

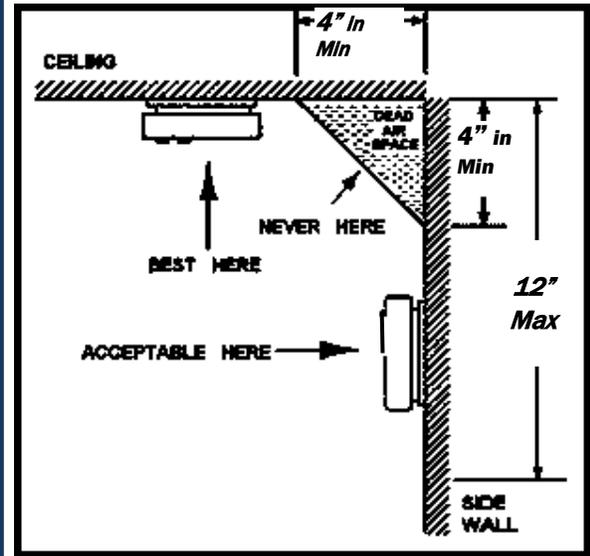


## Residential Single Station Smoke Alarms

The installation of smoke alarms (detectors) must be in accordance with the manufacturer's instructions and NFPA 72, the National Fire Alarm Code. Section 72:29.8.3.4 specific location requirements improve reliability and avoid false alarms. Smoke alarms (detectors) must

- not be located where the humidity and temperature are outside of the limits specified by the manufacturer,
- not be located where temperatures fall below 40 degrees or exceed 100 degrees,
- be mounted on an inside wall or ceiling where outside walls or ceilings are poorly insulated,
- be photoelectric, located 6- 10' from a cooking appliance
- within 36 inches from a door to a kitchen or bathroom containing a shower or tub,
- not be installed within 36 inches from a supply register of a forced hot-air heating or cooling system,
- not be installed within 36 inches from the tip of a blade of a fan suspended from a ceiling,
- be located in a stairway so that an intervening door or obstruction does not prevent rising smoke from reaching the alarm (detector),
- be located on the basement ceiling near the entry to the stairs.
- For try-shaped ceilings, smoke alarms shall be installed on the highest portion of the ceiling or on the sloped portion of the ceiling within 12 " vertically down from the highest point.
- Smoke alarms installed in rooms with joists or beams shall comply with the requirements of NFPA 72:17.7.3.2.4
- Heat alarms and detectors installed in rooms with joists or beams shall comply with the requirements of NFPA 72:17.6.3

**Example of Proper Mounting for Smoke Alarms**  
NFPA Figure 72: A.5.6.3.1



### Photoelectric Smoke Alarms



Act 180 of the 2008 Legislative Session established requirements for photoelectric smoke alarms for single-family dwellings. The law specifies that beginning Jan 1, 2009 new owner occupied single-family dwellings, and dwellings that are sold or transferred, must have a photoelectric style alarm installed in the immediate vicinity of any bedrooms and on each level of the dwelling. New construction must have alarms that are electrically wired in with battery back up.

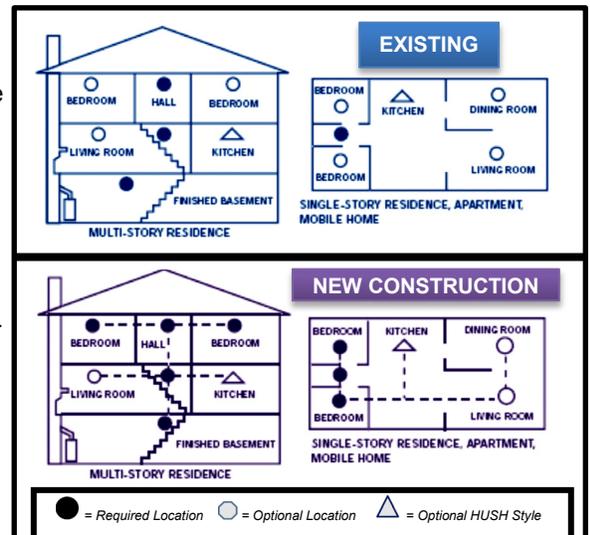
### Why should my home have smoke alarms?

