

**1305.0907 SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.**

Subpart 1. [Repealed, 39 SR 1605]

Subp. 1a. **IBC section 907.1.2.** IBC [F] section 907.1.2 is amended to read as follows:

**907.1.2 Fire alarm shop drawings.** Shop drawings for fire alarm systems shall be submitted for review and approval before system installation, and shall include all of the following where applicable to the system being installed:

1. A floor plan that indicates the use of all rooms.
2. Locations of alarm-initiating devices.
3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
4. Design minimum audibility level for occupant notification.
5. Maximum sound pressure.
6. Location of fire alarm control unit, transponders, and notification power supplies.
7. Annunciators.
8. Power connection.
9. Battery calculations.
10. Conductor type and sizes.
11. Voltage drop calculations.
12. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices, and materials.
13. Details of ceiling height and construction.
14. The interface of fire safety control functions.
15. Classification of the supervising station.

Subp. 1b. **IBC [F] section 907.2.** IBC [F] section 907.2 is amended to read as follows:

**907.2 Where required in new buildings and occupancies.** An approved manual, automatic, or manual and automatic fire alarm system shall be provided in new buildings and occupancies in accordance with Sections 907.2.1 through 907.2.24.2 and NFPA 72. For the purposes of Sections 907.2.1 through 907.2.24.2, fire barrier walls or fire walls shall not define separate buildings. In buildings containing mixed occupancies that are designed as separated uses in accordance with Section 508.4, fire alarm and detection systems need only be installed in those occupancies where required by this section.

**Exception:** In areas protected by an approved, supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, automatic fire detectors required by Section 907.2 need not be provided. Where Section 907.2 requires smoke detectors, such protection shall be installed.

Subp. 2. [Repealed, 32 SR 7]

Subp. 2a. **IBC [F] section 907.2.1.** IBC [F] section 907.2.1 is amended to read as follows:

**907.2.1 Group A, general.** A fire alarm system shall be installed in accordance with Sections 907.2.1 through 907.2.1.3 in Group A occupancies having an occupant load of 300 or more.

**Exceptions:**

1. Assembly areas used solely for worship purposes.
2. A fire alarm system is not required in buildings with an occupant load of less than 1,000 when an approved automatic fire-extinguishing system is installed throughout the building.
3. Assembly uses within Group E occupancies shall have alarms as required for the Group E occupancy.
4. Group A-5 occupancies.

Subp. 3. **IBC [F] section 907.2.1.1.** IBC [F] section 907.2.1.1 is amended to read as follows:

**907.2.1.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be installed in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, kitchens, trash collection rooms, storage rooms, and similar areas.

Subp. 4. **IBC [F] section 907.2.1.2.** IBC [F] section 907.2.1.2 is amended to read as follows:

**907.2.1.2 Notification.** The required fire alarm system shall activate an audible and visible notification appliance at a constantly attended location within the building for the purposes of initiating emergency action. A presignal feature and positive alarm sequencing in accordance with NFPA 72 are permitted.

Occupant notification shall be by means of voice announcements, either live or prerecorded, initiated by the person in the constantly attended location.

**Exception:** Where no constantly attended location exists, an automatic fire alarm system providing a general evacuation signal or an approved emergency voice/alarm communications system is permitted.

Subp. 5. **IBC [F] section 907.2.1.3.** IBC [F] section 907.2.1 is amended by adding a section to read as follows:

**907.2.1.3 System initiation in Group A occupancies with an occupant load of 1,000 or more.** Activation of the fire alarm system in Group A occupancies with an occupant load of 1,000 or more shall immediately initiate an approved prerecorded message

announcement using an approved emergency voice/alarm communications system in accordance with NFPA 72.

