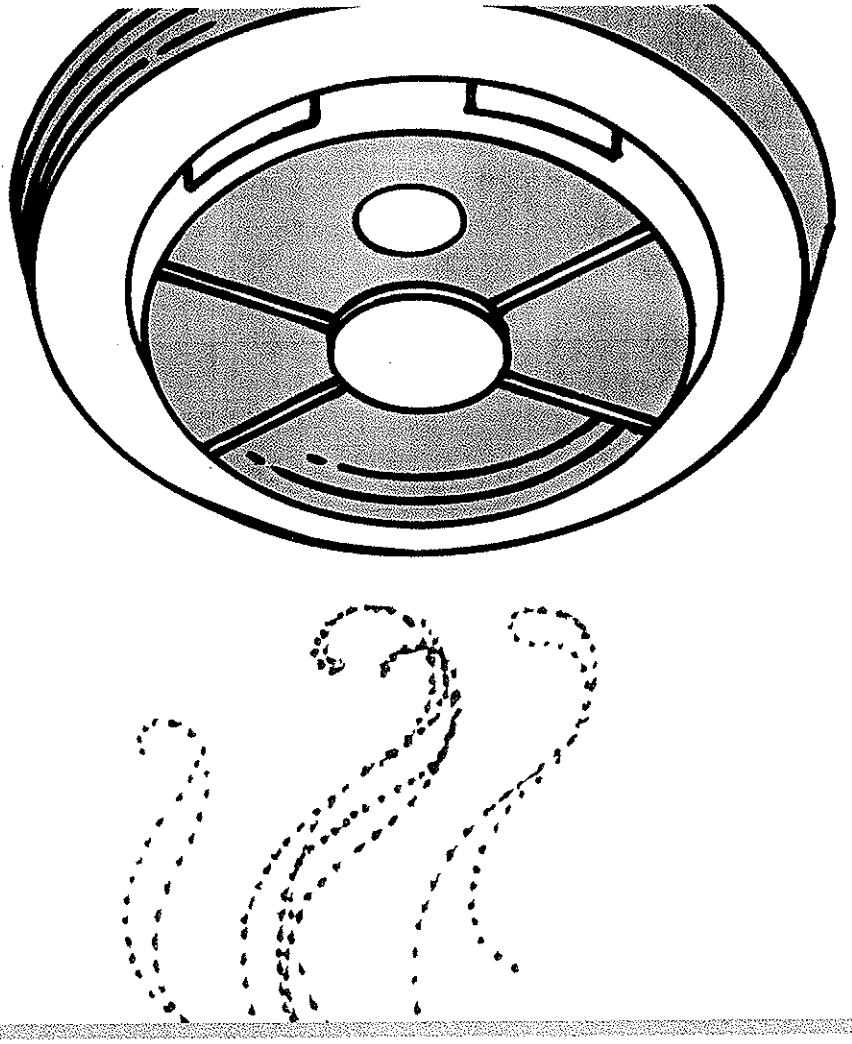


Guide to Massachusetts

Smoke & Carbon Monoxide Requirements

When Selling a
One- or Two-Family Residence
December 1, 2016

DEPARTMENT OF FIRE SERVICES
Peter J. Ostroskey • State Fire Marshal

M.G.L. c 148 s. 26F - The Law

Massachusetts General Law, chapter 148 section 26F mandates that upon the sale or transfer of certain homes, the seller must install approved smoke alarms. These requirements apply to residences that were built or modified prior to creation of the Massachusetts State Building Code (January 1, 1975). If a building was built or has undergone renovation, addition or modification after Jan. 1, 1975, the date the building permit was issued determines the smoke alarms requirements of the building code.

Although the transfer law applies to residences with five or less residential units, this pamphlet will focus only on one- and two-family homes.

Verification

After a successful inspection for smoke alarm compliance, the local fire department will issue a Certificate of Compliance indicating that the residence meets the smoke alarm requirements.

