

# 1 RCNY §28-01

## CHAPTER 28 SMOKE DETECTING DEVICES AND SYSTEMS AND CARBON MONOXIDE DETECTING DEVICES AND SYSTEMS

### §28-01 Required Smoke Detecting Devices and Systems.

(a) *Applicability.* (1) Local Law 62 for the year 1981 requires that all existing dwelling units within Occupancy Group J-1 (which includes Hotels, Motels, Lodging Houses, and Rooming Houses) and Occupancy Group J-2 (which includes Apartment Houses, Apartment Hotels and School Dormitory Buildings), and new buildings or substantially improved or altered buildings in Occupancy Group J-1, J-2 and J-3 (the latter includes One and Two Family Dwellings, Rectories, Convents and Group Homes) to be equipped with approved smoke detecting devices, except such units which contain operational automatic wet sprinkler systems.

(2) The devices shall be operational in existing Occupancy Groups J-1 and J-2 by January 1, 1982; however, the Commissioner may upon good cause shown extend the period of compliance to June 30, 1982. Appeals to the Commissioner for extension of the period of compliance shall be set forth on a form to be available and filed at the Office of the Commissioner, (Attention: The Executive Engineer), Department of Buildings, 60 Hudson Street New York, N.Y. 10013, [sic] no later than December 1, 1981, and contain the following information:

(i) The location of the premises, block and lot, the Building Department Application number, if any, the Construction and Occupancy Class, number of dwelling units, estimated number of detectors, type, and where they are to be installed.

(ii) The hardship to be considered with regard to the delivery or installation of the equipment.

(iii) The proposed time table for compliance.

(iv) A copy of the signed contract for the purchase and/or installation of the system. (Cost figures may be deleted).

(v) The application number, as appropriate.

(3) The Commissioner will not consider "good cause" appeals unless:

(i) The installation is wired into the building's electrical system, or

(ii) The number of units in single ownership or management responsibility exceed 500, and a complete schedule for installation is submitted prior to January 1, 1982, or

(iii) Special circumstances not covered by subdivisions (i) or (ii) above are involved.

(4) Notice of approved extensions are to be forwarded to the Commissioner of the Department of Housing Preservation and Development.

(5) The requirements for new buildings within Occupancy Group J-3 and new or substantially improved or altered buildings in Occupancy Group J-1, J-2, or J-3, shall only apply to those for which plans are Approved by the Department of Buildings on or after January 1, 1982.

(b) *Installation—new, existing and altered buildings.* (1) Dwelling units shall be equipped with smoke detecting devices receiving their primary power from the building wiring, and there shall be no switches in the circuit other than the overcurrent device protecting the branch circuit.

(2) However, dwelling units in existing buildings may, in the alternative, be equipped with battery-operated smoke detecting devices except where such buildings are substantially improved or altered on or after January 1, 1982.

(3) An existing building is one which is within either Occupancy Group J-1 or Occupancy Group J-2 for which plans have been approved by the Department prior to December 31, 1981.

(4) A building shall be deemed to have been substantially improved or altered if

(i) the cost of improvement or alteration exceeds the sum of \$150,000 or

(ii) 50 percent or more of the dwelling units or square feet of the structure are improved or altered and the cost of such improvement or alteration exceeds the sum of \$15,000 per dwelling unit or

(iii) there has been a change in the occupancy or use of the entire structure.

(5) In applying the foregoing provisions where cost is the factor, items falling within the scope of minor alterations or ordinary repairs, as set forth in §§27-124 and 27-125 of the Administrative Code, thereby exempt from permit requirements based on §27-147, as well as any other cost associated with any matters that are not regulated by the Building Code are not included within calculation of the cost, as well as minor applications filed pursuant to Directive 14/75, or for any other miscellaneous applications referred to in §§27-148 (c) to (h).

(6) Cost of alterations are not cumulative, provided any application filed with this department is signed off as satisfactorily completed prior to the filing of a subsequent application; and, if a Certificate of Occupancy is involved that a final Certificate of Occupancy has been issued for the pertinent application.

(c) *Equipment requirements.*

(1) Section 27-981 of the Administrative Code provides that all smoke detecting devices required to be provided and installed shall either be approved by the Board of Standards and Appeals, accepted pursuant to Rules and Regulations promulgated by the Commissioner, or be listed by a Nationally Recognized Independent Laboratory that:

(i) Maintains periodic inspections of production of listed equipment.

(ii) States in its listing that the equipment meets nationally recognized standards.

(iii) Maintains a periodic follow-up service of the devices to ensure compliance with the original listing.

