

CHAPTER 9 EXISTING OREGON AMENDMENTS
(2007 OSSC)

RED Underline = Existing Oregon Amendment

RED Double Underline = Proposed Amendment

~~BLUE Strikethrough~~ = Existing Oregon Deletion

~~BLUE Double Strikethrough~~ = Proposed Deletion

PURPLE = Model Code Change

901.1 Scope. The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation and operation of fire protection systems. Fire department access, fire-fighting water supply and fire hydrants shall be according to the Oregon Fire Code.

[F] 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in lieu of automatic sprinkler protection where recognized by the applicable standard and approved by the ~~fire code official~~ building official.

[F] 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1115 m2).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).
- ~~4. A Group M occupancy is used for the display and sale of upholstered furniture.~~

[F]903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area. For distance requirements to access roads and fire hydrants, see the Fire Code.

903.2.8.1 Requirements. Where substantial alterations are made or substantial damage occurs to an existing nonsprinkled Group R2 apartment house, designed and constructed under the provisions of this code, an approved automatic sprinkler system complying with NFPA 13R shall be installed only in the substantially altered or damaged dwelling units. When more than 50 percent of the dwelling units within a building are substantially altered or damaged, the entire apartment house occupancy shall be provided with an NFPA 13R sprinkler system or equivalent.

For the purposes of this section, when an NFPA 13R sprinkler system is installed, a fire department connection shall not be required.

SUBSTANTIAL ALTERATION. Any alteration where the total cost of all alterations (including, but not limited to, electrical, mechanical, plumbing or structural changes) for a building or facility within any 12-month period amounts to 25 percent or more of the assessed value of the structure before the building alteration occurred. For the purpose of this chapter, standard building maintenance, rewiring, residing or reroofing is not considered an alteration.

SUBSTANTIAL DAMAGE. Any damage of any origin to a structure, whereby the cost of restoring the structure to its original condition would be equal to or exceed 25 percent of the assessed value of the structure before the alteration occurred.

[F] **903.2.10 Group S-2.** An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 as follows: ~~buildings classified as all enclosed parking garages in accordance with Section 406.4 or where located beneath other groups, where one of the following conditions exist:~~

~~1. A Group S-2 enclosed parking garage fire area exceeds 12,000 square feet (1115 m²);~~

~~2. A Group S-2 enclosed parking garage is located beneath other groups.~~

1. Where the fire area of the enclosed parking garage exceeds 12,000 square feet (1115 m²);

or

2. Where the enclosed parking garage is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies as applicable in Section 101.2.

~~[F]903.2.10 Piers or wharves and windowless stories in all occupancies.~~ An automatic sprinkler system shall be installed in the locations set forth in Sections 903.2.10.1 through 903.2.10.1.3.

[F] **903.2.11 Specific building areas and hazards.** In all occupancies an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.6-7.

Exception: Group R-3 and Group U.

903.2.10.4 11.7 Piers or wharves. An automatic sprinkler system shall be installed under piers or wharves regulated by Section 419 of this code, which exceed 200 feet (60 960 mm) in length or exceed 5,000 square feet (465 m²) in area. Such systems shall comply with NFPA 307, *Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves*.

[F] **903.3.1.1.1 Exempt locations.** Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire

detection system, in accordance with Section 907.2, that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the [fire-code building](#) official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.

5. Fire service access elevator machine rooms and machinery spaces.

[F] 903.4.1 Signals Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and automatically transmitted to an approved central station, remote supervising station or proprietary supervising station as defined in NFPA 72 or, when approved by the [fire-code building](#) official, shall sound an audible signal at a constantly attended location.

Exceptions:

1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.
2. Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

[F] 904.2 Where required. Automatic fire-extinguishing systems installed as an alternative to the required automatic sprinkler systems of Section 903 shall be approved by the [fire-code building](#) official. Automatic fire-extinguishing systems shall not be considered alternatives for the purposes of exceptions or reductions allowed by other requirements of this code.

~~905.5.1.1 Group A occupancies with an occupant load exceeding 1,000. In Group A occupancies with an occupant load exceeding 1,000, Class II standpipe hose connections shall be provided where process or conditions exist which would nullify the effectiveness of the automatic sprinkler system.~~

~~905.5.1.2 Groups I, H, B, S, M, F, Division 1 occupancies less than four stories in height, but greater than 20,000 square feet per floor. In Groups I, H, B, S, M, F, Division 1 occupancies less than four stories in height, but greater than 20,000 square feet per floor Class II standpipe hose connections shall be provided where process or conditions exist which would nullify the effectiveness of the automatic sprinkler system.~~

[F] 905.5.3 Class II system 1-inch hose. A minimum 1-inch (25 mm) hose shall be permitted to be used for hose stations in light-hazard occupancies where investigated and listed for this service and where approved by the ~~fire-code~~ building official.

