

780 CMR: STATE BOARD OF BUILDING REGULATIONS AND STANDARDS
BUILDING PLANNING FOR SINGLE- AND TWO-FAMILY DWELLINGS

safety terminals. Handrails adjacent to a wall shall have a space of not less than 1½ inches (38 mm) between the wall and the handrails.

780 CMR 5312 GUARDS

5312.1 Guards Required. Porches, balconies or raised floor surfaces located more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 36 inches (914 mm) in height. Open sides of stairs with a total rise of more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 34 inches (864 mm) in height measured vertically from the nosing of the treads.

Porches and decks which are enclosed with insect screening shall be provided with guards where the walking surface is located more than 30 inches (762 mm) above the floor or grade below.

5312.2 Guard Opening Limitations. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere four inches (102 mm) or more in diameter.

Exceptions:

1. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere six inches (152 mm) cannot pass through.
2. Openings for required guards on the sides of stair treads shall not allow a sphere 4¾ inches (107 mm) to pass through.

780 CMR 5313 LIFE SAFETY SYSTEMS

5313.1 Definitions.

COMBINATION APPLIANCE: shall mean a combination photoelectric smoke detector and carbon monoxide alarm appliance which is ac powered with battery backup. Such combination appliance shall employ both simulated voice and tone alarms features which clearly distinguishes between carbon monoxide and smoke notification, in accordance with NFPA 720, 5.3.4

MULTIPLE-STATION ALARM DEVICE. Two or more single-station devices (smoke or heat detector or carbon monoxide detector) that are capable of interconnection such that actuation of one causes all integral or separate audible alarms to operate

SINGLE-STATION ALARM DEVICE. An assembly incorporating the detector (smoke or heat detector or carbon monoxide detector), control equipment and alarm sounding device in one unit that is operated from a power supply either in the unit or obtained at the point of installation.

SMOKE DETECTOR. A listed device that senses visible or invisible particles of combustion. Only photoelectric or combination photoelectric/ionization type smoke detectors shall be permitted in Massachusetts

SYSTEM-TYPE DEVICE. A device designed to be connected to a fire alarm control unit (panel). Low-power radio transmitting (wireless) systems are included as part of this definition.

5313.2 Household Fire-warning Systems.

5313.2.1 General. The household fire-warning system shall be single or multiple station or of the system type and shall consist of smoke detectors and heat detectors as required in 780 CMR 5313.

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

5313.2.2 Listing and Installation Requirements. All fire detection, notification and protection equipment and devices shall be listed and installed in accordance with the provisions of 780 CMR 5313.2, the manufacturer's instructions, the listing criteria, 527 CMR 12.00 and NFPA 72, as applicable.

5313.2.3 Interconnection within a Dwelling Unit. When more than one code-required detector must be installed, the code-required detectors shall be compatible and interconnected in such a manner that the actuation of one detector will activate all of the audible alarms.

5313.2.4 Audible Alarm Intensity. All required alarm sounding appliances shall have a minimum rating of 85 dBA at ten feet (3048 mm). Where audible appliances are installed to provide signals for sleeping areas, they shall have a sound level of at least 75 dBA measured at the pillow level in the sleeping area.

5313.2.5 Power source. All power sources and wiring must be permanent and in accordance with 527 CMR 12.00.

5313.2.5.1 Primary Electrical Power for Single-station and Multiple-station Devices. Power for single- and multiple-station devices shall be supplied from a permanently wired connection directly to an AC primary source of power. All power for AC-powered devices shall be taken from either a dedicated locked branch circuit or a single branch circuit, which also provides other electrical service to a habitable space. The power source shall be on the supply side, ahead of any switches.

5313.2.5.2 Primary Electrical Power for System-type Household Fire-warning Systems. System-type household fire-warning systems that include a listed control unit with automatic detectors and occupant notification appliances shall be powered from a permanently wired AC primary power source. Such AC primary power shall be supplied either from a dedicated locked branch circuit or the unswitched portion of a branch circuit also used for power and lighting of a habitable space, in accordance with the requirements of NFPA 72 and 527 CMR 12.00.