(2) The following is the current list of Acceptable Testing Laboratories:

Underwriters' Laboratories, Inc.  
333 Pfingsten Road Tele: (312) 272-8800  
Northbrook, Illinois 60061 MEA Laboratory No. 1-69-L  
Canadian Standards Association  
178 Rexdale Boulevard Tele: (416) 744-4316  
Rexdale, Ontario M9W 1R3 Canada MEA Laboratory No. 25-69-L  
Underwriters' Laboratories of Canada  
7 Crouse Road Tele: (416) 757-3611  
Scarborough, Ontario M1P 3A9 Canada MEA Laboratory No. 81-80-L

(The Director of the Materials and Equipment Acceptance Division, who maintains the current list of MEA Acceptable Testing Laboratories, will be able to advise interested parties of any changes.)

(3) (i) The device shall be of either the ionization chamber or photoelectric type. The device shall be in compliance with the requirements of:

**REFERENCE [sic] STANDARD RS 17-11**

UL No. 217-1980—Single and Multiple Station Smoke Detectors.

The device shall be installed in a manner consistent with the requirements of:

**REFERENCE STANDARD RS 17-12**

ANSI/NFPA No. 74-1980—Standard for the Installation, Maintenance and Use of Household Fire Warning Equipment, as Modified.

The following sections of this standard are modified to read as follows:

1-1 Scope. Covers the requirements for the proper selection, installation, operation and maintenance of fire warning equipment for use within dwelling units or rooming units.

1-2.6 The installation of wiring and equipment shall be in accordance with the New York City Electrical Code.

2-1.1.1 Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the rooms used for sleeping purposes in dwelling units in Occupancy Group J-2 and J-3, and in basements and basement recreation rooms in Occupancy Group J-3.

Smoke detectors shall be installed within the sleeping area of hotel or motel units, rooming units or studio dwelling units in Occupancy Group J-1.

4-5.5 Each smoke detector shall have an integral test means to permit the occupant to check that it is operational. A continuous power display indicator light is recommended.

5-2.1.4 A smoke detector installed to protect a sleeping area in accordance with 2-1.1.1 shall be located outside the rooms used for sleeping purposes, but in the immediate vicinity of the sleeping area, except as set forth for rooming units.

5-2.1.6 Smoke detectors shall be located on or near the ceiling and within fifteen feet of all rooms used for sleeping purposes in J-2 or J-3 occupancies. In all dwelling units with multiple levels, when any level has only one means of egress, the dwelling unit shall be provided with smoke detectors on all levels.

5-2.6.1 If ceiling mounted, the closest edge of the detector shall be a minimum of four inches from any wall.

5-2.1.6.2 If wall mounted, the closest edge of the detector shall be a minimum of four inches and a maximum of twelve inches from the ceiling.

(ii) The following sections of this standard are extracted for informational purposes:

3-3.1 Household fire warning equipment may be powered by a battery provided that the battery is monitored to assure that the following conditions are met:

(a) All power requirements are met for at least one year's life, including weekly testing.

(b) A distinctive audible trouble signal is given before the battery is incapable of operating (from aging, terminal corrosion, etc.) the device(s) for alarm purposes.

5-1.1.6 The supplier or installing contractor shall provide the owner with:

(a) An instruction booklet illustrating typical installation layouts.

(b) Instruction charts describing the operation, method and frequency of testing and proper maintenance of household fire warning equipment.

(c) Printed information for establishing a household emergency evacuation plan.

(d) Printed information to inform the owner where he may obtain, [sic] repair or replacement service and where and how parts requiring regular replacement (such as batteries or bulbs) may be obtained within two weeks.

*NOTE:* Owners of buildings in Occupancy Group J-2 are required to pass on all printed information as described in (b), (c) and (d) to the tenant who is responsible for maintaining the unit.

B-2.1 Where to locate the required smoke detectors.

B-2.1.1 The major threat from fire in a family living unit is at night when everyone is asleep. The principal threat to persons in sleeping areas comes from fires in the remainder of the unit; therefore, smoke detector(s) are best located

between the bedroom areas and the rest of the unit. In units with only one bedroom area on one floor, the smoke detector should be located as shown in Figure B-2.1.1.

Figure B-2.1.1 A smoke detector (indicated by cross) should be located between the sleeping area and the rest of the family living unit.

B-2.1.2 In family living units with more than one bedroom area or with bedrooms on more than one floor, more than one smoke detector may be needed as shown in Figure B-2.1.2.

Figure B-2.1.2 In family living units with more than one sleeping area, a smoke detector (indicated by cross) should be provided to protect each, if the distant requirement of 5-2.1.6 is exceeded.

(4) (i) Buildings with Occupancy Group J-1 and including Class “B” Multiple *[sic]* Dwellings, may in the alternative be equipped with a line-operated zoned smoke detecting system with central annunciation and central office tie-in for all public corridors and public spaces.

(ii) Such system shall be in compliance with the requirements of the Division of Fire Prevention of the Fire Department and the following standards:

#### **REFERENCE STANDARD RS 17-3**

§13.—Automatic Heat and Smoke Detection System of the standards for the Installation of Fire Sprinkler, Standpipe Smoke Detection, Oxygen, Nitrous Oxide, and other Alarm and Extinguishing Systems.

