1305.0903 [F] SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.

Subpart 1. **Scope.** IBC [F] Section 903 is amended as follows.

Subpart 1. [Repealed, 32 SR 7]

Subp. 1a. **[F] Section 903.2.7.** IBC [F] Section 903.2.7 is amended to read as follows:

903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3.1 shall be provided throughout all buildings containing a Group R occupancy where one of the following conditions exists:

- 1. The combined area on all floors, including mezzanines, exceeds 9,250 square feet (859.3 m^2) ; or
 - 2. The Group R fire area is located more than three stories above grade plane.

Exceptions:

- 1. Group R-3 single dwelling unit buildings.
- 2. Group R-3 or R-4 occupancies containing a facility licensed by the state of Minnesota shall be provided with a fire suppression system as required by the applicable licensing provision or this section, whichever is more restrictive.
- 3. Attached garages need not be sprinklered throughout if a dry sprinkler is installed within 5 feet (1524 mm) of the door opening between the garage and attached residence.

For the purposes of this section, fire walls, party walls, or attached multiple fire-resistive exterior walls shall not constitute separate buildings.

Exception: Fire walls, party walls, or attached multiple fire-resistive exterior walls separating other occupancies not accessory to the Group R.

Subp. 1b. **[F] Section 903.2.12.1.** IBC [F] Section 903.2.12.1 is amended to read:

903.2.12.1 Fire protection for exhaust systems. Any portion of an exhaust system utilizing combustible components or having the potential for combustible residue build-up on the inside or where required by other sections of this code, where the duct cross-sectional area is greater than or equal to 75 square inches (480 cm²), shall be provided with an automatic extinguishing system within the duct and at the duct intake, hood, enclosure, or canopy, or shall be constructed of material listed for use without sprinkler protection. When sprinkler protection is installed, means shall be provided to prevent water accumulation in the duct or the flow of water back to a process where the application of water constitutes a serious life or fire hazard.

Subp. 2. [Repealed, 32 SR 7]

Subp. 3. [Repealed, 32 SR 7]

- Subp. 3a. **[F] Section 903.3.1.2.1.** IBC [F] Section 903.3.1.2.1 is amended to read as follows:
- **903.3.1.2.1 Protection of decks and balconies.** Decks and balconies greater than 6 feet (1.8 m) above grade, greater than 4 feet (1.2 m) deep, and with an area greater than 40 square feet (3.72 m²) attached to new Group R-1 and R-2 occupancy buildings protected in accordance with Section 903.3.1.2 that are three or more stories in height and with 30 or more units shall be protected with sprinklers under the balcony or deck framing and under attic eaves when both of the following two conditions exist:
 - 1. The building has an unsprinklered attic; and
 - 2. The building has combustible siding.
- Subp. 4. **[F] Section 903.3.1.** IBC [F] Section 903.3.1 is amended by adding a section to read as follows:
- **903.3.1.4 Buildings of undetermined use.** When fire sprinkler systems are required in buildings of undetermined use, they shall be designed and installed to have a sprinkler density of not less than that required for an Ordinary Hazard Group 2 use with a minimum design area of 3,000 square feet (279 m²).

Use is considered undetermined if not specified at the time a permit is issued.

Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner to upgrade the system to the required density for the new hazard, use or occupancy.

- Subp. 5. **[F] Section 903.3.1.** IBC [F] Section 903.3.1 is amended by adding a subsection to read as follows:
- **903.3.1.5 Special sprinkler design criteria.** When fire sprinkler systems are required in areas containing the following uses, they shall be designed and installed to have a sprinkler density of not less than that required for an Ordinary Hazard Group 2 use:
 - 1. Chemistry labs; or
 - 2. Wrestling rooms or gymnastic rooms.
- Subp. 5a. **[F] Section 903.3.1.** IBC [F] Section 903.3.1 is amended by adding a subsection to read as follows:
- **903.3.1.6 Modifications to sprinkler standards.** The sprinkler installation standards as referenced in Sections 903.3.1.1, 903.3.1.2, and 903.3.1.3 are modified as follows:
- **903.3.1.6.1 Hose stream requirements.** When, in the opinion of the fire chief, an adequate alternate water supply for hose stream requirements is provided or available, the water supply requirements for the sprinkler system hose stream demands may be modified.

- **903.3.1.6.2 Elevator shafts and equipment.** Sprinkler protection shall not be installed in elevator shafts, elevator pits, or elevator machine rooms.
- **903.3.1.6.3 Swimming pools.** Sprinkler protection need not be provided on the ceiling of rooms containing swimming pools when the pool area is used exclusively for swimming purposes and when sprinklers are provided around the perimeter of the pool area.
- **903.3.1.6.4 NFPA 13 modifications.** Sections 8.15.8.2 and 8.17.2.5 of NFPA 13 are revised to read:
- **8.15.8.2** Linen closets and pantries. Sprinklers are not required in linen closets and pantries within dwelling units that meet the following conditions:
 - 1. The area of the space does not exceed 12 square feet (1.1 m^2) .
 - 2. The least dimension does not exceed 3 feet (0.9 m).
- 3. The walls and materials are surfaced with noncombustible or limited combustible materials.
- 4. The closet or pantry contains no mechanical equipment, electrical equipment, or electrical appliances.

8.17.2.5 Valves.

- **8.17.2.5.1** Fire department connection. A listed check valve shall be installed in each fire department connection.
- **8.17.2.5.1.1 Maximum pipe length.** There shall be a maximum of 25 feet (7.6 m) of pipe between the check valve and the fire department connection inlet.

Exception: This maximum shall not apply to the check valve serving a free-standing fire department connection.

8.17.2.5.1.2 Check valve location. The check valve shall be located to minimize freezing potential.

Subp. 6. [Repealed, 32 SR 7]

- Subp. 6a. **[F] Section 903.3.7.** IBC [F] Section 903.3 is amended by adding a subsection to read as follows:
- **903.3.7 Sprinkler system design pressure safety margin.** For new sprinkler systems or additions to existing sprinkler systems, the available water supply shall exceed the sprinkler system demand, including hose stream requirements, by 5 psi (0.34 bars) or more.
- Subp. 7. **[F] Section 903.4.** IBC [F] Section 903.4 is amended by adding an exception to read as follows:
 - 8. For existing sprinkler systems, monitoring is required when the number of sprinklers is 100 or more.

Subp. 8. **[F] Section 903.4.** IBC [F] Section 903.4 is amended by adding a section to read as follows:

903.4.4 Valve security. All valves controlling water supplies for automatic sprinklers shall be locked or secured in the open position.

Exception: Valves located in a room or space when access is limited to essential personnel only.

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; 36 SR 1479

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