LOCAL LAWS
OF
THE CITY OF NEW YORK
FOR THE YEAR 1973

No. 5

Introduced by Mr. Scholnick (Request of the Mayor)

A LOCAL LAW

To amend the administrative code of the city of New York in relation to fire safety requirements and controls in certain office buildings.

Be *it enacted* by the Council *as follows:*

§ 1. Part III of title C of chapter nineteen of the administrative code of the city of New York, is hereby amended by adding thereto a new section to be section C19-161.2, to follow section C19-161.1, to read as follows:

§ **C19-161.2. Fire safety in office buildings-The owner or other person having** charge of a building classified in section C26-306.1 of the administrative code of the city of New York as occupancy group E, occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building and any existing office building with an occupant load as hereinabove provided, shall comply with the following:

a. Fire safety plan-

1. A fire safety plan for fire drill and evacuation procedures in accordance with the requirements of the commissioner shall be submitted to the department and the approval of the commissioner shall be obtained. The applicable parts of the fire safety plan shall be distributed to the tenants of the building and to the building service employees. The tenants shall distribute to their employees applicable parts of the fire safety plan. All occupants of the building shall participate and cooperate in carrying out the provisions of the fire safety plan. Where the owner of the building is an occupant, he shall comply with those provisions of this section applicable to tenants.

2. Fire safety director, deputy fire safety director, and building evacuation supervisor;

(a) One employee shall be designated as fire safety director and one or more employees as deputy fire safety director. Such employees shall each have a certificate of fitness, in accordance with the requirements of the commissioner, qualifying him to conduct fire drills, evacuations and related activities such as organizing, training and supervising a fire brigade. In the absence of a fire director, when a fire safety director is required to be on duty in the building, such deputy fire safety director shall act as fire safety director.

(b) During normal working or business hours, when the building is occupied by

more than one hundred persons above or below the street level or more than a total of five hundred persons in the entire building, there shall be at least one person on duty in the building as fire safety director with the required certificate of fitness. During fire emergencies, the primary responsibility of the fire safety director shall be the supervision and manning of a fire command station and the direction and execution of the evacuation as provided in the fire safety plan. Such activities shall be subject to fire department control.

(c) At all other times when there are occupants in the building, and there is no fire safety director on duty in the building, there shall be at least one employee on duty in the building designated as building evacuation supervisor. He shall be capable of directing the evacuation of the occupants as provided for in the fire safety plan. During fire emergencies, the primary responsibility of the building evacuation supervisor shall be the manning of a fire command station and the direction and execution of the evacuation as provided in the fire safety plan. His training and related activities shall be under the direction of the fire safety director in accordance with the requirements of the commissioner and the fire safety plan. Such activities shall be subject to fire department control.

3. A fire brigade consisting of qualified building service employees shall be selected, organized, trained and supervised by the fire safety director.

4. Fire drills shall be conducted, in accordance with the fire safety plan, at least once every three months for existing buildings during the first two years after the effective date of this local law, or for new buildings during the first two years after the issuance of the certificate of occupancy. Thereafter, fire drills shall be conducted at least once every six months. The occupants of the building, other than building service employees, shall not be required to leave the floor or use the exits during the drill. A written record of such drills shall be kept on the premises for a three-year period and shall be readily available for inspection by the fire department.

5. In buildings where compliance would cause practical difficulty or undue hard ship, the commissioner may waive or modify the requirements of this subdivision and accept alternatives fulfilling the intent of these requirements consistent with public safety.

b. Signs at elevator landings --A sign shall be posted and maintained in a conspicuous place on every floor at the elevator landing, as provided in sub-article 608.0 of chapter twenty-six of the administrative code of the city of New York, indicating that in case of fire, occupants shall use the stairs unless otherwise instructed. The sign shall contain a diagram showing the location of the stairs, except that such diagram may be omitted provided that signs containing such diagram are posted in conspicuous places on the respective floor.

c. Floor numbering signs --A sign shall be posted and maintained within each stair enclosure on every floor indicating the number of the floor, as provided in sub-article 608.0 of such chapter of such code.

d. Stair and elevator identification signs-Each stair and each bank of elevators shall be identified by an alphabetical letter. A sign indicating the letter of identification shall be Posted and maintained at each elevator landing and on the side of the stair door from which egress is to be made, as provided in sub-article 608.0 of **such chapter of such code.**

e. Stair reentry signs --A sign shall be posted and maintained on each floor within each stair and on the occupancy side of each stair door, where applicable, indicating whether reentry is provided into the building and the floor where such reentry is provided, in accordance with subarticle 608.0 of such chapter of such code.