Although the law applies to homes built prior to the date of the building code (Jan. 1975), it is industry practice that most purchase and sales agreements, and many mortgage companies require that the seller, as a condition to sell or transfer, obtain a Certificate of Compliance issued by the local fire department, even if the home was permitted or modified after 1975.

Smoke Detector Requirements

All homes are required to have smoke alarms. In general, the requirements for smoke alarms vary depending on when the residence was constructed or underwent renovation, addition or modification.

Photoelectric vs. Ionization Technologies

Photoelectric smoke alarms

- Use light to detect smoke.
- More effective in detecting smoldering fires, which have been attributed to more fires involving death.
- Household fire **warning** systems (low voltage or wireless low voltage systems) only use photoelectric detectors.

Ionization smoke detectors

- Use radiation to detect smoke.
- More effective in detecting flaming fires.
- Increase the risk of nuisance alarms caused by steam or cooking smoke.

Carbon Monoxide Alarms

Massachusetts General Law, chapter 148 section 26F½ and 527 CMR 1.00:13.7.6 mandates that upon the sale or transfer of any residence, the local fire department must inspect the residence for carbon monoxide alarm compliance. After a successful inspection, the local fire department will issue a Certificate of Compliance indicating that the residence meets the carbon monoxide alarm requirements. Smoke alarm and CO alarm inspections can be conducted in the same visit.

Carbon Monoxide Alarm Requirements

Since March 31, 2006, carbon monoxide alarms have been required in all residences that have either: fossil fuel burning equipment or an attached enclosed garage. This law applied to all such residences whether or not the residence is being sold or transferred.

What is Fossil Fuel Burning Equipment?

Fossil fuel burning equipment is any device, apparatus or appliance that is designed or used to consume fuel of any kind which emits carbon monoxide as a by-product of combustion. Some examples of fossil fuel burning equipment are: gas water heaters, oil or gas furnaces, wood or gas fireplaces, wood pellet stoves, gas clothes dryers, or gas cooking stoves.

How Will I Know What I Need?

The word "typical" is used in the following guidelines only for purposes of illustration. The specific requirements may depend on when the building permit for the residence was issued and if there have been any major renovations, additions or modifications. It is best to check with your local building or fire department for detailed guidance.

Typical one- and two-family residences built before January 1, 1975:

- **Smoke alarms are required as follows:**
  - On every habitable level of the residence.
  - In the basement.
  - On the ceiling at the base of each stairway leading to a floor above including the basement (but not within stairways).
  - On the ceiling outside each separate sleeping area.

- Must be photoelectric. (Can be in combination with ionization or carbon monoxide.)
- May be battery-powered, hardwired, or a combination of both.
- Smoke alarms cannot be more than 10 years old or exceed the manufacturer's recommended life, whichever comes first.
- In two-family dwellings, smoke alarms are required in common areas shared by residents.

- **New or Replacement alarms:**
  - Must be photoelectric. (Can be in combination with ionization or carbon monoxide.)
  - Must contain a hush feature to silence nuisance alarms.
  - Battery-powered alarms must have 10-year, sealed, non-rechargeable, non-replaceable batteries.
- **Carbon monoxide alarms are required as follows:**
  - On every level of the residence, including habitable portions of basements and attics and must be located within 10 feet of each bedroom door.
  - Combination alarms (photoelectric smoke and carbon monoxide alarm) may be used.
  - Combination alarms must have both a tone and simulated voice alarm to distinguish the type of emergency.
  - May be either: battery powered, plug-in with battery backup, hardwired with battery backup, or system type.
  - Follow the manufacturer's instructions for placement.

Typical one- and two-family residences permitted between 1975 and August 27, 1997:

- **Smoke alarms are required as follows:**
  - One smoke alarm on every habitable level of the residence.
  - One smoke alarm on the ceiling at the base of each stairway.
  - One smoke alarm on the ceiling outside of each separate sleeping area.