**Exception:** Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an approved constantly attended location.

Subp. 6. **IBC [F] section 907.2.2.** IBC [F] section 907.2.2 is amended to read as follows:

**907.2.2 Group B, general.** A fire alarm system shall be installed in accordance with Sections 907.2.2 through 907.2.2.3 in Group B occupancies where:

1. The building has an occupant load of 500 or more persons;
2. The building has an occupant load of more than 100 persons above or below the lowest level of exit discharge; or
3. The building contains an ambulatory care facility.

When automatic sprinkler systems or automatic fire detectors are installed in ambulatory care facilities, such systems or detectors shall be connected to the building fire alarm system.

**Exception:** In other than ambulatory care facilities, a fire alarm system is not required when an approved automatic fire extinguishing system is installed throughout the building.

Subp. 7. **IBC [F] section 907.2.2.1.** IBC [F] section 907.2.2.1 is amended to read as follows:

**907.2.2.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, kitchens, mechanical and electrical rooms, trash collection rooms, storage rooms and similar areas. In ambulatory care facilities, initiation of the fire alarm system shall also be by manual means.

Subp. 8. **IBC [F] section 907.2.2.2.** IBC [F] section 907.2.2 is amended by adding a section to read as follows:

**907.2.2.2 Notification.** Activation of the fire alarm system shall initiate a general evacuation signal.

**Exception:** In lieu of audible notification appliances, visible notification appliances shall be permitted to be used in patient care areas.

Subp. 9. **IBC [F] section 907.2.2.3.** IBC [F] section 907.2.2 is amended by adding a section to read as follows:

**907.2.2.3 Ambulatory care facilities.** Corridors and rooms or spaces open to corridors within an ambulatory care facility shall be protected by an automatic smoke detection system.

Subp. 10. **IBC [F] section 907.2.3.** IBC [F] section 907.2.3 is amended to read as follows:

**907.2.3 Group E, general.** A fire alarm system shall be installed in accordance with Sections 907.2.3 through 907.2.3.3 in Group E occupancies having an occupant load of 50 or more.

Subp. 11. **IBC [F] section 907.2.3.1.** IBC [F] section 907.2.3 is amended by adding a section to read as follows:

**907.2.3.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash collection rooms, storage rooms, lounges, and similar areas.

**Exception:**

In buildings protected throughout by an approved automatic sprinkler system or having an approved fire alarm system equipped with corridor smoke detection, manual fire alarm boxes are only required in any main office and in any custodial area.

Subp. 12. **IBC [F] section 907.2.3.2.** IBC [F] section 907.2.3 is amended by adding a section to read as follows:

**907.2.3.2 Travel through adjoining rooms.** Where the only means of egress travel from an interior room or rooms having an aggregate occupant load of more than 10 occupants is through an adjoining or intervening room, automatic smoke detectors shall be installed throughout the common atmosphere through which the path of egress travel passes.

**Exception:** In buildings that are protected throughout by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, smoke detectors are not required in intervening or adjoining rooms.

Subp. 13. **IBC [F] section 907.2.3.3.** IBC [F] section 907.2.3 is amended by adding a subsection to read as follows:

**907.2.3.3 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6.

**Exception:** An emergency voice/alarm communication system is not required in Group E occupancies with occupant loads of 100 or less, as long as the activation of the fire alarm system or automatic sprinkler system in those occupancies initiates a general evacuation signal.

Subp. 14. **IBC [F] section 907.2.4.** IBC [F] section 907.2.4 is amended to read as follows:

**907.2.4 Group F, general.** A fire alarm system shall be installed in accordance with Sections 907.2.4 through 907.2.4.2 in Group F occupancies that are two or more stories in height and have an occupant load of 500 or more above or below the lowest level of exit discharge.

**Exception:** A fire alarm system is not required when an approved automatic fire extinguishing system is installed throughout the building.

Subp. 15. **IBC [F] section 907.2.4.1.** IBC [F] section 907.2.4 is amended by adding a section to read as follows:

**907.2.4.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, trash collection rooms, kitchens, mechanical and electrical rooms, and similar areas.