§ 2. Section C 19-170.0 of such code, as amended by local law number fifteen teen for the year nineteen hundred fifty-seven, is hereby amended to read as follows:

§ C19-170.0. Violations. --Any person who shall violate, or refuse, or neglect to comply with, any provision of Sections C19-161.0, C19-161.1, C19-161.2, C19-164.0, C19-165.1, C19-165.3, C19-166.0, C19-167.0, and C19-169.0 of the code shall, upon conviction thereof, be punished by a fine of not more than five hundred dollars, or by imprisonment not exceeding six months, or both; and any such person shall, also, for each offense, be subject to the payment of a penalty in the sum of two hundred fifty dollars, to be recovered in a civil action brought in the name of the commissioner.

§ 3. Sub-article 201.0 of article 2 of part Il, title C, chapter twenty-six of such code, as amended by local law thirty-nine of nineteen hundred seventy-two, is hereby amended by inserting therein between the definitions of "ESCALATOR" and "EXIT", the definition of "EXISTING OFFICE BUILDING, 100 FT. OR MORE IN HEIGHT" to read as follows:

EXISTING OFFICE BUILDING, 100 FT. OR MORE IN HEIGHT. --An office building 100 ft. or more in height or a building classified in occupancy group E, 100 ft. or more in height:

(1) which on the effective date of this local law is complete or under construe tion, or

(2) for which plans have been filed before such effective date and construction commenced within one year after such effective date, or

(3) for which plans are filed within one year after such effective date and construction commenced within two years after such effective date and further provided that all the requirements for such existing office buildings are fully complied with in the course of construction and before completion.

§ 4. Table 4-1 and Table 4-2 of article four of part Il of title C of chapter twenty-six of such code, as amended by local law number sixty-one for the year nineteen hundred sixty-nine, is hereby amended by adding to Table 4-1 a new footnote designation (d) under the 'Occupancy Group' column on the 'Business E line in the 'Class IA' and 'Class 1B' columns under 'Noncombustible Construction Group F, and is further aniended by adding thereto a new footnote (d), to follow footnote (c) to read as follows:

(See Tables 4-1 and 4-2 on following two pages.)

§ 5. Section C26-503.9 of such code is hereby REPEALED.

§ 6. Section C26-504.1 of such code is hereby amended by adding a new subdivision (c) to read as follows:

(c) Compartmentation. --Notwithstanding the provisions of Table 4-1, in all buildings classified in occupancy group F, 100 feet or more in height, having air conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, and in existing office buildings 100 feet or more in height having such systems, unsprinklered floor areas, more than 40 feet above curb level, **shall be subdivided by fire separations into awes** or compartments of

Table 4–1 Area and Height Limitations for Unsprinklered Buildings and Spaces

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class IA	*Class IB*	*Class IC*	*Class ID*	*Class IE*	*Class IIA*	*Class IIB*	*Class IIC*	*Class IID*	*Class IIE*
HIGH HAZARD A	AREA	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.
	HT.										
STORAGE B-1	AREA	1,000	1,000	1,000	1,000	1,000	1,000	1,000	N.P.	1,000	N.P.
	HT.	N.L.	75'-0"(6)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)		40'-0"(3)	
STORAGE B-2[b]	AREA	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	2,100
	HT.	N.L.	N.L.	85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
MERCANTILE C	AREA	7,500	7,500	7,500	7,500	7,500	7,500	7,500	5,600	8,400	2,100
	HT.	N.L.	N.L.	85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
INDUSTRIAL D-1	AREA	7,500	7,500	7,500	7,500	3,500	7,500	7,500	N.P.	1,400	N.P.
	HT.	N.L.	75'-0"(6)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)		40'-0"(3)	
INDUSTRIAL D-2	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
BUSINESS E	AREA	N.L.[d]	N.L.[d]	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-1	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-2	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					75'-0"(6)	85'-0"(7)	85'-0"(7)	65'-0"(5)	75'-0"(6)	65'-0"(5)
ASSEMBLY F-3	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
ASSEMBLY F-4	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
EDUCATIONAL G	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)
INSTITUTIONAL H-1	AREA	17,500	14,000	10,500	7,000	N.P.	4,200	4,200	N.P.	N.P.	N.P.
	HT.	N.L.	75'-0"(6)	65'-0"(5)	50'-0"(4		50'-0"(4)	50'-0"(4)			
INSTITUTIONAL H-2	AREA	17,500	14,000	10,500	7,000	N.P.	4,200	4,200	N.P.	N.P.	N.P.
	HT.	N.L.	75'-0"(6)	65'-0"(5)	50'-0"(4		50'-0"(4)	50'-0"(4)			
RESIDENTIAL J-1	AREA	N.L.	N.L.	N.L.	17,500	N.P.	10,000	10,000	N.P.	N.P.	N.P.
	HT.			85'-0"(7)	75'-0"(6		75'-0"(6)	75'-0"(6)			
RESIDENTIAL J-2	AREA	N.L.	N.L.	N.L.	17,500	N.P.	10,000	10,000	5,600	N.P.	N.P.
	HT.			85'-0"(7)	75'-0"(6)		75'-0"(6)	75'-0"(6)	40'-0"(3)		
RESIDENTIAL J-3	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	40'-0"(3)	75'-0"(6)	75'-0"(6)	40'-0"(3)	40'-0"(3)	40'-0"(3)

