

**Chapter 212-10 WAC**  
**SMOKE DETECTION DEVICES IN DWELLING UNITS**

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**WAC**

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**WAC 212-10-010 Administration, authority.** These rules are adopted pursuant to chapter 50, Laws of 1980, entitled smoke detection devices in dwelling units, and to RCW 48.48.140 to provide for the installation and maintenance of smoke detection devices inside all dwelling units (1) occupied by persons other than the owner, or (2) built or manufactured in this state.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-010, filed 2/4/81.]

**WAC 212-10-015 Application and scope.** (1) The provisions of these rules shall apply to (a) all dwelling units occupied by persons other than the owner after December 31, 1981, and (b) all dwelling units built or manufactured in this state after December 31, 1980.

(2) Notwithstanding the provisions of chapter 19.27 RCW, RCW 43.22.340 through 43.22.434 and 43.22.450 through 43.22.490, the provisions of these rules shall also apply to all buildings or structures, mobile homes and factory built housing used as dwelling units.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-015, filed 2/4/81.]

**WAC 212-10-020 Definitions.** (1) **Smoke detection device.** A self-contained alarm for detecting visible or invisible particles of combustion, which consists of an assembly of electrical components including a smoke chamber, alarm sounding appliance, and provision for connection to a power supply source, either by splice leads or a cord and plug arrangement or containing integral batteries. A supplemental heat detector may be included as part of the appliance. Terminals may be included for connection to a remote, audible signaling appliance or accessory. An integral transmitter may also be included to energize a remote audible signaling appliance. The smoke detection device may be of the photoelectric and/or ionization type.

(2) **Photoelectric detector.** A smoke detection device which activates when visible smoke from a fire enters the detector. Sensitive to smoldering fires as well as smoke generated by an open flame fire.

(3) **Ionization detector.** A smoke detection device which activates in response to invisible particles created by combustion. Sensitive to open flame fire.

(4) **Combination photoelectric/ionization detector.** A smoke detection device containing both an ionization and a photoelectric element.

(5) **Dwelling unit.** A single unit providing complete, independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

(6) **Factory built housing.** For the purpose of these rules, factory built housing is considered as any structure designed primarily for human occupancy other than a mobile home, the structure of any room of which is either entirely or substantially prefabricated or assembled at a place other than a building site, and which is subject to regulation by the Washington department of labor and industries pursuant to RCW 43.22.450 through 43.22.490.

(7) **Mobile home.** For the purpose of these rules, a mobile home is considered as a factory-assembled structure or structures assembled with the necessary service connections and made so as to be readily movable as a unit or units on its (their) own running gear and designed to be used as a dwelling unit without a permanent foundation, and which is subject to regulation by the Washington department of labor and industries pursuant to RCW 43.22.340 through 43.22.434.

(8) **New building.** For the purpose of these rules, a new building is considered as any structure constructed, erected or moved onto a permanent site on or after December 31, 1980, any portion of which is used or intended for use as a dwelling unit by any person or persons.

(9) **Existing building.** For the purpose of these rules an existing building is considered as any structure in existence prior to December 31, 1981, any portion of which is used, intended for use or thereafter converted for use as a dwelling unit by any person or persons other than the owner who do not otherwise qualify as a guest or member of the household of the owner.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-020, filed 2/4/81.]

**WAC 212-10-025 Conformance with nationally accepted standards.**

All smoke detection devices shall be designed and manufactured in conformance with the requirements of Underwriters Laboratories, Inc. Standard UL 217 or International Conference of Building Officials Standard 43-6, and shall be approved or listed for the purposes for which they are intended.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-025, filed 2/4/81.]

**WAC 212-10-030 Primary power supply.**

The primary power supply of a smoke detection device shall be either a commercial light and power source normally available in the dwelling unit, or an integral battery or batteries. Connection to a commercial power and light source, if used, shall be in the form of permanent wiring to terminals or leads in a separate wiring compartment having provision for the connection of a conduit, metal-clad or nonmetallic sheathed cable, by means of a power supply cord and attachment-plug cap, or by means of a separate power supply. EXCEPTION: Smoke detection devices in dwelling units built or manufactured in this state after December 31, 1980, shall receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent without a disconnecting switch other than those required for overcurrent protection.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-030, filed 2/4/81.]