#### **REFERENCE STANDARD RS 17-5A**

ANSI/NFPA No. 72A-1979—Standard for the Installation, Maintenance and Use of Local Protective Signaling Systems for Guard’s Tour, Fire Alarm and Supervisory Service.

#### **REFERENCE STANDARD RS 17-5E**

ANSI/NFPA No. 72E-1979—Standard of Automatic Fire Detectors.

(iii) All devices and equipment shall be approved by the Board of Standards and Appeals.

(5) (i) For dwelling units to be equipped with smoke detecting devices receiving their primary power from the building wiring, a Licensed Electrician shall file an application for a Certificate of Electrical Inspection with the Bureau of Electrical Control, Department of Buildings at the address provided in the City’s website, <http://www.nyc.gov>.

(ii) For buildings within Occupancy Group J-1 (Class “B” Multiple Dwellings) using the alternate provisions of Paragraph D of these Rules, the following shall apply:

(A) A Miscellaneous Application shall be filed in the Borough Office of the Department of Buildings, by a Registered Architect or Professional Engineer. All fees are to be paid.

(B) A duplicate set of plans and specifications are to be forwarded for examination, approval and inspection to the Electrical Section, Division of Fire Prevention, Fire Department, prior to the signing-off of the application.

(C) Notice of approvals shall be forwarded to the Commissioner of the Department of Housing and Preservation.

(6) No applications are required to be filed for installation of battery operated devices.

(7) It shall be the duty of the owner of a building in Occupancy Group J-2 (Class “A” Multiple Dwelling) to:

(i) Provide and install one or more approved and operational smoke detecting devices in each dwelling unit.

(ii) Post a notice in a form approved by the Commissioner of the Department of Housing Preservation and Development in a common area of the building, readily visible and preferably in the area of the inspection certificate, informing the occupants of such building, that the owner is required by law to install one or more approved and operational smoke detecting devices in each dwelling unit in the building, and that each occupant is responsible for the maintenance and repair of such devices and for replacing any or all such devices which are stolen, removed, missing or rendered inoperable during the occupancy of such dwelling unit.

(iii) Replace any smoke detecting device which has been stolen, removed, missing or rendered inoperable during a prior occupancy of the dwelling unit and which has not been replaced by the prior occupant prior to the commencement of a new occupancy of a dwelling unit.

(iv) Replace within thirty calendar days after the receipt of written notice any such device which becomes inoperable within one year of the installation of such device due to a defect in the manufacture of such device and through no fault of the occupant of the dwelling unit.

(v) File a certification of satisfactory installation within 10 days after completion with the Department of Housing Preservation and Development, Borough Division of Code Enforcement. This certification shall be set forth on a form available at the H.P.D. Borough Office.

(vi) Keep such records as the Commissioner of the Department of Housing Preservation and Development shall prescribe relating to the installation and maintenance of smoke detecting devices in the building and make such records available to the Commissioner of the Department of Housing Preservation and Development and/or the Fire Commissioner (or their representatives) upon request.

(8) It shall be the sole duty of the Occupant of each dwelling unit in a building in Occupancy Group J-2 (Class “A” Multiple Dwelling) in which a smoke detecting device has been provided and installed by the owner to:

(i) Keep and maintain such device in good repair; and,

(ii) Replace any and all devices which are either stolen, removed, missing or rendered inoperable during the occupancy of such dwelling unit.

*NOTE:* The occupant of a dwelling unit in which a battery operated smoke detecting device is provided and installed pursuant to this section shall reimburse the owner a maximum of ten dollars for the cost of providing and installing each such device. The

occupant shall have one year from the date of installation to make such reimbursement.

(9) It shall be the duty of the owner of a building in Occupancy Group J-1 (Class "B" Multiple Dwelling) which is required to be equipped with smoke detecting devices to install and maintain such devices, and to keep such records as the Commissioner of the Department of Housing Preservation and Development shall prescribe relating to the installation and maintenance of smoke detecting devices in each dwelling unit and make such record available to the Commissioner of the Department of Housing Preservation & Development and/or the Fire Commissioner, (or their representatives) upon request.

(10) In Occupancy Group J-1 all components of the line operated zoned detecting systems, with central annunciators and central office tie-ins shall be inspected and tested by qualified personnel holding a Fire Department Certificate of Fitness for testing and maintaining smoke detecting systems at intervals of not more than six months. In addition, trouble signals shall be tested daily and each sounding device monthly and records of such test be maintained.

For further information, refer to the Board of Standards and Appeals, Rules for Interior Fire Alarm Signal Systems, §8-01 of the B.S.A. rules.

(11) Smoke detecting devices and systems installed in accordance with the technical requirements of Divisions C, D and E after publication of this Notice of Opportunity to Comment, may at the option of the owner continue to be operated after the effective date of the promulgation, and modification of such devices and systems will not be required.