N.L.—No Limit
N.P.—Not Permitted

Not permitted inside Fire Districts[a]

NOTE: Tabulated areas are given in sq. ft. and establish maximum gross area permitted on any one story within a building or fire area. See Sections C26-405.3 and C26-502.6e for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

[a] See section C26-403.2 for construction exemptions.
[b] See sub-article 710.0 for area and height limitations of open parking structures.
[c] See section C26-803.1(b)(2) for grandstand limitations.
[d] *See section C26-504.1(c) for area limitations for buildings 100 feet or more in height with mechanical ventilation and/or air-conditioning systems that serve floors other than the floor on which the equipment is located.*

Table 4–2 Area and Height Limitations for Sprinklered Buildings and Spaces

Occupancy Group		NONCOMBUSTIBLE CONSTRUCTION GROUP I					COMBUSTIBLE CONSTRUCTION GROUP II				
		Class 1A	*Class 1B*	*Class 1C*	*Class 1D*	*Class 1E*	*Class 11A*	*Class 11B*	*Class 11C*	*Class 11D*	*Class 11E*
HIGH HAZARD A	AREA	N.L.	17,500	14,000	10,500	3,500	7,700	7,700	N.P.	1,400	N.P.
	HT.		75'-0"(6)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	50'-0"(4)		50'-0"(4)	
STORAGE B-1	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
STORAGE B-2[b]	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
MERCANTILE C	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
INDUSTRIAL D-1	AREA	N.L.	N.L.	N.L.	17,500	10,500	14,700	14,700	5,600	8,400	2,100
	HT.			85'-0"(7)	75'-0"(6)	50'-0"(4)	75'-0"(6)	75'-0"(6)	40'-0"(3)	50'-0"(4)	40'-0"(3)
INDUSTRIAL D-2	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
BUSINESS E	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-1	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-2	AREA	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	N.L.	19,600	N.L.	16,100
	HT.								75'-0"(6)		75'-0"(6)
ASSEMBLY F-3	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
ASSEMBLY F-4	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
EDUCATIONAL G	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)
INSTITUTIONAL H-1	AREA	N.L.	N.L.	17,500	10,500	7,000	11,200	11,200	3,500	4,000	N.P.
	HT.		85'-0"(7)	75'-0"(6)	65'-0"(5	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
INSTITUTIONAL H-2	AREA	N.L.	N.L.	17,500	10,500	7,000	11,200	11,200	3,500	4,000	N.P.
	HT.		85'-0"(7)	75'-0"(6)	65'-0"(5	50'-0"(4)	65'-0"(5)	65'-0"(5)	40'-0"(3)	50'-0"(4)	
RESIDENTIAL J-1	AREA	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	N.P.	N.P.	N.P.
	HT.						85'-0"(7)	85'-0"(7)			
RESIDENTIAL J-2	AREA	N.L.	N.L.	N.L.	N.L.	N.P.	N.L.	N.L.	12,600	N.P.	N.P.
	HT.						85'-0"(7)	85'-0"(7)	50'-0"(4)		
RESIDENTIAL J-3	AREA	N.L.	N.L.	N.L.	N.L.	17,500	N.L.	N.L.	12,600	15,400	9,100
	HT.					50'-0"(4)	85'-0"(7)	85'-0"(7)	50'-0"(4)	50'-0"(4)	50'-0"(4)

N.L.—No Limit
N.P.—Not Permitted

Not permitted inside Fire District[a]

NOTE: Tabulated areas are given in sq. ft. and establish maximum gross area permitted on any one story within a building or fire area. See Sections C26-405.3 and C26-502.6e for permissible area increases. Tabulated heights are given in feet and number of stories (in parentheses).

[a] See section C26-403.2 for construction exemptions.

[b] See sub-article 710.0 for area and height limitations of open parking structures.

the size required by paragraphs (1) through (5) below. Floor area shall be. defined as the area within exterior walls and excluding any areas enclosing stairs, corridors, elevators and shafts:

(1) Unless otherwise provided below, all unsprinklered floor areas shall be segregated by one-hour fire separations into spaces or compartments not to exceed 7500 square feet.

(2) Where the floor area exceeds 10,000 square feet, at least one of the subdividing fire separations shall be of two-hour fire-resistive construction, creating areas of refuge, complying with section C26-604.5 of this code except that the requirement for an elevator in, each area shall not apply.

(3) The floor area or any subdivided area may be increased to not more than 15,000 square feet if complete area protection by approved devices for the detection of products of combustion other than heat is provided within such increased area and provided further that at least one of the subdividing fire separations shall be of two-hour fire-resistive construction where the floor area exceeds 15,000 square feet, creating areas of refuge in the same manner and under the same conditions as provided in (2) above. The activation of any such detectors shall have the same effect as provided in subdivision (f) of section C26-1704.5 of this code.

