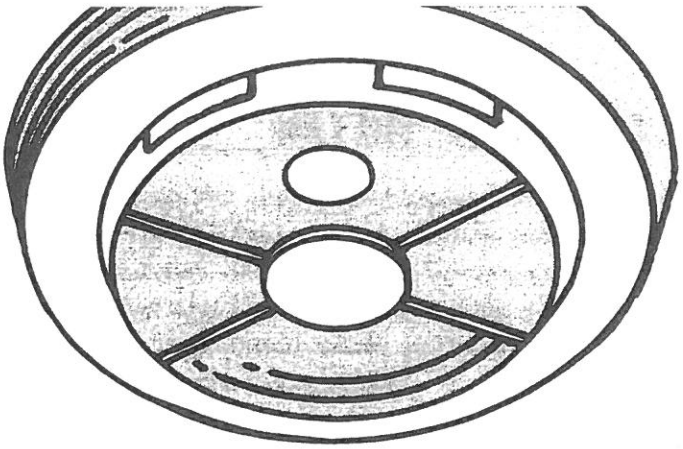

A Guide to the Massachusetts...

Smoke & Carbon Monoxide

Requirements

...when Selling a One- or Two-Family Residence

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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 detectors. 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 has undergone renovation, addition or modification after Jan. 1, 1975, the date of the building permit determines the smoke detector 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 detector compliance, the local fire department will issue a Certificate of Compliance indicating that the residence meets the smoke detector 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

In general, the requirements for smoke detectors vary depending on when the residence was constructed. For example, some residences may require battery-powered detectors, others might need interconnected hard-wired detectors only or a combination of both. Others might need

interconnected hard-wired detectors with battery backup. On April 5, 2010, a significant change in the Massachusetts' smoke detector requirements will become effective for all residences subject to MGL c. 148, s. 26F upon sale or transfer. Now, all smoke detectors installed within 20 feet of kitchens or bathrooms (containing a bathtub or shower) will be required to be photoelectric detectors. The risk of nuisance alarms from steam and cooking is lower with photoelectric only detectors. All installed smoke detectors outside of 20 feet of kitchens or bathrooms (containing a bathtub or shower) must utilize either:

- **A DUAL detector (containing both ionization and photoelectric technologies); OR**
- **Two separate detectors (one photoelectric and one ionization).**

In residences not subject to MGL c. 148, s. 26F (built after Jan. 1975), the smoke detector upgrade is recommended, but is not required by law.

PHOTOELECTRIC VS. IONIZATION TECHNOLOGIES

Ionization smoke detectors:

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

Photoelectric smoke detectors:

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

CARBON MONOXIDE ALARMS

Massachusetts General Law, chapter 148 section 26F½ and 527 CMR 31 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.

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 a fossil fuel burning equipment include: 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 actual requirements may depend on when the building permit for the residence was actually applied for and if there have been any major renovations, additions or modifications. It is best to check with your local fire department for detailed guidance.

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

- **Smoke detectors are required as follows:**
  - On every habitable level of the residence.
  - On the ceiling at the base of each stairway.
  - On the ceiling outside of each separate sleeping area.
  - The smoke detectors may either be battery powered, hardwired or a combination of the two.
  - If the smoke detector is located within 20 feet of a kitchen or bathroom (containing a bathtub or shower), the smoke detector will be required to be a photoelectric detector.
  - If the smoke detector is outside of 20 feet of a kitchen or a bathroom (containing a bathtub or shower) you must utilize either:
  - A dual detector (containing both ionization and photoelectric technologies); **OR**
  - Two separate detectors (one photoelectric and one ionization).
- **Low voltage household warning systems are exempt from the dual detection requirement.**
- **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 detectors (photoelectric smoke and carbon monoxide detector) may be used if the detector is within 20 feet of a kitchen or bathroom (containing a bathtub or shower).
  - Combination detectors (ionization smoke and carbon monoxide detector) may be used if the detector is outside of 20 feet of a kitchen or

