**CHANGE TYPE:** Addition

**CHANGE SUMMARY:** This new section provides an option for using a smoke detection system in lieu of single-station and multiple-station alarms in Groups R-2, R-3, R-4 and I-1.

**2015 CODE: 907.2.11.7 Smoke Detection System.** Smoke detectors listed in accordance with UL 268 and provided as part of the building's fire alarm system shall be an acceptable alternative to single- and multiple-station smoke alarms and shall comply with the following:

- 1. The fire alarm system shall comply with all applicable requirements in Section 907.
- 2. Activation of a smoke detector in a dwelling unit or sleeping unit shall initiate alarm notification in the dwelling unit or sleeping unit in accordance with Section 907.5.2.
- 3. Activation of a smoke detector in a dwelling unit or sleeping unit shall not activate alarm notification appliances outside of the dwelling unit or sleeping unit, provided that a supervisory signal is generated and monitored in accordance with Section 907.6.6.

**CHANGE SIGNIFICANCE:** This change adds a section to allow the option of using a smoke detection system as an alternative to single-station and multiple-station alarms. Specifically, it allows smoke detectors listed in accordance with UL 268, Smoke Detectors for Fire Alarm Systems using ionization-type, photoelectric-type or combination detectors using both photoelectric and ionization technologies. UL is now recommending the use of combination detectors because research that has shown that each technology has unique performance characteristics. Ionization responds quicker to a slow smoldering fire, whereas a photoelectric detector responds quicker to a fast flaming fire.

In larger buildings of Group R-2 and 1-1 occupancies, this can be a significant cost savings because the installation and subsequent testing of duplicate devices inside a dwelling unit or sleeping unit are avoided. Addressable smoke detection systems can be easily programmed to alert only the occupants of the dwelling unit or sleeping unit while at the same time maintaining supervision of the circuit integrity. The testing and maintenance of today's addressable systems is more easily accomplished using the sensitivity reporting features of these systems. For jurisdictions that have been allowing this methodology, this change will eliminate the need for approving these systems under the alternative materials and methods section of the code.

907.2.11.7

## Smoke Detection System



Smoke detector in R-2 occupancy