**WAC 212-10-035 Number of smoke detection devices.** (1) At least one smoke detection device shall be installed to protect the sleeping area within each dwelling unit. A sleeping area is defined as the area or areas of the dwelling unit in which the bedrooms (or sleeping rooms) are located. Where bedrooms or rooms ordinarily used for sleeping are separated by other-use areas (such as kitchens or living rooms but not bathrooms or closets), or are located on different stories or floor levels, they shall be considered as separate sleeping areas for the purposes of these rules.

(2) Dwelling units with more than one sleeping area shall require the installation of additional smoke detection devices to protect each sleeping area.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-035, filed 2/4/81.]

**WAC 212-10-040 Location of smoke detection devices.** (1) Smoke detection devices shall be installed outside of bedrooms or rooms used for sleeping purposes but in the immediate vicinity of such rooms, centrally located in the corridor or area giving access to the rooms. In dwelling units without separate sleeping rooms, the smoke detection devices shall be centrally located in the main room. Smoke detection devices shall be located on or near the ceiling. NOTE: Smoke detection devices should be installed in those locations recommended by the manufacturer except in those cases where the space above the ceiling is open to the outside and little or no insulation is present over the ceiling. Such cases result in the ceiling being excessively cold in the winter time or excessively hot in the summer time. Where the ceiling is significantly different in temperature from the air space below, smoke has difficulty reaching the ceiling and to a detector which may be placed there. In this situation, placement of the detector on a side wall, with the top four inches to twelve inches from the ceiling is preferred. In dwelling units employing radiant heating in the ceiling, the wall location is the preferred location. Radiant heating in the ceiling can create a hot-air boundary layer along the ceiling surface which can seriously restrict the movement of smoke to a ceiling-mounted detector.

(2) A smoke detection device installed in a stairwell shall be so located as to assure that smoke rising in the stairwell cannot be prevented from reaching the detection device by an intervening door or obstruction.

(3) Smoke detection devices in rooms with ceiling slopes greater than one-foot rise per eight feet horizontally shall be located at the high side of the room.

(4) Smoke detection devices shall not be mounted in front of an air supply duct outlet or between the bedroom and the furnace cold air return.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-040, filed 2/4/81.]

**WAC 212-10-045 Installation.** (1) It is the responsibility of the builder or manufacturer of each new building, mobile home or factory built housing to install smoke detection devices within each dwelling unit.

(2) It is the responsibility of the owner of each existing building, mobile home or factory built housing to install smoke detection devices within each dwelling unit occupied by persons other than the owner.

(3) It is the responsibility of the owner of each new or existing building, mobile home or factory built housing, containing dwelling units occupied by persons other than the owner, to inspect and test all smoke detection devices at the time of vacancy and make the necessary repairs or replacements to insure that the smoke detection devices are operational prior to reoccupancy, and to instruct the occupants of the purpose, operation and maintenance of the smoke detection device(s).

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-045, filed 2/4/81.]

**WAC 212-10-050 Maintenance.** It is the responsibility of the occupant of all new or existing dwelling units, owned by other than the occupant, to maintain and test all smoke detection devices installed within the dwelling unit by the owner. Actual costs of maintenance, repair or replacement of smoke detection devices shall be as agreed beforehand by the occupant and owner. However, failure of the owner to abide by the terms of any such agreement does not relieve the occupant of the responsibility to maintain the smoke detection devices in a fully operational condition at all times. Failure to do so can subject the occupant to the penalty provisions of WAC 212-10-055.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-050, filed 2/4/81.]

**WAC 212-10-055 Penalties.** Any person who violates any of the provisions of RCW 48.48.140 or these rules shall be punished by a fine of not more than fifty dollars.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-055, filed 2/4/81.]

**WAC 212-10-060 Severability.** If any provision of these rules or its application to any person is held invalid, the remainder of the rules or the application of the provision to other persons or circumstances is not affected.

[Statutory Authority: RCW 48.48.140. WSR 81-04-058 (Order FM 81-2), § 212-10-060, filed 2/4/81.]