9.00: continued

907.2.13 Replace as follows:

907.2.13 High-rise Buildings. High-rise buildings shall be provided with an automatic smoke detection system in accordance with section 907.2.13.1, a fire department communication system in accordance with section 907.2.13.2 and an emergency voice/alarm communication system in accordance with section 907.5.2.2.

907.2.15 Add exception as follows:

Exception. Buildings sprinklered throughout with automatic sprinklers

907.2.18.2 Replace as follows:

907.2.18.2 Alarm Required. : Activation of the smoke exhaust system shall activate an audible alarm at a *constantly attended location* and activate the alarm notification appliances throughout the building in accordance with section 907.3.

907.2.24 Add subsection:

907.2.24 Other Sleeping Areas. An automatic smoke detection system shall be provided for all sleeping areas, and means of egress from sleeping areas in buildings not otherwise required to have smoke detectors by section 907.2.1 through 907.2.23 where any space is used for sleeping purpose.

907.3.3 Replace as follows:

907.3.3 Elevator Emergency Operation. Automatic fire detectors installed for elevator emergency operation shall be installed in accordance with the provisions of 524 CMR 17.00: *Power Passenger and Freight Elevators (For Installations Made Prior to July 1, 1989)*, 524 CMR 35.00: *Safety Code for Elevators and Escalators A17.1-2004 and the Massachusetts Modifications of That Code* and NFPA 72.

907.3.4 Replace as follows:

907.3.4 Wiring. The wiring to the auxiliary devices and equipment used to accomplish the above fire safety functions shall be monitored for integrity in accordance with 527 CMR 12.00: *2008 Massachusetts Electrical Code (Amendments)* and NFPA 72.

907.4.1 Delete exception 2. only.

907.5.2.2 Add a second exception as follows:

2. In Group A with an occupant load of 300 or more where the head of the fire department or designee determines that partial or selective evacuation is not desired, but rather total evacuation is required, then a distinctive signal in *lieu* of a voice alarm is permitted.

907.5.2.2.5 Add subsection:

907.5.2.2.5 Evacuation. Where the head of the fire department or his/her designee determines that partial or selective evacuation is not desired but rather total evacuation is required, then a distinctive signal in *lieu* of a voice alarm is permitted.

907.5.2.3 Add a second sentence as follows:

Also refer to 521 CMR 40.00: *Alarms* for visible alarm requirements in buildings, or portions thereof, open to the public.

907.6.5 Replace as follows:

907.6.5 Monitoring. Fire alarm systems required by section 907 shall be monitored in accordance with section 903.4.1

Exception. Monitoring by a supervising station is not required for:

1. Single and multiple station smoke alarms required by section 907.2.11 in other than Groups R-1 and R-2 with more than 12 units.
2. Smoke detectors in Group I-3 Occupancies

9.00: continued

3. *Automatic sprinkler systems* and single- and multi-station smoke detectors in one- and two-family dwellings.
4. Smoke detectors in patient sleeping rooms in occupancies in Group I-2.

907.6.5.2 Add subsection:

907.6.5.2 Re-transmission of Alarm Signals. In all cases, central stations and those operating approved remote/proprietary station fire alarm system supervising stations shall re transmit alarm signals within 90 seconds of receipt, to the fire department having jurisdiction.

909.2 Replace as follows:

909.2 General Design Requirements. Buildings, structures or parts thereof required by this code to have a smoke control system or systems shall have such systems designed in accordance with the applicable requirements of Section 909 and the generally accepted and well-established principles of engineering relevant to the design. The *construction documents* shall include sufficient information and detail to adequately describe the elements of the design necessary for the proper implementation of the smoke control systems. These documents shall be accompanied by sufficient information and analysis to demonstrate compliance with these provisions.

An independent third party review is required for smoke control system designs incorporating performance analysis under Section 909 (design fire analysis, rational analysis, timed egress analysis), or the smoke control methods of Sections 909.6, 909.7, or 909.8 or other alternative design method selected by the *registered design professional*. The independent third party reviewer shall prepare a written report documenting the review, and submit it to the *registered design professional* and the building and fire officials. If all parties concur that the analyses are appropriate, the design may be approved pursuant to Section 104.11.

909.4.6.1 Add subsection:

909.4.6.1 Exhaust Method Smoke Control. When the exhaust method of section 909.8 is used, the rational analysis shall evaluate exposure of occupants exiting a space to smoke or tenability thresholds. Occupant exposure to smoke or tenability thresholds shall be determined by a timed egress analysis using a minimum duration of 1.5 times the calculated egress time. The smoke control system shall remain operational for the required duration.

909.6 Replace as follows:

909.6 Pressurization Method. When approved by the fire official, the primary mechanical means of controlling smoke shall be by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke control zone of fire origin.

909.15 Replace as follows:

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 Official and shall be kept on site adjacent to the fire alarm panel in a format and manner approved by the fire chief.

909.18.8.3.1 Replace as follows:

909.18.8.3.1 Report Filing. A copy of the final report shall be filed with the fire code official and *building official* and an identical copy shall be maintained in an *approved* location at the building.

909.20.6.1.1 I Add subsection:

909.20.6.1.1 Intake Duct Detection. An in duct smoke detector shall be installed just downstream of the fresh air fan. Activation of this detector shall annunciate at the control panel and shall shut down the fan for that particular smoke proof enclosure.