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## 661-210.2 (100) General requirements.

**210.2(1)** Approved single station smoke detectors shall be acceptable in all areas covered by this chapter, unless other fire warning equipment or materials are required by any provision of 661—Chapter 201, 202, or 205. Any single station smoke detector installed on or after April 1, 2010, in compliance with this subrule, including a replacement of an existing detector, shall be a dual sensor smoke detector. If sufficient dual sensor smoke detectors have been installed to comply with the requirements of this chapter, additional smoke detectors which may be other than dual sensor detectors may be installed.

- **210.2(2)** Any installation of wiring and equipment shall comply with NFPA 70, National Electrical Code, 2008 edition, and requirements established by the manufacturer of the equipment serviced by the wiring.
- 210.2(3) All devices, combinations of devices, and equipment to be installed in conformity with this chapter shall be approved and used for the purposes for which they are intended. Any smoke detector installed on or after April 1, 2010, in compliance with this chapter, including a replacement of an existing detector, shall be a dual sensor smoke detector. If sufficient dual sensor smoke detectors have been installed to comply with the requirements of this chapter, additional smoke detectors which may be other than dual sensor detectors may be installed.
- **210.2(4)** A combination system, such as a household fire warning system whose components may be used in whole or in part, in common with a nonfire emergency signaling system, such as a burglar alarm system or an intercom system, shall not be permitted or approved, except for one- or two-family dwellings.
- **210.2(5)** All power supplies shall be sufficient to operate the smoke detector alarm for at least four continuous minutes.

## **210.2(6)** Power source.

- a. In new buildings and additions constructed after July 1, 1991, required smoke detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent and without a disconnecting switch other than that required for overcurrent protection. Smoke detectors may be solely battery operated when installed in existing buildings, or in buildings without commercial power, or in buildings which undergo alterations, repairs or additions subject to subrule 210.2(2).
- b. New and replacement smoke detectors installed after May 1, 1993, which receive their primary power from the building wiring shall be equipped with a battery backup.
- **210.2**(7) The failure of any nonreliable or short-life component which renders the detector inoperative shall be readily apparent to the occupant of the sleeping unit without the need for a test. Each smoke detector shall detect abnormal quantities of smoke that may occur and shall properly operate in the normal environmental condition.
- **210.2(8)** Equipment shall be installed, located and spaced in accordance with the manufacturer's recommendations.
- **210.2(9)** Installed fire warning equipment shall be mounted so as to be supported independently of its attachment to wires.
  - 210.2(10) All apparatus shall be restored to normal immediately after each alarm or test.
  - 210.2(11) Location within dwelling units.
- a. In dwelling units, detectors shall be mounted on the ceiling or wall at a point centrally located in the corridor or area giving access to each separate sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a detector shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke detector shall be installed on the upper level, except that when the lower level contains a sleeping area, a detector shall be installed on each level. When sleeping rooms are on an upper level, the detector shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room. Detectors shall sound an alarm audible in all sleeping areas of the dwelling unit in which they are located.

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b. Location in efficiency dwelling units and hotels. In efficiency dwelling units, in hotel suites and in hotel sleeping rooms, detectors shall be located on the ceiling or wall of the main room or hotel sleeping room. When sleeping rooms within an efficiency dwelling unit or hotel suite are on an upper level, the detector shall be placed at the ceiling of the upper level in close proximity to the stairway. When actuated, the detector shall sound an alarm audible within the sleeping area of the dwelling unit, hotel suite or sleeping room in which it is located.

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