(4) In existing buildings, existing fire separations of oue-hour fire-resistive construction may be accepted in lieu of the fire separation of two hour fire-resistive construction providing all other requirements of (2) and (3) above are complied with.

(5) Regardless of the floor area, no subdivision of the floor area shall be required under subdivision (c) when complete sprinkler protection is provided in accordance with the construction provisions of article 17.

(6) Existing office buildings 100 feet or more in height shall comply with the requirements of this subdivision as follows:

a. Whenever an alteration is performed involving partition changes, compliance with this subdivision shall be required in that portion of the building being altered.

b. At least one-third of the total floor area of the building not in compliance with the requirements of this subdivision on the effective date of this local law, shall comply with ***such*** requirements within five years of such effective date.

c. At least two-thirds of the total floor area of the building not in compliance with the requirements of this subdivision **on the effective** date of this ***local*** law, ***shall comply*** with such requirements within ten years of such effective date.

d. Full compliance shall be provided within fifteen years of ***such*** effective date.

(7) In existing office buildings 100 feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs (1) through (5) of subdivision (e) and accept alternatives fulfilling the intent of these requirements.

§7. Sub-article 50-1.0 of article 5 of part 11 title C, chapter twenty-six of such code is hereby amended by adding thereto a new section C26-504.15 to follow C26-504.14 to read as follows:

C26-504.15. Smoke and heat venting. --(a) Where the floor area of a one-story building classified in occupancy group A, B-1, or D-1 is greater in depth than 100 feet from a frontage space, that portion beyond 100 feet shall be provided with roof vents and smoke curtains complying with the requirements of reference standard RS 5-11. Where the effective area of vents are glazed with plain glass or plastic not thicker than
inch, they need not be provided with automatic opening devices.

(b) Buildings classified in occupancy group E, 100 feet or more in height, having air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall he provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS5-17.

Buildings that are sprinklered throughout shall be exempt from the smoke shaft requirements,

(c) Existing office buildings, 100 feet or more in height, having airconditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, shall be provided with at least one smoke shaft by means of which smoke and heat shall be mechanically vented to the outdoors as provided in reference standard RS5-17, or in lieu of such smoke shaft or shafts, all interior enclosed stairs other than a fire tower or access stairs may be provided with a system of pressurization for fire emergency use. Such pressurization shall be provided by means of a system or systems as provided in reference standard RS 5-18 except that the commissioner shall, after consultation with the fire commissioner and other appropriate city agencies, but not later than eighteen months from the effective date of this local law, submit to the city council an amendment of reference standard RS 5-18. Such amendment shall reflect the latest technological data and conclusions obtainable from tests of pressurization systems.

Such buildings shall comply with the smoke and heat venting requirements herein within three and one-half years of the effective date of this local law. If such work is not completed within two years of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and time schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this paragraph, or to perform the work in accordance with the time schedule, as approved by the commissioner. shall constitute a violation.

Existing buildings that are sprinklered throughout shall be exempt from the smoke shaft and stair pressurization requirements.

8. Section C26-600.1 of title C, part II, chapter twenty-six of such code is hereby amended to read as follows:

§ **C26-600.1. Scope. --The provisions of this article shall control the design,** construction, protection, location, arrangement and maintenance of required exit facilities to provide safe means of egress from all buildings hereafter erected, altered or changed in occupancy, except that exit requirements for special uses and occupancies, as provided in

articles 7 and 8, shall **take precedence over the provisions of this article and except further** that existing buildings shall comply with the applicable requirements of section C26-600.3, section C26-604.4 and sub-articles 607.0 and 608.0.

§ 9. Subparagraph b of paragraph (1) of subdivision (i) of section C26-604.4 of such code, as amended by local law number fifty-four for the year nineteen hundred seventy, is hereby amended to read as follows:

b. Doors opening into interior stair enclosures shall not be locked from either side with the following exceptions:

1. Doors may be locked to prevent access to the stair at the street floor.

2. In buildings classified in occupancy group E, less than 100 feet in height, the doors may be locked on the stair side on each floor above the street floor.

3. In buildings classified in occupancy group F, 100 feet or more in height, and existing office buildings 100 feet or more in height, the doors may be locked on the stair side above the street floor except that at intervals of four stories or less, doors shall be openable from the stair side without the use of a key to permit reentry at such floors. In addition, the door on every floor where a keyed switch is required by the provisions of article 18 shall be openable from the stair side without the use of a key to permit reentry at such floors.

4. When a locked door is provided with an automatic fail safe system for opening such door in the event of the activation of any automatic fire detecting device or when any elevator in readiness as provided in section C26-1800.8 is activated, such door shall be deemed as openable from the stair side. The installation of such automatic fail safe system shall comply with the requirements of reference standards RS17-3A and RS17-3B, whichever is applicable. Stair reentry signs required under section C26-608.5 shall specify that reentry is provided only during fire emergencies.