Subp. 16. **IBC [F] section 907.2.4.2.** IBC [F] section 907.2.4 is amended by adding a section to read as follows:

**907.2.4.2 Notification.** Activation of the fire alarm system shall initiate a general evacuation signal.

Subp. 17. **IBC [F] section 907.2.5.** IBC [F] section 907.2.5 is amended to read as follows:

**907.2.5 Group H, general.** A fire alarm system shall be installed in accordance with Sections 907.2.5 through 907.2.5.2 in Group H-5 occupancies, occupancies used for the manufacture of organic coatings, and, when required by chapters 60, 62, and 63 of the Minnesota State Fire Code at the following locations:

1. rooms or areas where highly toxic compressed gases are stored or used;
2. rooms or areas where Class I, II, or III organic peroxides are stored; and
3. liquid and solid oxidizer storage areas.

Subp. 18. **IBC [F] section 907.2.5.1.** IBC [F] section 907.2.5 is amended by adding a section to read as follows:

**907.2.5.1 Initiation.** Initiation of the fire alarm system in Group H-5 Occupancies and in occupancies used for the manufacture of organic coatings shall be by manual means. Initiation of fire alarm systems installed for highly toxic gases, organic peroxides and oxidizers shall be by automatic means, as specified in chapters 60, 62, and 63 of the Minnesota State Fire Code.

Subp. 19. **IBC [F] section 907.2.5.2.** IBC [F] section 907.2.5 is amended by adding a section to read as follows:

**907.2.5.2 Notification.** Activation of the fire alarm system in Group H-5 Occupancies and in occupancies used for the manufacture of organic coatings shall initiate a general evacuation signal. Activation of the automatic detection systems installed for highly toxic gases, organic peroxides, and oxidizers shall sound a local alarm.

Subp. 20. [Repealed, 32 SR 7]

Subp. 21. [Repealed, 32 SR 7]

Subp. 22. **IBC [F] section 907.2.6.** IBC [F] section 907.2.6 and all subsections are deleted in their entirety and replaced with the following:

**907.2.6 Group I, general.** A fire alarm system shall be installed in accordance with Sections 907.2.6.1 through 907.2.6.4.2 in Group I occupancies.

**907.2.6.1 Group I-1 occupancies-general.** A manual and automatic fire alarm system shall be installed in Group I-1 occupancies in accordance with Sections 907.2.6.1.1 through 907.2.6.1.3.

**907.2.6.1.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms, lounges, gift shops, and similar areas. Automatic smoke detectors shall be provided in corridors and areas that are open to corridors.

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

**907.2.6.1.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, activation of the fire alarm system shall immediately transmit an alarm to an approved central station or remote station service.

**Exceptions:**

1. In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in critical care areas.
2. Where occupants are incapable of evacuating themselves because of age, physical/mental disabilities, or physical restraint, only the attendants or other personnel required to evacuate occupants from a zone, area, floor, or building shall be required to be notified. This notification shall include means to readily identify the zone, area, floor, or building in need of evacuation.

**907.2.6.1.3 Sleeping room smoke alarms.** Smoke alarms shall be installed in resident sleeping rooms in accordance with Section 907.2.10.2.

**907.2.6.2 Group I-2 occupancies-general.** A manual and automatic fire alarm system shall be installed in Group I-2 occupancies in accordance with Sections 907.2.6.2.1 through 907.2.6.2.4.

**907.2.6.2.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and

soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms, lounges, gift shops, and similar areas. Hospitals, nursing homes (both intermediate care and skilled nursing facilities), board and care homes, and detoxification facilities shall be provided with smoke detection throughout the corridor and areas open to the corridors, other than nurses' stations.

**Exceptions:**

1. Corridor smoke detection shall not be required where the sleeping room smoke detectors required in Section 907.2.6.2.3 are connected to an approved fire alarm system and activate a general evacuation signal.
2. Manual fire alarm boxes shall not be required at exits from patient sleeping areas if located at all nurses' stations or other constantly attended staff locations, provided such fire alarm boxes are visible and continuously accessible and provided that travel distances horizontally on the same floor shall not exceed 200 feet to reach a manual fire alarm box.