bathroom (containing a bathtub or shower).
- 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 detectors are required as follows:**
  - One smoke detector on every habitable level of the residence.
  - One smoke detector on the ceiling at the base of each stairway.
  - One smoke detector on the ceiling outside of each separate sleeping area.
  - A minimum of one smoke detector must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired interconnected smoke detectors.
- **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 detectors (photoelectric smoke and carbon monoxide detector) may be used anywhere.
  - Combination detectors (ionization smoke and carbon monoxide detector) may be used if the detector is outside of 20 feet of a kitchen or bathroom (containing a bathtub or shower).
  - 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 detectors are required as follows:**
  - One smoke detector on every habitable level of the residence.
  - One smoke detector at the base of each stairway.
  - One smoke detector outside of each separate sleeping area.
  - One smoke detector inside every bedroom.
  - A minimum of one smoke detector must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired and interconnected smoke detectors with battery backup.
  - If the smoke detector is within 20 feet of a kitchen or bathroom (containing a bathtub or shower), the smoke detector is required to be a photoelectric detector.
- **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 detectors (photoelectric smoke and carbon monoxide detector) may be used anywhere.
  - Combination detectors (ionization smoke and carbon monoxide detector) may be used if the detector is outside of 20 feet of a kitchen or bathroom (containing a bathtub or shower).
  - 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 detectors are required as follows:**
  - One smoke detector on every habitable level of the residence.
  - One smoke detector at the base of each stairway.
  - One smoke detector outside of each separate sleeping area.
  - One smoke detector inside every bedroom.
  - A minimum of one smoke detector must be installed for every 1,200 square feet of living space per level.
  - Must be hardwired and interconnected smoke detectors with battery backup.
  - If the smoke detector is within 20 feet of a kitchen or bathroom (containing a bathtub or shower), the smoke detector is required to be a photoelectric detector.
  - If the smoke detector is outside of 20 feet of a kitchen or a bathroom (containing a bathtub or shower), the smoke detector is required to be either a photoelectric detector or a dual detector (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 detectors (photoelectric smoke and carbon monoxide detector) 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 detectors are required as follows:**
  - Must have a single heat detector 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 detectors are not required in 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 detectors.**
  - 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 detectors 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 and is only valid for 60 days.

HOW DO I KNOW WHICH KIND OF SMOKE DETECTOR I HAVE?

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

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

- **The date of manufacture should be on the back; if not, the detector is most likely outdated and should be replaced to comply with the regulation.**
- **It is an ionization smoke detector if the word "AMERICIUM" or the following symbol is on the back:**

CAN I STILL HAVE IONIZATION SMOKE DETECTORS IF I AM NOT SELLING OR TRANSFERRING MY HOME?

- Yes. The requirements in the new regulation only apply upon the sale or transfer of the residence.
- Even though the technology has changed, ionization detectors are still reliable.
- However, the risk of nuisance alarms from steam and cooking is higher with ionization detectors, particularly if located within 20 ft of a kitchen or bathroom.

ARE COMBINATION CARBON MONOXIDE & SMOKE DETECTORS PERMITTED?

- Yes. Combination carbon monoxide and smoke detectors are permitted.
- They must have both a tone and simulated voice alarm to distinguish the type of emergency. Carbon monoxide detectors are required regardless of a sale or transfer.
- Combination ionization and CO detectors cannot be used within 20 ft of a kitchen or bathroom

ARE THERE OTHER RECOMMENDATIONS?

The State Fire Marshal's Office recommends:

- **Test your smoke and CO detectors monthly and replace the batteries twice a year. REMEMBER, when you change the clocks, change the batteries.**
  - Unless otherwise recommended by the manufacturer's published instructions, no smoke detectors (battery operated or hard-wired smoke detectors only!) shall remain in service after 10 years from the date of manufacture.