§ 10. Section C26-607.1 of such code as amended by local law thirty-nine for the year nineteen hundred seventy-two, is hereby amended to read as follows

§ C26-607.1 --Retroactive provisions. Except as otherwise provided, the provisions of this article are not retroactive except that the provisions of this sub-article and sub-article 608.0 for certain existing office buildings are retroactive. Signs required by this sub-article must be installed no later than three months after the effective date of this code. Where auxiliary systems for emergency exit lighting are to be provided, the installation must commence no later than five months after the effective date of this code.

§ Il. Article 0 of Part 11, title C, chapter twenty-six of such code is hereby amended by adding thereto a new sub-article to be sub-article 608.0, to follow sub-article 607.0, to read as follows:

SUB-ARTICLE 608.0 STAIR AND ELEVATOR SIGNS IN OFFICE BUILDINGS

§C26-608.1. Applicability. --This **sub-article is applicable to buildings classified** in occupancy group E, occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more ***than a*** total of five hundred persons in the entire building and any existing office building with an occupant load as hereinabove provided.

C26-608.2. Signs at elevator landings. --A sign shall be posted and maintained on every floor at the elevator landing. The sign shall read "IN CASE OF FIRE, USE STAIRS UNLESS OTHERWISE INSTRUCTED". The lettering shall be at least one-half inch block letters in red with white background or as otherwise approved by the commissioner. Such lettering shall be properly spaced to provide good legibility. The sign shall also contain a diagram showing the location where it is posted and the location and letter identification of the stairs on the floor. The sign shall be at least ten inches by twelve inches, located directly above a call button and securely attached to the wall or partition. The top of such sign shall not be above six feet from the floor level. The diagram on such sign may be omitted provided that signs containing such diagram are posted in conspicuous places on the respective floor. In such case, the sign at the elevator landing shall be at least two and one half inches by ten inches and the diagram signs shall be at least eight inches by twelve inches.

*§ **C26-608.3. Floor numbering signs. --A*** sign shall be posted and maintained within each stair enclosure on every floor, indicating the number of the floor. The numerals shall be of bold type and at least three inches high. The numerals and background shall be in contrasting colors. The sign shall be securely attached to the stair side of the door.

C26-608.4 **Stair and elevator identification signs-Each** stair and each bank of elevators shall be identified by an alphabetic letter. A sign indicating the letter of identification for the elevator bank shall be posted and maintained at each elevator landing directly above or as part of the sign specified in section C26-608.2. The stair identification sign shall be posted and maintained on the occupancy side of the stair door. The letter on the sign shall be at least three inches high, of bold type and of contrasting color from the background. Such signs shall be securely attached.

C26-608.5. **Stair reentry signs. --Signs** shall be posted and maintained on the stair door at each floor indicating whether reentry is provided into the building and the floor where such reentry is provided. The lettering and numerals of the signs shall he at least one-half inch high of bold type. The lettering and background shall be contrasting colors and the signs shall be securely attached approximately five feet above the floor. The signs shall read as follows and may be either independent or combined with the corresponding sign required by sections C26-608.3 and C26-608.4.

(a) Where no reentry is provided from the stairs to any floor, the sign shall read "NO REENTRY FROM THIS STAIR" and such sign shall be on the occupancy side of the stair door at each floor. No reentry sign shall be required on the stair side of the door.

(b) Where reentry is provided to specified floors

(1) On the stair side of the door at floors where reentry is provided, the sign shall read "REENTRY ON THIS FLOOR".

(2) Where no reentry is, provided on that floor, the sign on the stair side Of the door shall read "NO REENTRY, NEAREST REENTRY ON THE AND FLOORS". The floor numbers of the nearest reentry below and the nearest reentry floor above shall be entered in the blank spaces.

§C26-608.6. Materials for signs. --Signs required by this sub-article shall be of metal or other durable material.

§ C26-608.7. Signs in existing office buildings. --(a) Signs installed prior to the enactment of this sub-article may be accepted by the commissioner, provided that such signs will adequately accomplish the intended purpose.

(b) In buildings existing prior to the enactment of this sub-article, the commissioner may modify the requirements as to location of signs where compliance would cause practical difficulty or undue hardship.