- A minimum of one smoke alarm must be installed for every 1,200 square feet of living space per level.
- Must be hardwired interconnected smoke alarms.

- **Carbon monoxide alarms are required as follows:**
  - On every level of the residence, including habitable portions of basements and attics and must be located within 10 feet of each bedroom door.
  - Combination alarms (photoelectric smoke and carbon monoxide alarm) may be used anywhere.
  - Combination alarms (ionization smoke and carbon monoxide alarm) may be used if the alarm is more than 20 feet from a kitchen or bathroom (containing a bathtub or shower).
  - Combination alarms must have both a tone and simulated voice alarm to distinguish the type of emergency.
  - May be either: battery powered, plug-in with battery backup, hardwired with battery backup, or system type.
  - Follow the manufacturer's instructions for placement.

Typical one- and two-family residences permitted after August 27, 1997:

- **Smoke alarms are required as follows:**
  - One smoke alarm on every habitable level of the residence.
  - One smoke alarm at the base of each stairway.
  - One smoke alarm outside of each separate sleeping area.
  - One smoke alarm inside every bedroom.
  - A minimum of one smoke alarm must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired and interconnected smoke alarms with battery backup.
  - If the smoke alarm is within 20 feet of a kitchen or bathroom (containing a bathtub or shower), the smoke alarm is required to be a photoelectric alarm.

- **Carbon monoxide alarms are required as follows:**
  - On every level of the residence, including habitable portions of basements and attics and must be located within 10 feet of each bedroom door.
  - Combination alarms (photoelectric smoke and carbon monoxide alarm) may be used anywhere.
  - Combination alarms (ionization smoke and carbon monoxide alarm) may be used if the alarm is more than 20 feet from a kitchen or bathroom (containing a bathtub or shower).
  - Combination alarms must have both a tone and simulated voice alarm to distinguish the type of emergency.
  - May be either: battery powered, plug-in with battery backup, hardwired with battery backup, or system type.
  - Follow the manufacturer's instructions for placement.

Typical one- and two-family residences permitted on or after January 1, 2008:

- **Smoke alarms are required as follows:**
  - One smoke alarm on every habitable level of the residence.
  - One smoke alarm at the base of each stairway.
  - One smoke alarm outside of each separate sleeping area.
  - One smoke alarm inside every bedroom.
  - A minimum of one smoke alarm must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired and interconnected smoke alarms with battery backup.
  - If the smoke alarm is within 20 feet of a kitchen or bathroom (containing a bathtub or shower), the smoke alarm is required to be a photoelectric alarm.
  - If the smoke alarm is more than 20 feet from a kitchen or a bathroom (containing a bathtub or shower), the

smoke alarm is required to be either a photoelectric alarm or a dual alarm (containing both ionization and photoelectric technologies).

- **Carbon monoxide alarms are required as follows:**
  - On every level of the residence, including habitable portions of basements and attics and located within 10 feet of each bedroom door.
  - Combination alarms (photoelectric smoke and carbon monoxide alarm) may be used.
  - Must be hardwired and interconnected with battery backup. (May be separately wired from the existing smoke detection system.)
  - Follow the manufacturer's instructions for placement.
- **Heat alarms are required as follows:**
  - Must have a single heat alarm in any garage attached to or under the residence.
  - Must be hardwired and interconnected with or without battery backup to the existing smoke detection system.
  - Heat alarms are not required in garages of older homes unless renovation, addition or modification occurs after Jan. 1, 2008.

Typical one- and two-family residences permitted on or after February 4, 2011:

- **Smoke alarms are required as follows:**
  - One smoke alarm on every habitable level of the residence.
  - One smoke alarm at the base of each stairway.
  - One smoke alarm outside of each separate sleeping area.
  - One smoke alarm inside every sleeping area.
  - A minimum of one smoke alarm must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired and interconnected with battery backup.
  - All smoke alarms must be photoelectric.

