

CHAPTER 210
SMOKE ALARMS/DETECTORS

661—210.1(100) Definitions. The following definitions apply to rules 661—210.1(100) through 661—210.5(100):

“*Approved*” means that the equipment has been approved or listed for a specific use by an independent testing laboratory or organization of national reputation.

“*Fire alarm system*” means a system or a portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal-initiating devices and to initiate the appropriate response to those signals.

“*Multiple-station smoke alarm*” means two or more single-station smoke alarm devices that are capable of interconnection such that actuation of one causes the appropriate alarm signal to operate in all interconnected alarms. Interconnection may occur wirelessly for residential smoke alarms.

“*Single-station smoke alarm*” means an assembly incorporating the detector, the control equipment and the alarm-sounding device in one unit, operated from a power supply either in the unit or obtained at the point of installation or both.

“*Smoke alarm*” means a single- or multiple-station alarm responsive to smoke. See also “single-station smoke alarm” and “multiple-station smoke alarm.” Residential smoke alarms are required to be listed under Underwriters Laboratory Standard (UL) 217.

“*Smoke detector*” means a device that senses visible or invisible particles of combustion. Smoke detectors are typically listed under UL 268.

[ARC 8550B, IAB 2/24/10, effective 4/1/10; ARC 5254C, IAB 11/4/20, effective 12/9/20]

661—210.2(100) Scope. The provisions of this chapter apply to single-family and two-family residences, to townhouses and to all other residential occupancies in commercial buildings unless otherwise provided herein or by another provision of law. The provisions of this chapter do not apply to nonresidential occupancies.

[ARC 8550B, IAB 2/24/10, effective 4/1/10; ARC 5254C, IAB 11/4/20, effective 12/9/20]

661—210.3(100) General requirements.

210.3(1) Approved single-station smoke alarms 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 or if a fire alarm system with smoke detection listed under UL 268 has been installed. Any single-station smoke alarm or multiple-station smoke alarm installed on or after April 1, 2010, in compliance with this subrule, including a replacement of an existing smoke alarm, shall be listed under UL 217.

210.3(2) Any installation of wiring and equipment shall comply with 661—Chapter 504.

210.3(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 alarm installed on or after April 1, 2010, in compliance with this chapter, including a replacement of an existing smoke alarm, shall be listed in accordance with UL 217. Existing dual sensor smoke alarms may be maintained until replacement is recommended by the manufacturer or upon failure.

210.3(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.

210.3(5) All power supplies shall be sufficient to operate the smoke detector alarm for at least four continuous minutes.

210.3(6) Single-station battery-operated or battery backup smoke alarms shall be replaced in accordance with the manufacturer’s instructions.

210.3(7) Power source.

a. In new buildings and additions constructed after July 1, 1991, required smoke alarms 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 alarms may be solely battery-powered when installed in existing buildings, or in buildings without commercial power, or in buildings which undergo alterations, repairs or additions subject to subrule 210.3(2).

b. New and replacement smoke alarms installed after May 1, 1993, which receive their primary power from the building wiring shall be equipped with a battery backup.

c. New and replacement smoke alarms installed after July 1, 2016, which receive their primary power from the building wiring where more than one smoke alarm is required to be installed shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms.

d. After June 30, 2021, a battery-powered smoke alarm listed in accordance with UL 217 that is newly installed or replaces an existing battery-powered smoke alarm must be powered by a nonremovable, nonreplaceable battery that powers the alarm for at least ten years. The battery requirements of this subrule do not apply to a fire alarm, smoke detector, smoke alarm, or ancillary component that is electronically connected as a part of a centrally monitored or supervised alarm system; that uses a low-power, radio frequency wireless communication signal.

210.3(8) The failure of any nonreliable or short-life component which renders the alarm inoperative shall be readily apparent to the occupant of the sleeping unit without the need for a test. Each smoke alarm shall detect abnormal quantities of smoke that may occur and shall properly operate in the normal environmental condition.

210.3(9) Equipment shall be installed in accordance with the manufacturer's recommendations.

210.3(10) Installed fire warning equipment shall be mounted so as to be supported independently of its attachment to wires.

210.3(11) All apparatus shall be restored to normal immediately after each alarm or test.

210.3(12) Smoke alarms shall be located as follows:

a. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.

b. In each room used for sleeping purposes.

c. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm 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.

[ARC 7735B, IAB 5/6/09, effective 4/7/09; ARC 8151B, IAB 9/23/09, effective 9/1/09; ARC 8550B, IAB 2/24/10, effective 4/1/10; ARC 2494C, IAB 4/13/16, effective 5/18/16; ARC 5254C, IAB 11/4/20, effective 12/9/20]

661—210.4(100) Smoke detectors—notice and certification of installation. A person who files for a homestead tax credit pursuant to Iowa Code chapter 425 shall certify that the single-family dwelling unit for which the credit is filed has a smoke alarm(s) installed in accordance with subrule 210.3(6) and paragraph 210.3(12) “*a.*,” or that such smoke alarm(s) will be installed within 30 days of the date of filing for credit.

[ARC 8550B, IAB 2/24/10, effective 4/1/10; ARC 5254C, IAB 11/4/20, effective 12/9/20]

661—210.5(100) Smoke detectors—new and existing construction.

210.5(1) *New construction.* All multiple-unit residential buildings and single-family dwellings which are constructed after July 1, 1991, shall include the installation of smoke alarms meeting the requirements of rule 661—210.3(100).

210.5(2) *Existing construction.* All existing single-family units and multiple-unit residential buildings shall be equipped with smoke alarms or detectors as required in paragraph 210.3(12) “*a.*”

[ARC 8550B, IAB 2/24/10, effective 4/1/10; ARC 5254C, IAB 11/4/20, effective 12/9/20]

These rules are intended to implement Iowa Code section 100.18.

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