§ 12. Paragraph (4) of sub-division (b) of section C26-1208.3 of such code is hereby amended as follows:

(4) FANS.-Except for fans installed in compliance with §C36-504.15 all fan equipment located on any roof or floor other than a floor on grade shall be mounted on or from vibration isolators. Fan equipment with motor drives separated from the fan equipTable 17-2

Summary of Sprinkler Requirements

Where Required Type of System	Automatic Sources Required	Partial System Permitted	connection to Domestic Permitted	Altemft Permitted (§C26 17032)
High Hazard Building Group A (§C26-1703.1 (a))	2	NO	No (§C26-1703.8(c))	No
High Hazard Spam Group A (§C26-170.1 (b))	I	yes	No (§C26-1703.8(c))	NO
Storage Occupancy Bldg. Group B1 (§C26-1703.1(c))	I	No	No (§C26-1703.8(c))	NO
Storage Occupancy Spaces Bldg. Group B I (§C26-1703.1(d))	I	Yes	Yes (§C26-1703.8(c))	No
Storage Occupancy Spaces --Group B2 (§C26-1703.1(e))	I	Yee	NO	No
Mercantile Occupancy Spaces --Group C Exceeding 7,500 sq. ft. (§C26-1703.1(f))	**2 sources** If exceeding 20,000 sq. I if not more than 20,000 sq. ft.	NO	No	NO

ment shall be supported on an isolated integral rigid structural base supporting both the fan and motor. Fan equipment with motor drives supported from the fan equipment shall be mounted directly on vibration isolators. Each isolator shall have provision for leveling. Isolators shall incorporate resilient pads having a minimum thickness of 3/4 in. The vibration isolators shall provide a minimum isolator efficiency of 90 per cent at fan rotor rpm with a maximum deflection of 2 in. Fans and compressors of 3 hp. or less assembled in unitary containers may meet this requirement with isolators internal to the container providing the isolators meet the above minimum isolator efficiencies.

§ 13. Table 17-2 of article 17 of part 11, title C, chapter twenty-six of such code, as amended by local law thirty-nine for the year nineteen hundred seventy-two is hereby amended to read as follows:

Siamese Required (§C26-1703.6)	Central a station Required (§C26-1703.2) (IC26-1703.14)	Water b Flow Alarm Required (JC26-1703.4) (13721 of RS17-2)	Automatic Dry Sprinkler Permitted (15212 of RS-17)	Dry Non automatic Sprinkler Permitted,
Yes . (§C26-1703.6(a)(3)) If over 36 heads in a fire section	None a None	Yes Yes If over 36 heads in a fire section	Yes Yea	No No
Yes (§C26-1703.6(a)(3)) If over 36 heads in a fire section	None None	Yes Yee If over 36 heads in a fire section	Yes Yes	No NO
(§C26-1703.6(a) (3)) If over 36 heads in a fire section	None	Yee If over 36 heads in a fire section	Yes	NO
Yes	None	Yes	Yes	No

Where Required System	Automatic Sources Required	Partial System Permitted	Connection to Domestic Permitted	Alternate Permitted (§C26- of 17032)
Industrial Occupancy Bldg. Group D-1 Men required by Labor Law (§C26-1703.1(g))	I source if not hazardous occupancy	No	No	No
Industrial Occupancy Spaces --Group DI exceeding 7,500 sq. ft. (§C26-1703.1 (h))		No	No	No
Business Occupancy Spaces-Group E Showrooms when Reqnired by §C26-1703.1 (i)		Yes	Yes and/or standpipe riser	No
AssembJy Occupancy Spaces-Group F-1a (§C26-1703.1 (i))		Yes	Yes	No
Institutional Occupancy Group H-Corridors and Exit Passageway (§C26-1703.1(k))		Yes	Yes	No
Unventilated Areas Above or below grade QC26-1703.1 (1))		Yes	Yes	No
Rubbish --Laundry and Similar Chutes QC26-1703.1 (in))		Yes	Yes	No
Soiled Linen, Collection and Sorting Area (§C26-1703.1(n))		Yes	Yes	No
Workshops (§C26-1703.1(o))		Yes	Yes	Yes
Refuse Collection and Disposal Areas (§C26-1703.1 (p))		Yes	Yes In Occupancy Groups E, G	No

Siamese Required (§C26-1703.6)	Central a station Required (§C26-1703.2) (IC26-1703.14)	Water" Flow Alarm Required (§C26-1703.4) (§3721 of RS17-2)	Automatic Dry Sprinkler Permitted (§5212 of RS-17)	Dry Non automatic Sprinkler Permitted e
yes	None	Yes	Yes	No
Yes	None	yes	Yes	No
Yes	None	Yes	Yes	No
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	None	Yes b	No	No
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	None	Yes	No	No
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	None	(§C26-1703.9(e)(8))	Yes	No
No	None	None	yes	NO
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	None	yes (§C26-1703.9(e)(8))	Yes	No
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	Yes If smoke detector is used in lieu of sprinkler	Yes (§C26-1703.9(e)(8))	yes	No
(§C26-1703.6(a)(3)) If over 36 heads in a fire section	None	yes (§C26-1703.9(e)(8))	Yes	No

Where Required System	Automatic Sources **Required**	Partial System Permitted	**Connection** to Domestic Permitted	**Alternate** Permitted (§C26- of 17032)
Drying Area Laundries or Similar Spaces (§C26-1703.1(q))	I	Yes	Yes in Occupancy Groups E, G	ya
Cooling Towers (§C26-1703.1 (r)	I	No	yes	No

Notes-

a Central station supervision required only when booster pump is provided under

b Water flow alarms required when more than 36 heads are installed in a fire section

c Only when permitted by the commissioner (§ 1703.14 (b).

