction when it’s needed most.

**“Nuisance Alarms”**

Do not respond to “nuisance” alarms (cooking, fireplaces, etc.) by disconnecting the battery. Either fan away the smoke or relocate the detector.

**If It “Acts Up”**

Most manufacturers back their detectors with a service or replacement warranty. If your detector begins to malfunction during the warranty period, follow the warranty procedure listed in the use and care literature. In some instances you can return the unit to the store from which it was bought. You may be instructed to send the unit directly to the manufacturer.

**Source**