**907.2.6.2.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a signal that is distinctive from audible signals used for other purposes in the same building. Such signal is intended to notify staff and need not meet the minimum sound pressure levels required for general evacuation fire alarm notification. In addition, activation of the fire alarm system shall immediately transmit an alarm to an approved central station or remote station service.

**Exceptions:**

1. In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in critical care areas.
2. Where occupants are incapable of evacuating themselves because of age, physical/mental disabilities, or physical restraint, only the attendants or other personnel required to evacuate occupants from a zone, area, floor, or building shall be required to be notified. This notification shall include means to readily identify the zone, area, floor, or building in need of evacuation.
3. Where total evacuation of occupants is impractical due to building configuration, only the occupants in the affected zones shall be initially notified. Provisions shall be made to selectively notify occupants in other zones to afford orderly evacuation of the entire building.

**907.2.6.2.3 Patient room smoke detectors.** Smoke detectors shall be installed in patient sleeping rooms of hospitals and nursing homes. Such detectors' primary power shall be other than battery power. Actuation of such detectors shall cause a visual display on the corridor side of the room where the detector is located and shall cause a distinct audible and visual alarm at the nurses' station attending the room. Such detectors may be part of the facility's fire alarm system, nurses' call system, or a standalone system.

**907.2.6.2.3.1 Integral smoke detectors for automatic door-closing devices.** Integral smoke detectors for automatic door-closing devices on sleeping room doors can be installed only if they also meet all of the requirements in Section 907.2.6.2.3.

**907.2.6.2.4 Sleeping room smoke alarms.** For Group I-2 facilities other than hospitals and nursing homes, single station smoke alarms shall be installed in resident sleeping rooms.

**907.2.6.3 Group I-3 occupancies-general.** A manual and automatic fire alarm system shall be installed in Group I-3 occupancies in accordance with Sections 907.2.6.3.1 through 907.2.6.3.4.

**907.2.6.3.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms, lounges, gift shops, commissaries, and similar areas. Actuation of an automatic fire-extinguishing system, a manual fire alarm box, or a fire detector shall initiate an approved fire alarm signal, which automatically notifies staff. Presignal systems shall not be used.

**907.2.6.3.2 Manual fire alarm boxes.** Manual fire alarm boxes are not required to be located in accordance with Section 907.4 where the fire alarm boxes are provided at staff-attended locations having direct supervision over areas where manual fire alarm boxes have been omitted.

Manual fire alarm boxes are permitted to be locked in areas occupied by detainees, provided that staff members are present within the subject area and have keys readily available to operate the manual fire alarm boxes.

**907.2.6.3.3 Smoke detectors.** An approved automatic smoke-detection system shall be installed throughout resident housing areas, including sleeping areas and contiguous day rooms, group activity spaces, and other common spaces normally accessible to residents.

**Exceptions:**

1. Other approved smoke-detection arrangements providing equivalent protection, such as placing detectors in exhaust ducts from cells or behind protective grills, are allowed when necessary to prevent damage or tampering.
2. Smoke detectors are not required in sleeping rooms with four or fewer occupants in smoke compartments that are equipped throughout with an approved automatic sprinkler system.

**907.2.6.3.4 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a signal that is distinctive from audible signals used for other purposes in the same building. Such signal is intended to notify staff and need not meet

the minimum sound pressure levels required for general evacuation fire alarm notification. In addition, activation of the fire alarm system shall immediately transmit an alarm to an approved central station or remote station service.

**907.2.6.4 Group I-4 occupancies-general.** A manual and automatic fire alarm system shall be installed in Group I-4 occupancies in accordance with Sections 907.2.6.4.1 through 907.2.6.4.2.