§ 14. Section 1702.14 of such code is hereby amended by adding thereto a new subdivision, to be subdivision (d), to follow subdivision (c), to read as follows:

(d) Use of standpipe riser for sprinkler system water supply.-Standpipe risers may be used to supply water to sprinklers in buildings classified in occupancy group E, 100 feet or more in height, and in existing office buildings, 100 feet or more in height, in accordance with applicable provisions of this article and reference standards RS17-1 and RS17-2. § 15. Subdivisions (i), (j), (k), (1), (m), (n), (o), (p) and (q) of section C26-1703.1 of such code are hereby redesignated to be subdivisions (j), (k), (1), (m), (n), (o), (p), (q) and (r) respectively.

§ 16. Section 1703.1 of such code is hereby amended by adding thereto a new subdivision, to be subdivision (i), to follow subdivision (h), to read as follows:

(i) Buildings classified in occupancy group E, 100 feet or more in height having air-conditioning and/or mechanical ventilation systems that serve more than the floor in which the equipment is located, and within three years of the effective date of this local law, in existing office buildings 100 feet or more in height having such systems, showroom spaces exceeding 7500 square feet in area located more than 40 feet above curb level. The sprinkler system may be connected to the domestic **water supply** and/or the standpipe risers. Where connected to a standpipe riser, provision shall be made to prevent excessive pressure on the sprinkler heads. If such work is not completed within eighteen month of the effective date of this local law, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time Such plan and schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this subdivision, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation.

Siamese Required (§C26-1703.6) (§26-1703.6(a)(3)) If over 36 heads in a fire section	central& station Required (§C26-1703.2) (§C26-1703.14) Yes If a smoke detector is used in lieu of sprinkler	Water b Flow Alarm Required (§C26-1703.4) (§3721 of RS17-2) yes (§C26-1703.9(e)(8))	Automatic Dry Sprinkler Permitted (§5212 of RS-17) No	Dry Non automatic Sprinkler Permitted* No
No	None.	yes	Yes	No

§ 1703.11 or when nonautomatic sprinkler is permitted by the commissioner.
or fire area.

§ 17. Section C26-1703.2 of such code is amended to read as follows:

l C26-17UZ Smoke detector alternate. --An approved smoke detection alarm system may be used in lieu of sprinklers in those locations described under paragraphs (o) and (q) above. Such smoke detection system shall be of the supervisory type connected to an approved central station.

§ 18. Paragraph (a) of section C26-1703.4 of such code is hereby amended to read as follows:

(a) A sprinkler alarm system shall be provided in accordance with the applic able provisions of reference standards RS17-2 and RS-17-3. Where the building is provided with a class E or modified class E fire alarm signal system, compliance with the applicable provisions of reference standards RS17-3A or RS17-3B shall be acceptable in lieu of compliance with the provisions of reference standard RS17-3.

§ 19. Subdivision (b) of section C26-1703.6 of such code is hereby amended to read as follows:

(b) Installation and Construction. --The installation and construction of siamese connections shall be the same as required for fire standpipe systems, except that the caps of each automatic sprinkler siamese connection shall be painted green and the entire siamese connection of a nonautomatic sprinkler system shall be painted with aluminum paint, and except that caps of each siamese connection used for combination standpipe and sprinkler systems shall be painted yellow and signs provided as required in section 2 (b) of reference standard RS17-1.

§ 20. Section 1703.9 of such code is hereby amended by adding thereto a new subdivision, to be subdivision (g), to follow subdivision (i), to read as follows:

(g) Standpipe risers may be used to supply water to sprinklers in buildings classified in occupancy group F, 100 feet or more in height, and in existing office buildings, 100 feet

or more in height, in accordance with applicable provisions of this article and reference standards RS17-1 and RS17-2.

§ 21. Subdivision (a) of section C26-1704.1 of such code is hereby amended by adding thereto a new paragraph to be paragraph (9), to follow paragraph (8), to read as fo'dows:

(9) Buildings classified in occupancy group E, 100 feet or more in height.

§ 22. Section C26-1704.3 of such code is hereby amended to read as follows:

§ **C26-1704.3. Existing installations-Except** as provided in subdivision (g) of section C26-1704.5, fire alarm systems heretofore installed in buildings in accordance with rules then in force shall be accepted for use as long as they are maintained in good working order.

§ 23. Section C26-1704.4 of such code is hereby amended by adding thereto two new subdivisions to be subdivision (g) and (h), to follow subdivision **(f), to read as follows:**

(g) Class E system. --Consisting sting of a class E fire alarm signal system as described in section C26-1704.5(f) and reference standard RS17-3A. Such systems shall be exempt from the provisions of section C26-1704.6, except that compliance with subdivision (e) of such section shall be required.

