

Changes to the Massachusetts Smoke Detector Law

Effective January 1, 2010, a new regulation relating to the installation and maintenance of certain smoke detectors takes effect. This article is intended to provide basic guidance to ensure that residential property owners, property managers, and real estate brokers understand and comply with the new Massachusetts law concerning smoke detectors which goes into effect next year. While the new law may not impose these new requirements on a specific property, it is imperative that owners ensure that their properties comply with these laws, both from a public safety and liability viewpoint. To avoid problems and determine the precise requirements for your properties, members are encouraged to consult with legal counsel.

SMOKE DETECTOR TECHNOLOGY

Currently, there are two primary detection methods used in modern smoke detectors: ionization and photoelectric. Ionization detectors typically have a constant current running between two electrodes. When smoke enters, it interrupts the current, setting off an alarm. Ionization detectors are often faster to alert than photoelectric detectors. However, ionization detectors are unable to differentiate between smoke and steam. As a result, they are prone to false alarms when steam from a shower or other source interrupts the current. This is especially true when the ionization detector is placed in close proximity to a kitchen or bathroom.

Photoelectric detectors emit a beam of light. In the absence of smoke, the beam passes in front of the detector in a straight line. When smoke crosses the path of the light beam, some light is scattered by the smoke particles, directing it at a sensor and triggering an alarm. Photoelectric detectors are less sensitive to false alarms from steam or cooking fumes but can take longer than ionization detectors to alert.

There has been an ongoing debate as to whether to require property owners to replace their ionization detectors with photoelectric detectors. On one hand, property owners have raised concerns about the cost of replacing smoke detectors, which continue to be operable. On the other hand, the fire departments have suggested that the elimination of false alarms outweighs the additional costs. The new regulations were enacted to resolve this ongoing debate.

NEW REGULATIONS

In recognition of the relative strengths and weaknesses of photoelectric versus ionization smoke detectors, the Board of Fire Prevention Regulation has passed a new regulation (527 CMR 32.00 et seq). Under the new regulation, owners of certain residential buildings will be required to install and maintain both ionization and photoelectric smoke detectors. While the new regulation does not change the locations where smoke detectors are required, it does allow the installation of both technologies in certain locations.

Under the new regulation, a smoke detector utilizing both technologies is required in all the same locations, except within 20 feet of a kitchen or a bathroom containing a bathtub or shower. Within 20 feet of a kitchen or bathroom containing a bathtub or shower, only a photoelectric smoke detector is allowed. An ionization detector is prohibited in these places due to their tendency to be set off by steam.

All property owners should determine what type of smoke detectors they are currently using. Subsequently compliance can be achieved by installing two separate detectors using these technologies, or by installing one detector, which uses both technologies.

WHAT PROPERTIES ARE AFFECTED BY THE NEW REGULATION?

Determining whether a specific property is affected by the new regulation requires a case-by-case analysis and, therefore, property owners are encouraged to consult with legal counsel to determine the specific requirements for their property. That being said, the following types of properties are impacted by the new regulation:

Residential buildings under 70 feet tall and containing less than six dwelling units.

Residential buildings not substantially altered since January 1, 1975, and containing less than 6 residential units.

All residential buildings sold or transferred after January 1, 2010, which are less than 70 feet tall, have less than six units, or have not been substantially altered since January 1, 1975.

For all properties in these categories, compliance is mandated by January 1, 2010. It should be noted that the law does not apply to these larger buildings or those, which were substantially altered since January, 1975, as these properties already were required to upgrade their fire safety systems under other existing laws.

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