- **Carbon monoxide alarms are required as follows:**
  - On every level of the residence, including basements and habitable portions of attics, and must be located within 10 feet of each bedroom door.
  - Combination alarms (photoelectric smoke and carbon monoxide alarm) may be used.
  - Must be hardwired and interconnected with battery backup. (May be separately wired from the existing smoke detection system.)
- **Heat alarms are required as follows:**
  - Must have a single heat alarm in any garage attached to or under the residence.
  - Must be hardwired and interconnected with or without battery backup to the existing smoke detection system.
  - Heat alarms are not required in garages of older homes unless renovation, addition or modification occurs after Jan. 1, 2008.

How Will I Get a Certificate of Compliance?

After you have a closing date:

- Contact the local fire department to schedule an inspection of your smoke and carbon monoxide detectors right away. Don't wait until the last minute!
- Fees are determined by each city/town.

Prior to the arrival of the fire department:

- Make sure that your posted street number is visible from the street (MGL c.148 § 59);
- Make sure that you have the proper type of alarms.
  - The local fire department may require that they be taken down for compliance verification.
  - Make sure that all detectors are installed in the proper locations.
  - Make sure that all alarms are working properly.

- After passing the inspection, the local fire department will issue your Certificate of Compliance.
  - This document will probably be required at the closing.

How Do I Know if my Smoke Alarm is More than 10 Years Old or Expired?

The manufacturer's date is located on the back of the smoke alarm. Carefully remove the alarm from its mounting bracket to check the date.

If there is no date marked, then the alarm is more than 10 years old. If the date indicates it was manufactured more than 10 years ago, replace it with a new alarm that meets the requirements identified in this guide.

How Do I Know Which Kind of Smoke Alarm I Have?

A new alarm should be marked on the outside of the package to indicate if it uses ionization or photoelectric technology.

For older or existing alarms you will need to remove the smoke alarm and look on the backside.

- It is an ionization smoke alarm if the word "AMERICIUM" or the following symbol is on the back:

Can I Use New Wireless Technology?

Yes you can use new wireless technology.

- In homes built before 1975, alarms can be wirelessly interconnected and can have a replaceable battery as long as the battery lasts for at least one year.
- In homes built or modified after 1975, they may be wirelessly interconnected, but cannot be wirelessly powered; they must be hard-wired per the State Building Code.
- Wireless devices are always allowed with household fire **warning** systems.

Household Fire Warning Systems

If you have a household fire warning system, the specific requirements may be different than those listed here. Contact your local fire department.

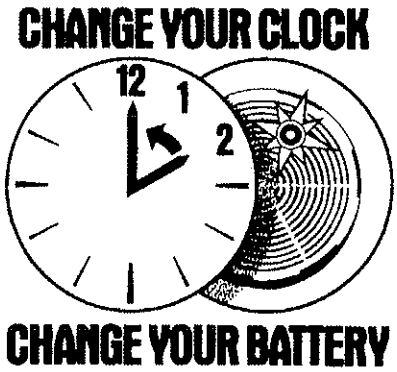
- Alarms must comply with Underwriter's Laboratory Standard 268.

Are There Other Recommendations?

The State Fire Marshal's Office recommends:

- Test your smoke and CO alarms monthly and replace alkaline batteries twice a year. REMEMBER, when you change the clocks, change the batteries.
- Unless otherwise recommended by the manufacturer's published instructions, no smoke alarms (battery operated or hard-wired) shall remain in service after 10 years from the date of manufacture. Combination CO and smoke alarms may need to be replaced sooner.

- Additional replaceable battery-powered smoke alarms can be installed. Strongly consider a smoke alarm on the ceiling of each bedroom.
- Additional non-required smoke alarms may be photoelectric, ionization or both.
- People who are deaf or hard of hearing should install bed shaking devices in the bedroom that connect to the smoke alarms and strobe alarms in living areas.
- Consider selecting a carbon monoxide alarm with a digital display.



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