§29-05 Installation of Automatic Wet-Pipe Sprinklers in Fireproof Multiple Dwellings Converted to Business Use.

(a) Except as otherwise provided herein, automatic wet-pipe sprinklers used in fireproof multiple dwellings, converted in whole or in part to business use under the provisions of §27-248 of the Administrative (Building) Code, in effect prior to December 6, 1968, and in fireproof multiple dwellings that are altered under the provisions of §9, Subdivision 5, Paragraph b, of the Multiple Dwelling Law (subdivision of large apartments) shall be installed in conformity with Subchapter 17 of Chapter 1 of Title 27 of the Administrative (Building) Code.

(b) 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 minimum static pressure at the top of the highest riser will be at least 15 pounds per square inch, except as otherwise provided in §29-05(g).

2. If the pressure from this source is insufficient to provide a minimum static pressure of 15 pounds per square inch, at the highest line of sprinklers, but is sufficient to supply a pressure of 5 pounds per square inch or more at the highest line of sprinklers, and that an automatic booster pump is provided, the capacity of which shall be sufficient to supply 250 gallons per minute at a pressure of at least 15 pounds per square inch at the highest line of sprinklers.

3. Where the length of pipe from the furthermost sprinkler to the riser exceeds 100 feet the pipe beyond the 100 foot distance shall be increased in size one pipe size above the size otherwise required for each 100 feet of additional length or part thereof. This provision shall not require an increase in the size of the risers.

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, and that such valve is sealed open.

5. The size of the domestic water supply line is at least equal in size of the main sprinkler connection.

6. Where the pressure from this source is insufficient to provide a minimum static pressure of 15 pounds per square inch at the topmost sprinkler line, provided the sprinkler heads are spaced to cover 70 square feet minimum static pressure will be accepted at the topmost sprinkler line, provided the sprinkler heads are spaced to cover 70 square feet or less.

(d) In lieu of complying with 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 §29-05(c), may be installed. In addition, a high-and-low air-alarm shall be provided.

(e) §27-963 may be construed to permit the sprinkler connection to the street main to be the same size as the main sprinkler riser, but in no instance shall it be less than 2 inches. A tap may be one pipe size less than the sprinkler main.

(f) §27-940 shall apply only when the number of sprinkler heads in any fire area as defined in these rules exceeds 36.

(g) In lieu of applying the provisions of §27-956, sprinkler heads shall be so spaced that there shall be one head for approximately 130 square feet of floor area, and heads shall 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. A 12 pound capacity of such tank shall not be less than 1,500 gallons. The bottom of the gravity tank, or the sprinkler supply pipe shall not be 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 §29-05(b)(2).

(h) In lieu of complying with the provisions of Section ANSI/NFPA 13 of Reference Standard RS 17-2 of the Administrative (Building) Code, a 1 inch valve 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.

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

(j) The term "sprinkler area" as used in these rules shall mean any floor space within a structure enclosed on all sides by [sic] exterior walls, fire walls, fire partitions, or fireproof [sic] partitions and self-closing doors acceptable to the Department of Buildings.

(k) 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 those buildings having not more than 36 heads in any sprinkler area.

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