

1 RCNY §29-04

CHAPTER 29 SPRINKLER SYSTEMS

§29-04 Installation of Automatic Wet-Pipe Sprinkler Systems and Alarm Systems in Certain Class B Multiple Dwelling (Lodging Houses).

(a) Automatic wet-pipe sprinkler systems installed in lodging houses in compliance with Subdivision 3, of §66, of the Multiple Dwelling Law shall be in conformity with the provisions of the Administrative Code, Subchapter 17 of Chapter 1 of Title 27, only to the extent that such article is not inconsistent with these amended rules.

(1) Sprinkler systems shall be automatic wet-pipe with one automatic source of water supply.

(2) Acceptable automatic sources of water supply shall be any one of the following:

(i) Elevated gravity tank having a minimum capacity of 5,000 gallons and installed in accordance with §27-965 of the Administrative (Building) Code. Effective capacity shall be determined by the largest number of heads in any floor area multiplied by 75 gallons, and shall never be less than 5,000 gallons.

(ii) Pressure tank having a minimum capacity of 2,500 gallons and installed in accordance with §27-965 of the Administrative (Building) Code. Effective water capacity shall be determined by the largest number of heads in any floor area multiplied by 37.5 gallons, and shall never be less than 2,500 gallons.

(iii) Automatic fire pump having a capacity of not less than 250 gallons per minute and installed in accordance with §27-964 of the Administrative (Building) Code.

(iv) A direct connection to the public water main, provided it is capable of maintaining a pressure of at least 15 pounds per square inch at the top of the highest sprinkler riser, with 250 gallons of water flowing per minute at a 2 1/2-inch outlet from a hydrant at the street level within 250 feet of the building. The hydrant test shall be made between the hours of 8 a.m. and 5 p.m. on a working day.

If the public water main pressure is incapable of maintaining a minimum pressure of 15 pounds per square inch as specified herein, a booster pump may be installed in conformity with these rules; or, in lieu of such booster pump, the sprinkler spacing and pipe sizes for the area not having the required minimum water pressure of 15 pounds per square inch shall be in conformity with the provisions of §27-956 of the Administrative (Building) Code, provided that in no event shall *[sic]* the minimum water pressure at the highest sprinkler riser be less than 2 pounds per square inch. Booster pumps, if required, shall have a capacity sufficient to supply 250 gallons per minute, at a pressure of at least 15 pounds at the top of the highest sprinkler riser. All shall be installed in accordance with §27-964 of the Administrative (Building) Code.

A letter from the Department of Environmental Protection shall be filed with the application for the installation of a sprinkler system, stating the water pressure and supply conditions of the street main to which the sprinkler supply is to be connected.

(3) One common source of water supply shall be acceptable for any contiguous buildings under the same ownership or leasehold and under the same lodging-house management, provided that each such building is fully separated by fire walls with automatic fire doors on any connecting openings.

Supply mains shall be at least the size of the largest main riser in any one building and shall be arranged to be centrally located and run as directly as possible from the source of water supply to the respective risers in each building.

Each building shall be provided with a separate alarm valve in accordance with §29-04(a)(8).

In all other respects, the installation in each building shall comply with these rules.

Supply mains shall be increased in size as may be required for adequate water supply and pressure requirements in accordance with §29-04(a)(2).

(4) Sprinkler spacing for standard 1/2-inch heads under sheathed or plaster ceilings shall not exceed 168 square feet of protection area, with the distance between lines and between sprinklers on lines not in excess of 14 feet.

(5) The maximum permissible number of standard 1/2-inch sprinkler heads on a given pipe-size, in one fire area, on any one story shall be as follows:

Size of pipe diameters	Maximum number of sprinkler heads allowed
1 inch	2 heads
1 ¼ inch	3 heads
1 ½ inch	5 heads
2 inches	10 heads
2 ½	30 heads
3 inches	60 heads
3 ½ inches	100 heads
4 inches	Unlimited heads

Branch lines should not exceed eight sprinkler heads on either side of a cross main.

Areas within fire walls may be subdivided into separate fire areas by one-hour partitions. Openings in such partitions shall be protected with fireproof doors and assemblies, and such doors shall be self-closing. Areas within such subdivisions may be

considered independent fire areas.

(6) Each riser shall be of sufficient size to supply all the sprinkler heads on that riser in any one fire area according to §29-04(a)(5).

The supply main shall be at least the size of the riser it serves, except that no main shall be less than two inches and shall be installed in accordance with §27-956 of the Administrative (Building) Code.

(7) Taps in the public water main may be one standard pipe-size smaller than the required supply main according to §29-04(a)(6), provided the supply main immediately increases at the tap to its full required size.

All water main installations shall be subject to the approval of the Department of Environmental Protection.

(8) Systems shall be equipped with an alarm valve so constructed that any flow of water in any part of the system, or the closure of any valve controlling water supply will automatically cause the interior fire alarm system and the central station alarm to operate.

(9) Prior to the issuance of a letter of approval from the Department of Buildings as to the satisfactory installation of any system, a letter from the Department of Environmental Protection must be filed with the Department as to the size of tap and service main and its satisfactory installation.

(b) An automatic closed-circuit water-flow and valve-tamper alarm system, having at least one manual fire alarm station shall be provided in connection with the sprinkler system. This alarm system shall be connected to an approved central station which provided supervisory and maintenance service satisfactory to the fire commissioner.

In connection therewith, there shall be an approved transmitter so arranged as to actuate all gongs of the interior fire alarm system whenever a water flow through the sprinkler system occurs.

Interior fire alarm systems of the closed-circuit type previously installed under the rules then in force and approved by the fire commissioner may be accepted if, after inspection and test the systems are found to be adequate and in proper operating condition.

Battery operated interior fire alarm systems of the open-circuit type shall be replaced with an approved closed-circuit system.

In connection with these rules, the persons affected are advised to consult Article 5 of Subchapter 17 of Chapter 1 of Title 27, of the Administrative (Building) Code and §§15-126, 15-127 and 15-214, of the Administrative (Fire Prevention) Code of the city of New York, concerning interior fire alarm system, watchmen's time detector system and telegraphic communication.