

# 1 RCNY §29-02

## CHAPTER 29 SPRINKLER SYSTEMS

### §29-02 Installation of Automatic Wet-Pipe Sprinklers in Certain Class A and Class B Multiple Dwellings, Including Hotels, Under the Provisions of §67, Multiple Dwelling Law.

Effective February 25, 1949, automatic wet-pipe sprinklers used in certain Class A and Class B multiple dwellings, including hotels, shall be installed in conformity with the provisions of the Administrative Code, Subchapter 17 of Chapter 1 of Title 27, except as modified herein.

These rules do not apply to sprinkler installations in converted dwellings, lodging houses or multiple dwellings used for single room occupancy.

(a) In lieu of one of the four alternate automatic sources of water supply specified in §27-961, of the Administrative (Building) Code, a connection may be made to the domestic water supply system on the condition that:

(1) It can be established from information obtainable from the Department of Environmental Protection that the pressure at the top of the highest riser will be 15 pounds per square inch (except as provided in §29-02(f)).

(2) If the pressure from this source is insufficient to provide a pressure of 15 pounds at the highest line of sprinklers, but is sufficient to supply a pressure of 15 pounds or more at the highest line of sprinklers, an automatic booster pump is provided, the capacity of which shall be sufficient to supply 25 percent of the standard one-half inch (1/2") inch heads in the sprinkler area having the maximum number of heads, and in no event shall such supply be less than 250 gallons per minute at a pressure of at least 15 pounds at the highest sprinkler line.

(3) A local approved type of water-flow alarm is provided, the gong so located that when it operates it may be heard by the occupants or employees, and the gong also plainly marked "Sprinkler Alarm", in red letters one inch in height on a white background.

*Exception:* In a sprinkler area which does not contain more than 36 heads, no water-flow alarm shall be required.

(4) A sprinkler shut-off valve is provided conveniently accessible and its purpose clearly indicated by the words "Automatic Sprinkler Shut-Off Valve" on a sign affixed thereto.

(5) The size of the domestic water supply line is at least equal to the size of the main sprinkler connection. *Note* : The provisions of Paragraph c of §27-964 shall not apply to sprinklers installed in conformity with the provisions of §29-02(a).

(b) The capacity of gravity tanks for sprinklers shall be in conformity with the provisions, of §27-965, or such tank may be supplied by an automatic filling pump of at least 65 gallons per minute capacity, which shall be sufficient to supply 25 percent of the sprinkler heads in the largest sprinkler area for 20 minutes. The capacity of such tank shall be not less than 1,000 gallons. The bottom of the gravity tank or sprinkler supply pipe shall be not less than 20 feet above the highest supplied sprinkler line. When such elevation is not practicable, an automatic booster pump may be installed in the main sprinkler supply line in conformity with §29-02(a)(2).

(c) In lieu of complying with the provisions of §27-965, a pressure tank located not more than one story below the highest supplied sprinkler line, filled by an automatic pump, and with a supply of water, all as described in §29-02(b) may be installed. In addition, a high-and-low air-alarm shall be provided.

(d) The provisions of §27-963(a) may be construed to permit the sprinkler connection to the street main to be the same size as main sprinkler riser, but in no instance shall it be less than two inches. A tap may be one pipe size less than the sprinkler main.

(e) §27-935 shall apply only when the number of heads in any sprinkler area as defined in these rules exceeds 36.

(f) *Standard 1/2-inch sprinkler heads.* In lieu of applying the provisions of §27-956, sprinkler heads shall be so spaced that there shall be one head for approximately 168 square feet of floor area, and shall also be spaced not more than 14 feet on centers. The distance from a wall or partition to the first sprinkler head shall not exceed seven feet, measured at right angles to the wall or partition. In multiple dwellings that are presently equipped with sprinklers, the heads in the public halls may be spaced 14 feet on centers, with the first head not more than seven feet from any wall or partition. A 12 pound static pressure will be accepted at the topmost sprinkler line, provided the sprinkler heads are spaced to cover 100 square feet or less. Sprinkler heads may be installed in covered shafts in lieu of fire-retarding on the condition that:

(1) Such shafts are not exposed to freezing temperatures;

(2) If ventilating louvres, windows or skylights are present in such shafts, the highest head is located a sufficient distance from such openings to prevent freezing;

(3) One head is centered at the top of such shaft at the level of the highest ceiling;

(4) In shafts constructed of [*sic*] incombustible materials, excepting windows or doors opening thereon, sprinkler heads are placed at each floor level and are staggered at alternate levels;

(5) In shafts constructed of combustible materials, and which exceed 60 square feet in cross-sectional area, sprinkler heads are placed at each floor level and are staggered at alternate floor levels.

(g) The protection afforded by sprinklers to stairs, halls, corridors, and other passageways shall also apply to their soffits and overlaps.

(h) These rules shall also apply to a store or other space used for business on any story where there are no sleeping rooms and which is not provided with sprinkler heads, unless such spaces are otherwise arranged in conformity with the provisions of Section 61, Multiple Dwelling Law.

(i) In lieu of complying with the provisions of §3-9.1.1 of ANSI/NFPA 13 of Reference Standard RS 17-2 of the Administrative (Building) Code, a 1 inch valved pipe may be extended from the top of the riser to the outside of the building, or inside the building to a deep sink for testing the system, pump and alarm under water-flow conditions.

(j) Check valves, gate valves, and water meters shall be installed as and when directed by the Department of Environmental Protection.

(k) The term "sprinkler area" as used in these rules shall mean any floor space within a structure enclosed on all sides by exterior walls, fire walls, fire partitions, fire-retarded partitions, or fire-resistive partitions and doors acceptable to the Department of Housing and Buildings. The term "fire-resistive partition" as used in these rules shall mean a partition which is constructed of incombustible materials or wood studs covered on both sides with lath and plaster, plaster board, or other fire-resistive materials acceptable to the Department.

Such partitions shall extend from the floor to the ceiling. All doors in such partitions shall be self closing.

(l) The sprinkler control valve shall be inspected at least once weekly by a competent person, who is employed by the owner to see that such valves are sealed open, and who holds a certificate of fitness. A record of each inspection shall be kept for examination by a representative of the Department. The provisions of §27-957, in relation to alarm devices shall not apply to a sprinkler area which does not contain more than 36 heads in multiple dwellings, in which such weekly inspections are made.

(m) Systems installed before July 1, 1928 shall be subject to inspection and if found adequate may be accepted by the Department of Buildings. However, in such cases, a copy of the plans approved by the Fire Department shall be filed with the Department of Buildings.

(n) Where there are practical difficulties in the way of carrying out these rules, the Superintendent may permit modifications, provided that the spirit of these rules are observed and safety secured.