**907.2.6.4.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be installed in laundry and soiled linen rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection rooms, storage rooms, lounges, gift shops, and similar areas. Automatic smoke detectors shall be provided in corridors and areas that are open to corridors.

**907.2.6.4.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, activation of the fire alarm system shall immediately transmit an alarm signal to an approved central station or remote station service.

Subp. 23. **IBC [F] section 907.2.7.** IBC [F] section 907.2.7 is deleted in its entirety.

Subp. 24. **IBC [F] section 907.2.7.1.** IBC [F] section 907.2.7.1 is deleted in its entirety.

Subp. 25. **IBC [F] section 907.2.8.** IBC [F] section 907.2.8 is amended to read as follows:

**907.2.8 Group R-1, general.** A fire alarm system shall be installed in accordance with Sections 907.2.8.1 through 907.2.8.3 in Group R-1 occupancies.

**Exceptions:**

1. A fire alarm system is not required in buildings not over two stories in height where all individual sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least one-hour fire partitions and each sleeping unit has an exit directly to a public way, exit court, or yard.
2. Buildings containing five or fewer sleeping units shall be allowed to be equipped with approved multiple-station smoke alarms installed as required for Group R-3 Occupancies. Installation shall be in accordance with Section 907.2.10.

**907.2.8.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, laundry and soiled linen rooms, mechanical and electrical rooms, trash collection rooms, storage rooms, gift shops, kitchens, locker rooms, custodial closets, lounges, and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

**Exception:** System fire and smoke detectors are not required when an approved automatic fire extinguishing system is installed in accordance with Section 903.3.1.1 or 903.3.1.2

and a manual fire alarm box is provided at a constantly attended location. When a constantly attended location is not provided, the manual fire alarm box shall be provided at the main exit.

**907.2.8.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

**907.2.8.3 Sleeping unit smoke alarms.** Sleeping unit smoke alarms required by Section 907.2.10 shall not be connected to a fire alarm system.

**Exception:** Connection of such alarms for annunciation only.

Subp. 26. **IBC [F] section 907.2.9.** IBC [F] section 907.2.9 and all subsections are deleted in their entirety and replaced with the following:

**907.2.9 Groups R-2 and R-4 , general.** Fire alarm systems and smoke alarms shall be installed in Group R-2 and Group R-4 occupancies. Group R-2 occupancies shall comply with Sections 907.2.9.1 through 907.2.9.1.3. Group R-4 occupancies shall comply with Sections 907.2.9.2 through 907.2.9.2.3.

**907.2.9.1 Group R-2, general.** A fire alarm system shall be installed in accordance with Sections 907.2.9.1 through 907.2.9.1.2 in Group R-2 occupancies where:

1. any sleeping unit or dwelling unit is located two or more stories above the story containing the lowest level of exit discharge;
2. any sleeping unit or dwelling unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit;
3. the building contains more than 16 dwelling units or sleeping units; or
4. the building is used as a congregate living facility, dormitory, convent, monastery, fraternity, sorority, group home, or shelter and has an occupant load of 20 or more.

**Exception:** A fire alarm system is not required in buildings not over two stories in height where all dwelling units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least one-hour fire partitions and each dwelling unit has an exit directly to a public way, exit court, or yard.

**907.2.9.1.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Automatic fire detectors shall be provided in boiler and furnace rooms, trash-collection rooms, shops, laundry rooms, common kitchens, locker rooms, lounges, mechanical and electrical rooms, storage rooms, and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

**Exception:** System fire and smoke detectors are not required when an approved automatic fire extinguishing system is installed throughout the building.

**907.2.9.1.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

**907.2.9.1.3 Dwelling unit smoke alarms.** Dwelling unit smoke alarms required by Section 907.2.10 shall not be connected to the building fire alarm system.

**Exception:** Connection of such alarms for annunciation only.

**907.2.9.2 Group R-4, general.** A fire alarm system shall be installed in accordance with Sections 907.2.9.2.1 through 907.2.9.2.3 in Group R-4 occupancies.