A smoke alarm are the single most important means of preventing house and apartment fire fatalities by providing an early warning signal -- so you and your family can escape.

### Where do I put them?

Install smoke alarms on every level of your home, including the basement. Many fatal fires begin late at night or in the early morning. In new buildings install smoke alarms both inside and outside of the sleeping rooms. This is because most fire fatalities occur between 2 a.m. and 6 a.m. when most people are sleeping. Contrary to popular belief, the smell of smoke may not wake a sleeping person. Instead, the poisonous gases and smoke produced by a fire can dull the senses and put one into a deeper sleep. The only thing standing between the deadly fumes of a fire and a safe escape is the piercing sound of a smoke alarm.

**Additional information on back**



**How do I take care of my smoke alarms?**

Smoke alarms are pretty easy to maintain. Unfortunately, improper maintenance is a big reason smoke alarms fail. According to a study by the Consumer Product Safety Commission, 90 percent of U.S. households have smoke alarms. However, the smoke alarms in 20 percent of these households - about 16 million - weren't working. Vacuuming the outer surface of the alarm occasionally will help prevent false alarms.

**Can I install a combination smoke alarm?**

The law and the code allow the use of photoelectric and carbon monoxide combination alarms but it does not allow ionization / photoelectric combination alarms to be used.

**How long will my smoke alarm last?**

About eight-to-ten years, after which it should be replaced. Like most electrical devices, smoke alarms wear out. You may want to write the purchase date with a marker on the inside of your unit. That way, you'll know when to replace it. Always follow the manufacturer's instructions for replacement.

**Updating Smoke Alarms**

Smoke alarms don't last forever. Smoke alarms need to be Replaced every 10 years.

If your smoke alarms are 10 years old or more it's time to replace them with new photoelectric ones.

There's a label on the alarm with the date of manufacture. If it doesn't have a label, it's already more than ten years old. Smoke alarms need to be properly installed, maintained and replaced when needed.

Many hardware, home supply or general merchandise stores carry smoke alarms. Make sure the alarm you buy is a photoelectric style and is UL-listed. If you are unsure where to buy one in your community, call your local fire department (on a non-emergency telephone number) and they will provide you with some suggestions.

No home should be without smoke alarms, and ionization alarms should continue to be used until a home can be equipped with new photoelectric alarms. And remember installation of an early warning single station smoke alarm system combined with a well-rehearsed plan for escape may save the lives of you and your family.

## *Requirements of the Vermont Fire and Building Safety Code*

**NFPA 101**

[9.6.2.10.2.1] **Power for Smoke Alarms:** All newly installed smoke alarms in one & two family dwellings, multiple unit dwellings, lodging or rooming houses, hotels and dormitories shall be directly wired to a non-dedicated electrical branch circuit for the building and by battery.

[9.6.2.12] **Photoelectric Smoke Alarms:** All newly installed smoke alarms in dwelling units, lodging or rooming houses, hotels and dormitories, shall be the photoelectric-only-type.

[24.3.4] Detection, Alarm, and Communications Systems. Smoke alarms or a smoke detection system shall be provided in accordance with either 24.3.4.1 or 24.3.4.2, as modified by 24.3.4.4

[24.3.4.1.1] Smoke alarms shall be installed in accordance with 9.6.2.10 in the following locations:

- (1) **All sleeping rooms** in other than existing one- and two-family dwellings, in new or renovated buildings.
- (2) **Outside of each separate sleeping area**, in the immediate vicinity of the sleeping rooms.
- (3) **On each level** of the dwelling unit, including **basements**.

[24.3.4.1.2] Dwelling units shall be protected by an approved smoke detection system in accordance with Section 9.6 and equipped with an approved means of occupant notification.

[24.3.4.1.3] In existing one- and two-family dwellings, approved smoke alarms powered by batteries shall be permitted.

[ 9.6.2.10.2.1] When alarms are replaced they shall be wired in to receive AC power from the buildings electrical system.