7511.0905 SECTION 905, STANDPIPE SYSTEMS.

- Subpart 1. **IFC Section 905.2.** IFC Section 905.2 is amended by adding sections to read:
- **905.2.1 Modification to standards.** In buildings other than high rise that are protected throughout by an automatic sprinkler system installed in accordance with Sections 903.3.1.1 and 903.3.1.2, a Class I or III standpipe system need only meet the pressure requirements for the sprinkler system when such systems comply with Sections 905.2.1.1 through 905.2.1.5.
- **905.2.1.1 Municipal water supply.** A municipal water supply capable of supplying the required standpipe flow rate with a residual pressure not less than 20 psi (1.4 bars) through a fire hydrant shall be provided. A fire hydrant shall be located within 300 feet (91 m) of the building's fire department connection.
- 905.2.1.2 System testing and pipe size. The standpipe system shall be able to provide the pressure and flow rate required by NFPA 14 when the standpipe system is supported by local fire department apparatus through the fire department connection as verified with hydraulic calculations. The hydraulic calculations are to be performed between the hydraulically most demanding standpipe hose connection and the fire department connection. Pipe sizes shall not be less than the minimum requirements in NFPA 14.
- **905.2.1.3 Design pressure.** A maximum design pressure of 150 psi (10.3 bars) is permitted at the fire department connection when the standpipe is supported by local fire department apparatus.
- **905.2.1.4 Hose connection.** At least one 2-1/2 inch (64 mm) hose connection shall be provided on the exterior of the building at the fire department connection for each 250 gpm (980 L/min) of required standpipe flow.
- **905.2.1.5 Automatic sprinkler system demand.** The automatic sprinkler system demand, including the inside hose stream demand from NFPA 13, is to be provided by the municipal water supply system without requiring fire department pumping into the system.
- Subp. 2. **IFC Section 905.3.2.1.** IFC Section 905.3.2 is amended by adding a section to read:
- 905.3.2.1 Group A exhibition. Class III automatic standpipes shall be provided in Group A-3 occupancies where the floor area used for exhibition exceeds 12,000 square feet $(1,115 \text{ m}^2)$.
- Subp. 3. **IFC Sections 905.3.4, 905.3.4.1.** IFC Sections 905.3.4 and 905.3.4.1 are amended by deleting the sections in their entirety.
 - Subp. 4. **IFC section 905.3.** IFC section 905.3 is amended by adding sections to read:

905.3.9 Detention and correctional facilities. Regardless of the height of the building or number of stories, every building in a Group I-3 detention and correctional facility, where 50 or more persons are under restraint or security under Occupancy Condition 3, 4 or 5, shall be provided with a Class III automatic wet or semiautomatic dry standpipe system.

Exception: Combined systems meeting the provisions of Section 905.2 may be used.

When acceptable to the fire chief, fire department connections may be located inside all security walls or fences on the property.

Standpipes shall be located in accordance with Section 905. In addition, standpipes shall be located so that it will not be necessary to extend hose lines through smoke barriers. When located in cell complexes, standpipes may be located in secured pipe chases.

905.3.10 Group R-2 occupancies; small hose connections. Small hose connections shall be installed in Group R-2 occupancies three or more stories in height where any portion of the building's interior area is more than 200 feet (60,960 mm) of travel, vertically or horizontally, from the nearest point of fire department vehicle access. Small hose connections required by this section shall comply with the following:

- 1. Supply one 1 ½-inch (38 mm) fire hose valve at each floor level or intermediate stair landing in each required and enclosed stairway.
- 2. The water for the small hose connections shall be supplied separately from the sprinkler system protecting that area so that the small hose connections are still functional if the water supply to the sprinkler system is shut down following fire extinguishment.
- 3. The piping shall be a minimum of $1 \frac{1}{2}$ -inch (38 mm).
- 4. The water shall be supplied from a wet-pipe sprinkler system only.
- 5. The piping shall be comprised of metallic piping and hose valve connections.

Permanent signage shall be required which reads "Fire Department Overhaul Hose Connection" at each connection in the building. If a separate standpipe system is provided, a sign shall also be provided at the exterior fire department connection.

Subp. 5. **IFC section 905.5.1.** IFC section 905.5.1 is deleted.

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

History: 32 SR 10; 40 SR 1437

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