**Exceptions:**

1. A fire alarm system is not required in buildings two stories or less in height where all individual sleeping units, attics, and crawl spaces contiguous to those units are separated from each other and public or common areas by at least one-hour fire partitions and each sleeping unit room has an exit directly to a public way, exit court, or yard.
2. Buildings containing five or fewer sleeping units are permitted to be equipped with approved multiple-station smoke alarms installed as required for Group R-3 occupancies. Installation shall be in accordance with Section 907.2.10.

**907.2.9.2.1 Initiation.** Initiation of the fire alarm system shall be by automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms, shops, laundry and soiled linen rooms, mechanical and electrical rooms, common kitchens, lounges, trash collection rooms, storage rooms, gift shops, locker rooms, and similar areas. Automatic smoke detectors shall be provided in all common areas and interior corridors serving as required means of egress.

**Exception:** System fire and smoke detectors are not required when an approved automatic fire-extinguishing system is installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3.

**907.2.9.2.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal.

**907.2.9.2.3 Smoke alarms.** Single and multiple-station smoke alarms shall be installed in accordance with Section 907.2.10.

Subp. 26a. [Repealed, 39 SR 1605]

Subp. 26b. [Repealed, 44 SR 609]

Subp. 27. [Repealed, 44 SR 609]

Subp. 27a. [Repealed, 39 SR 1605]

Subp. 27b. **IBC [F] section 907.2.22.** IBC [F] section 907.2.22 is amended to read as follows:

**907.2.22 Battery rooms.** An automatic smoke detection system shall be installed in areas containing stationary storage battery systems where the battery capacity exceeds that listed in

Table 907.2.22. Battery systems exceeding the quantities listed in Table 907.2.22 shall comply with Minnesota Rules, chapter 7511, the Minnesota State Fire Code.

Subp. 27c. **IBC [F] section 907.2.22.** IBC [F] section 907.2.22 is amended to add Table 907.2.22 as follows:

**TABLE 907.2.22**

**BATTERY STORAGE SYSTEM THRESHOLD QUANTITIES**

<b>Battery Technology</b>	<b>Capacity<sup>a</sup></b>
Flow batteries <sup>b</sup>	20 kWh
Lead acid, all types	70 kWh
Lithium, all types	20 kWh
Nickel cadmium (Ni-Cd)	70 kWh
Sodium, all types	20 kWh <sup>c</sup>
Other battery technologies	10 kWh

For SI: 1 kilowatt hour = 3.6 megajoules.

<sup>a</sup> For batteries rated in amp-hours, kWh shall equal rated voltage times amp-hour rating divided by 1000.

<sup>b</sup> Shall include vanadium, zinc-bromine, polysulfide-bromide, and other flowing electrolyte-type technologies.

<sup>c</sup> 70 kWh for sodium-ion technologies.

Subp. 27d. **IBC [F] section 907.2.23.** IBC [F] section 907.2.23 is amended to read as follows:

**907.2.23 Capacitor energy storage systems.** An automatic smoke detection system shall be installed in areas containing capacitor energy storage systems where the storage capacity exceeds 3 kWh (10.8 megajoules). Systems exceeding 3 kWh (10.8 megajoules) shall comply with Minnesota Rules, chapter 7511, the Minnesota State Fire Code.

Subp. 28. **IBC [F] section 907.2.24.** IBC [F] section 907.2 is amended by adding sections to read as follows:

**907.2.24 Residential hospices.** A fire alarm system shall be installed in accordance with Sections 907.2.24.1 and 907.2.24.2 in residential hospices. When automatic sprinkler systems or automatic fire detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

**907.2.24.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in boiler and furnace rooms,

kitchens, laboratories, shops, gift shops, commissaries, laundry and soiled linen rooms, mechanical and electrical rooms, locker rooms, storage rooms, custodial closets, trash collection rooms, lounges, and similar areas. Automatic smoke detectors shall be provided in sleeping rooms, corridors, and spaces open to the corridors.

