

**Agenda
Item
VII.B.**

State of Oregon

Board memo

Building Codes Division

August 6, 2008

To: Building Code Structures Board

From: Shane Sumption
ADA, Fire, Life-Safety Code Specialist

Subject: Mid-Cycle Amendment – OSSC Appendix SR107.3, SR108.3.2
Fire alarm system requirements

Action requested:

The division is requesting that the board review and approve the following mid-cycle amendment to sections SR107.3 and SR108.3.2 of the Oregon Structural Specialty Code.

History:

The division received an application for appeal under [ORS 455.475](#) on June 18, 2008 with regard to the SR occupancy fire alarm requirements found in Section SR107.3. While researching the applicable code sections, it became evident that a code change was needed.

Currently, the code requires an automatic and manual fire alarm system “throughout” all SR occupancies in accordance with NFPA 72. Three levels of protection that are identified in NFPA 72 include: Total (complete) Coverage; Partial Coverage; and, Selective Coverage with “Total (complete) Coverage” being the closest term to “throughout.”

Subsection SR107.3.1 specifies that smoke detectors shall be used as the method for detection in “sleeping rooms, corridors and spaces open to the corridors.” Areas not specifically required to be provided with smoke detectors can be protected through any detection device allowed by NFPA 72 (i.e., heat detectors).

In a building provided with an automatic fire sprinkler system installed in accordance with NFPA 13 that is connected to the alarm system, the requirement for detection “throughout” is redundant. In such applications, the sprinkler heads function like “heat detectors” and when activated, signal the fire alarm system to operate.

The second part of this amendment, section SR108.3.2, is necessary to maintain and clarify the requirement for redundant detection in SR occupancies that are designed with controlled egress.

The deletion of the exception under SR108.3.2 is simply housekeeping in that the installation of such devices is regulated by the product listing and the NFPA 72.

Alternatives:

1. Approve the proposed mid-cycle code amendment for rulemaking and subsequent adoption effective October 1, 2008 with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.
2. Disapprove the proposed amendment and offer further direction to the division.

Recommendation:

The division recommends the board approve the following proposed mid-cycle code amendment for rulemaking and subsequent adoption effective October 1, 2008 with the finding that the added cost, if any, is necessary to the health and safety of the occupants or the public or necessary to conserve scarce resources.

Proposed amendment:

SR107.3 Fire alarm systems. An approved manual and automatic **fire** alarm system shall be installed ~~throughout~~ **in** all Group SR occupancies. **Detection shall be required only in the areas specified in section SR107.3.1 when an automatic sprinkler system is installed throughout the building, in accordance with 903.3.1.1 and connected to the building fire alarm system.**

Exceptions:

1. Manual fire alarm boxes located in resident sleeping areas shall not be required at exits if located at all constantly attended staff locations provided such locations are visible and continually accessible and that travel distances required in Section 907.3.1 are not exceeded.
2. Approved household fire alarm systems with automatic and manual provisions are permitted in Group SR-3 occupancies when installed in accordance with NFPA 72.

SR107.3.1 Smoke detectors. Smoke detectors that comply with UL 268 shall be provided in corridors, sleeping rooms and spaces open to corridors in all Group SR occupancies.

SR107.3.1.1 Smoke detectors in sleeping rooms and living units. Smoke detectors in sleeping rooms and living units of Group SR occupancies shall be monitored by on site staff in an approved manner.

SR108.3.2 Controlled egress fire alarm requirements. An approved automatic fire alarm system shall be provided **for partial coverage** in accordance with ~~Section 907,~~ NFPA 72 and this appendix.

The fire alarm system shall include smoke detectors in all sleeping areas and common living spaces of the facility.

Exception: Smoke detectors shall not be installed within three feet of any of the following:

1. ~~A door to a kitchen.~~
2. ~~A door to a bathroom containing a bathtub or shower compartment.~~
3. ~~The supply registers of a forced air HVAC system.~~