



Harwich Fire Department • Fire Prevention Office

MA BUILDING CODE 7TH EDITION

EXCERPTS FROM 780 CMR 7th Edition – RESIDENTIAL

Effective 01/01/2008

SMOKE ALARMS:

5313.2

Where more than **12 smoke alarms (detectors) are installed, system-type devices must be utilized.**

5313.2.9 Required Locations

1. **In each bedroom** (sleeping room).
2. **Outside each separate bedroom** (sleeping room) in the immediate vicinity of the bedroom (sleeping room).
3. Near the **base of all stairs** where such stairs lead to another occupied floor.
4. On **each additional story of the dwelling, including basements and cellars** but not including crawl spaces and unoccupied attics. In dwellings or dwelling units with split-levels and without an intervening door between the adjacent levels, a smoke detector installed on the upper level shall suffice for the adjacent lower level, provided that the lower level is less than one full story below the upper level.

5. **For each 1,200 square feet** (111 m²) of area or part thereof.

5313.2.11

Photo-electric Smoke Detectors. **Any smoke detector located within 20 feet (6096 mm) of a kitchen or a bathroom shall be a photo-electric-type smoke detector.**

Photo-electric-type smoke detectors shall be allowed to be located closer than three feet (914mm) horizontally from a kitchen or a bathroom door when hallway or other room size restricts detector mounting options. Exception: A bathroom not containing a tub, shower, jacuzzi or steam room.

HEAT DETECTORS:

5313.3

Required Heat Detectors. **A single heat detector listed for the ambient environment shall be installed in: 1. Any integral garage (“garage under”) or attached garage to the main house** (detached garages do not require a heat detector)

5313.3.3.2

For flat-finished ceilings, the single heat detector **shall be placed on or near the center** of the garage ceiling; for sloped ceilings having a rise to run of greater than one foot in eight feet (305 mm in 2438 mm), the single heat detector shall be placed in the approximate center of the vaulted ceiling but no closer than four inches (102 mm) to any wall.

CARBON MONOXIDE DETECTORS:

5313.4.1

Carbon monoxide detectors **shall either be listed 120V devices** and secondary power shall not be required or **shall be part of a listed low-voltage combination system** as defined in NFPA 72. (***) no DC ONLY or plug in new construction)

5313.4.3

One carbon monoxide detector shall be installed on **each story** of a dwelling unit, including basements and cellars (but not including crawl spaces and uninhabitable attics) in accordance with the manufacturer’s instructions and the applicable requirements of NFPA 720.

Also refer to 527 CMR 31.00 and 248 CMR as carbon monoxide detector required locations set forth in 527 CMR 31.00 and 248 CMR must also be met.

527 CMR 31 - **within 10 feet of each** bedroom door (outside of bedrooms)

248 CMR - **when direct vent exhaust is less than 7 feet from grade** a CO detector will be required in room with gas equipment

527 CMR 30 - **In occupancies with an unvented propane or natural gas-fired space heater**, at least one listed carbon monoxide detector shall be installed and maintained in any room or space where said heater has been installed in accordance with the manufacturers instructions.

SPRINKLERS:

5313.5 Dwellings Requiring Sprinklers.

Automatic sprinklers installed in accordance with NFPA 13D shall be installed in one- and two-family dwellings having an **aggregate area greater than 14,400 square are feet** (1338 m²), including basements but not including garages and unfinished attics.