

## Fire Sprinkler Requirements for Commercial Buildings

903.2 *Where required.* Automatic sprinkler systems shall comply with this section with the following exceptions:

1. Commercial buildings—Automatic sprinkler systems will be required in all newly constructed buildings exceeding 3,600 square feet of fire area, any remodel or addition that changes the footprint beyond 3,600 square feet or any single tenant expansion requiring a new certificate of occupancy that exceeds 12,000 square feet of fire area. Whichever requirement listed in this chapter, including exceptions, or defined in this amendment that is more restrictive will apply. Credit will not be given for fire barrier walls with a fire resistive rating in lieu of automatic fire sprinkler systems.
2. Townhomes—An automatic sprinkler system shall be installed in all townhouse occupancies with more than two dwelling units per building. The automatic sprinkler system shall be installed in accordance with NFPA 13-R to include garages, exterior balconies and attached breezeways. Each building shall be provided with not less than a Class A roof covering.

903.2.1.1 *Group A-1.* An automatic sprinkler system shall be provided for group A-1 occupancies where following conditions exists:

1. The floor area exceeds 3,600 square feet of fire area.

903.2.1.2 *Group A-2.* An automatic sprinkler system shall be provided for group A-2 occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

903.2.1.3 *Group A-3.* An automatic sprinkler system shall be provided for group A-3 occupancies where the following condition exists;

1. The floor area exceeds 3,600 square feet of fire area.

903.2.1.4 *Group A-4.* An automatic sprinkler system shall be provided for group A-4 occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

903.2.1.6 *Group B.* An automatic sprinkler system shall be provided for B occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

903.2.2. *Group E.* An automatic sprinkler system shall be provided for E occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

903.2.3. *Group F-1.* An automatic sprinkler system shall be provided for F-1 occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

*903.2.3.2 Group F-2.* An automatic sprinkler system shall be provided for F-2 occupancies where the following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

*903.2.6. Group M.* An automatic sprinkler system shall be provided for M occupancies where following condition exists:

1. The floor area exceeds 3,600 square feet of fire area.

*903.2.8 Group S1*

1. The floor area exceeds 3,600 square feet of fire area

*903.2.8.1 Repair Garages*

1. The floor area exceeds 3,600 square feet of fire area

*903.2.8.3 Self-service storage facility.* An automatic sprinkler system shall be installed throughout all self-service storage facilities.

*903.2.9 Group S2*

1. The floor area exceeds 3,600 square feet of fire area.

*903.2.10.3 Buildings more than 55 feet in height.* An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the International Building Code that is located 55 feet (16764 mm) or more above the lowest level of fire department vehicle access.

Exception:

1. Open parking structures in compliance with section 406.3 of the building code.

*903.2.10.4 High-piled combustible storage.* For any building with a clear height exceeding 12 feet (4572 mm), see chapter 23 to determine if those provisions apply.

*903.2.10.5 Spray Booths and Rooms.* New and existing spray booths and spraying rooms shall be protected by an approved automatic fire extinguishing system.

*903.3.1.1.1 Exempt locations.* When approved by the code official, automatic sprinklers shall not be required in the following rooms or areas where such . . . (bulk of section unchanged) . . . because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any rooms or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
- 3 Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than two hours.

*Section 903.3.5 add a second paragraph to read as follows:*

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10-psi safety factor.

*Section 903.4 add a second paragraph to read as follows:*

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

*903.4.2 - Add second paragraph to read as follows:*

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

*903.6.2 Spray booths and rooms.* New and existing spray booths and spray rooms shall be protected by an automatic fire-extinguishing system in accordance with section 1504.