

7511.0903 SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.

Subpart 1. **IFC Section 903.2.7.** IFC Section 903.2.7 is amended, and a section added, to read:

903.2.7 Group R. An automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 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 m²); 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. Group R-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.

903.2.7.1 Residential hospice facilities. An automatic sprinkler system installed in accordance with NFPA 13 shall be provided throughout all buildings with a Group R-3 or Group R-4 fire area containing a residential hospice facility.

Exception: An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed, provided that all habitable spaces and closets are sprinklered.

Subp. 2. **IFC Section 903.2.12.1.** IFC 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. 3. **IFC Section 903.3.1.2.1.** IFC Section 903.3.1.2.1 is amended to read:

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, with an area greater than 40 square feet (3.72 m^2), and 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. **IFC Section 903.3.1.** IFC Section 903.3.1 is amended by adding sections to read:

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 m^2).

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.

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 or gymnastic rooms.

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 amended 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 m²).
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. 5. **IFC Section 903.3.8.** IFC Section 903.3 is amended by adding a section to read:

903.3.8 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. 6. **IFC Section 903.4.** IFC Section 903.4 is amended by adding an exception to read:

8. For existing sprinkler systems, monitoring is required when the number of sprinklers is 100 or more.

Subp. 7. **IFC Section 903.4.4.** IFC Section 903.4 is amended by adding a section to read:

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.

Subp. 8. **IFC Section 903.6.** IFC Section 903.6 is amended by adding sections to read:

903.6.2 Basement access or sprinkler protection. An approved automatic sprinkler system shall be provided in the following basements when such areas exceed 2,500 square feet (232.3 m²) in size and do not have 20 square feet (1.86 m²) of opening entirely above the adjoining ground level in each 50 lineal feet (15 240 mm) or fraction thereof of exterior wall on at least one side of the building:

1. Group A occupancies used as commercial drinking and dining establishments.
2. Group A occupancies used as bowling alleys.
3. Group E occupancies used for student occupancy.
4. Group I occupancies.
5. Group R-1 and R-2 occupancies having dwelling units or guest rooms.

Openings required by this section shall have a minimum dimension of 30 inches (762 mm).

If any portion of the basement is located more than 75 feet (22.86 m) from required openings, the basement shall be provided with an approved automatic sprinkler system throughout.

903.6.3 Existing rubbish and linen chutes. Existing rubbish and linen chutes shall be protected with automatic sprinklers installed and maintained in conformance with Section 903.2.12.2.

Statutory Authority: *MS s 299F.011; 326B.02*

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