[F] 906.1 Where required. Portable fire extinguishers shall be provided in occupancies and locations as required by the fire code. installed in the following locations:

~~1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.~~

~~**Exception:** In new and existing Group A, B and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.~~

~~2. Within 30 feet (9144 mm) of commercial cooking equipment.~~

~~3. In areas where flammable or combustible liquids are stored, used or dispensed.~~

~~4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 1415.1 of the *International Fire Code*.~~

~~5. Where required by the *International Fire Code* sections indicated in Table 906.1.~~

~~6. Special hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official.~~

*****Delete the remainder of Section 906*****

[F]907.2.6 Group I. A manual and automatic fire alarm system that activates the occupant notification system shall be installed in Group I occupancies. ~~An automatic smoke detection system that activates the occupant notification system shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3.~~

Exceptions:

~~1. Manual fire alarm boxes in resident or patient sleeping areas of Group I-1 and I-2 occupancies shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that travel distances required in Section 907.4.2 are not exceeded.~~

~~2. Occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is approved by the fire code official.~~

[F]907.2.6.2 Group I-2. ~~An automatic smoke detection system shall be installed~~ Supervised smoke detectors that comply with UL 268 shall be provided in corridors, in nursing homes (both intermediate care and skilled nursing facilities), detoxification facilities sleeping rooms and spaces permitted to be open to the corridors, by Section 407.2. The system shall be activated in accordance with Section 907.5. Hospitals shall be equipped with smoke detection as required in Section 407.2.

Exceptions:

1. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each patient sleeping unit and shall provide an audible and visual alarm at the nursing station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain patient sleeping units where patient sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors ~~on the unit sides~~ installed in accordance with their listing, provided that the integral detectors shall be supervised and perform the required alerting function in an approved manner.

907.2.6.2.1 Annunciation. Smoke detectors in patient sleeping rooms of I-2 occupancies shall provide a visual display on the corridor side of each patient sleeping unit and an audible and visual alarm at the nursing station attending each unit.

[F] **907.5.2.3.3 Groups I-1, ~~and R-1 and R-4.~~** Groups I-1, ~~and R-1 and R-4~~ dwelling units or sleeping units ~~in accordance with Table 907.5.2.3.3~~ shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system in accordance with chapter 11 and NFPA 72.

[F] **907.5.2.3.4 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, ~~all dwelling units and sleeping units shall be provided with the capability to support visible alarm notification appliances in accordance with ICC A117.1~~ visual alarms shall be provided within common and public areas, but are not required within individual dwelling units.

Table 907.5.2.3.3. Visible and audible alarms

[F] **909.5.1 Leakage area.** The total leakage area of the barrier is the product of the smoke barrier gross area multiplied by the allowable leakage area ratio, plus the area of other openings such as gaps and operable windows. Compliance shall be determined by achieving the minimum air pressure difference across the barrier with the system in the smoke control mode for mechanical smoke control systems. Passive smoke control systems tested using other approved means such as door fan testing shall be as approved by the ~~fire code~~ building official.

[F] **909.7 Airflow design method.** When approved by the ~~fire code~~ building official, smoke migration through openings fixed in a permanently open position, which are located between smoke control zones by the use of the airflow method, shall be permitted. The design airflow shall be in accordance with this section. Airflow shall be directed to limit smoke migration from the fire zone. The geometry of openings shall be considered to prevent flow reversal from turbulent effects.

[F] **909.8 Exhaust method.** When approved by the ~~fire code~~ building official, mechanical smoke control for large enclosed volumes, such as in atriums or malls, shall be permitted to utilize the

exhaust method. Smoke control systems using the exhaust method shall be designed in accordance with NFPA 92B.

[F] 909.9 Design fire. The design fire shall be based on a rational analysis performed by the registered design professional and approved by the ~~fire code~~ building official. The design fire shall be based on the analysis in accordance with Section 909.4 and this section.

[F] 909.10 Equipment. Equipment including, but not limited to, fans, ducts, automatic dampers and balance dampers, shall be suitable for its intended use, suitable for the probable exposure temperatures that the rational analysis indicates and as approved by the ~~fire code~~ building official.

[F] 909.15 Control diagrams. Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the ~~fire code~~ building official, the fire department and in the fire command center in a format and manner approved by the fire chief.

[F] 909.18.8.3.1 Report filing. A copy of the final report shall be filed with the ~~fire code~~ building official and an identical copy shall be maintained in an approved location at the building.

[F] 909.19 System acceptance. Buildings, or portions thereof, required by this code to comply with this section shall not be issued a certificate of occupancy until such time that the ~~fire code~~ building official determines that the provisions of this section have been fully complied with and that the fire department has received satisfactory instruction on the operation, both automatic and manual, of the system.

Exception: In buildings of phased construction, a temporary certificate of occupancy, as approved by the fire code official, shall be allowed provided that those portions of the building to be occupied meet the requirements of this section and that the remainder does not pose a significant hazard to the safety of the proposed occupants or adjacent buildings.

[F] 910.4 Mechanical smoke exhaust. Where approved by the ~~fire code~~ building official, engineered mechanical smoke exhaust shall be an acceptable alternate to smoke and heat vents.