**Exception:** Manual fire alarm boxes are not required at exits if manual fire alarm boxes are located at all nurses' stations or other continuously attended staff locations, provided such fire alarm boxes are visible and continuously accessible and that travel distances required by Section 907.4.2 are not exceeded.

**907.2.24.2 Notification.** Activation of the fire alarm system or automatic sprinkler system shall initiate a general evacuation signal. In addition, the fire alarm system shall be monitored by an approved central station service in accordance with Section 903.4.1.

**Exception:** In lieu of audible notification appliances, visible notification appliances shall be allowed to be used in sleeping areas.

Subp. 29. [Repealed, 32 SR 7]

Subp. 30. [Repealed, 39 SR 1605]

Subp. 31. **IBC [F] section 907.3.** IBC [F] section 907.3 is amended, and subsections added, to read as follows:

**907.3 Fire safety functions.** Automatic fire detectors required by Section 907.2 of this code and Chapter 11 of the Minnesota State Fire Code are to activate notification appliances in accordance with those sections. When automatic fire detectors are installed for other fire safety functions, they shall perform the intended function upon activation. When automatic detectors are installed for fire safety functions and the building has a fire alarm system, the detectors shall activate supervisory signals at the fire alarm control panel or at a constantly attended location. When the building does not have a fire alarm system, the detectors shall activate a visual and audible supervisory signal at an approved location, which shall indicate the source of the signal.

**907.3.1 Air distribution and air-handling systems.** Smoke detectors installed to shut down the air distribution or air-handling system shall, upon activation, perform the intended function. Air distribution or air-handling equipment that is part of a smoke-control system shall switch to smoke-control mode upon activation of a detector.

**907.3.1.1 Fire alarm system interface.** Smoke detectors that are installed in air distribution or air-handling systems for shutdown purposes and that are connected to a fire alarm system shall not sound a general evacuation signal.

**907.3.2 Elevator control functions.** Smoke detectors that are installed to control or recall elevators or to control doors for elevators, elevator lobbies, or elevator shafts and that are connected to a fire alarm system shall not sound a general evacuation signal. Elevator recall and firefighter's emergency operation for elevators shall only be controlled by elevator smoke detectors and shall not initiate upon other building fire detectors or evacuation signals.

**907.3.3 Door hold-open functions.** Smoke detectors that are installed to hold open fire doors under nonemergency conditions and that are connected to a fire alarm system shall sound a general evacuation signal when the doors being held open are part of the means of egress corridor or stair system. Door hold-open smoke detectors are not required to activate a visual or audible signal.

(Subsection 907.3.4 remains unchanged.)

Subp. 31a. [Repealed, 44 SR 609]

Subp. 31b. **IBC [F] section 907.5.2.1.2.** IBC [F] section 907.5.2.1.2 is amended to read as follows:

**907.5.2.1.2 Maximum sound pressure.** Fire alarm system audibility levels shall not exceed 35 dB above the average ambient sound level described in Section 907.5.2.1.1 or 35 dB above the peak ambient sound level. The maximum sound pressure level for audible alarm notification appliances shall be 110 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is greater than 95 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

Subp. 32. [Repealed, 39 SR 1605]

Subp. 32a. **IBC [F] section 907.6.6.** IBC [F] section 907.6.6 is amended to read as follows:

**907.6.6 Monitoring.** Where provided, monitoring of fire alarm systems shall comply with Sections 907.6.6.1 and 907.6.6.2.

(The exceptions are removed.)

(Subsections 907.6.6.1 and 907.6.6.2 remain unchanged.)

Subp. 33. [Repealed, 39 SR 1605]

**Statutory Authority:** *MS s 16B.37; 16B.59 to 16B.76; 326B.02; 326B.101 to 326B.194*

**History:** *27 SR 1474; 32 SR 7; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 1605; 44 SR 609*

**Published Electronically:** *March 31, 2020*