(h) Modified class E system.-Consisting of a modified class E fire alarm signal system as described in section C26-1704.5(g) and reference standard RS17-3B. Such systems shall be exempt from the provisions of section C26-1704.6, except that compliance with subdivision (e) of such section shall be required.

§ 24. Subdivision (f) of section C20-1704.5 of such code is hereby relettered to be subdivision (i).

§25. Section C26-1704.5 of such code is hereby amended by adding thereto new subdivisions (f), (g) and (h) to follow subdivision (e) to read as follows:

(f) Buildings classified in occupancy group F, 100 feet or more in height, and existing office buildings 100 feet or more in height except as provided in subdivision (g) of this section shall be provided with a class E fire alarm signal system as follows:

(1) It shall be a special electrically supervised approved direct wire, radio or combination thereof fire alarm signal system consisting of an interior fire alarm and voice communicating system so arranged that the operation of any station will identify its location at the fire command station as required by section C26-1704.8, at the mechanical control center and at the regularly assigned location of the fire safety director. This identification signal shall be accomplished by means of an information display system which shall be manually resetable from the fire command station only.

(2) Ile nomenclature used for the location identification system shall be subject to the approval of the fire commissioner.

(3) In addition to the visual devices required above, audible signal devices indicating operation of the fire alarm signal system shall be provided at the fire command station, mechanical control center and the regularly assigned location of the fire safety director. Provisions shall be made for silencing the audible signal and transferring this signal to lamp indication.

(4) Operation of a manual station shall automatically transmit a fire alarm

signal to the fire department via a central office of an operating company franchised by the board of estimate, and cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

(5) The fire alarm signal may be sounded over loud speakers as provided in reference standard RS17-3A so located that their operation will be heard clearly above any ambient noise, and shall be controlled from the fire command station in such a manner that the fire alarm signal can be sounded on the individual floors or throughout the building.

(6) Provision shall be made whereby the fire command station may permit the floor station to make announcements over the loud speaker system.

(7) The loud speaker amplifier system shall be so designed and installed that approximately fifty (50) per cent of the system shall remain operable for the transmission and audibility of signals and intelligibility of voice communication over the loud speaker system throughout the building, in the event the other fifty (50) per cent become inoperable. The electrical supply for this fire alarm system, including the amplifiers, shall be in accordance with applicable laws, rules and regulations.

(8) An approved products of combustion ionization detecting device or a combination of an approved smoke detecting device and an approved fixed temperature thermostatic device shall be installed at each elevator landing. The device shall be located in the ceiling immediately above a call button. The activation of this device shall have the same effect as specified in subparagraphs (a) through (e) of paragraph (9) of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS18-1.

(9) In buildings which are provided with air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, the activation of any of the detectors installed in such air-conditioning and/or mechanical ventilation systems in accordance with the provisions of RS13-1 of the reference standards shall:

a. cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

b. cause a fire alarm signal to be transmitted to the fire department via a central station of a franchised operating company.

c. cause the fire alarm signal system to sound at the fire command station required by section C26-1704.8 and to sound an alarm in the mechanical control center and at the regularly assigned location of the fire safety director, and to operate an information display system as provided in paragraph (1) above.

d. stop the air supply into and the air return from the floor where activated by actuation of approved remote control reversible fire shutters or by automatically shutting down the air supply fans and the air return fans of the floor where activated, notwithstanding the provisions of sections 1001 through 1005 of RS13-1 of the reference standards relating to air supply **and air return controls in case of fire.**

e. cause the activation of the air exhaust fans and dampers in smoke shafts and/or the pressurizing fans in stair enclosures.

(10) A building equipped throughout with an automatic sprinkler system including a water flow alarm shall be exempt from the installation of any detectors pursuant to paragraph (8) of this subdivision and section 1006 of Reference Standard RS13-1 provided the activation of the sprinkler water flow alarm shall have the same effect as specified in subparagraphs (a) through (e) of paragraph (9) of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS18-1.

(11) In existing office buildings 100 feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraphs (1) through (9) of this subdivision (f) and accept alternatives fulfilling the intent of these requirements.

(12) Existing office buildings 100 feet or more in height shall comply with the requirements of this subdivision within three years of the effective date of this local law. If such work is not completed within eighteen months of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and time schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this paragraph, or to pet-form the work in accordance with the time schedule, as approved by the commissioner. shall constitute a violation.

(g) Fire alarm or communication systems installed prior to the effective date of this local law in existing office buildings 100 feet or more in height, may be incorporated or installed in a modified class E fire alarm signal system provided they comply with the following:

(1) It shall be a special electrically supervised approved direct wire, radio or combination thereof fire alarm signal system consisting of an interior fire alarm and voice communicating system so arranged that the operation of any station will identify its location at the fire command station as required by section C26-1704.8, at the mechanical control center and at the regularly assigned location of the fire safety director. This identification signal shall be accomplished by means of an information display system which shall be manually resetable from the fire command station only.

(2) The nomenclature used for the location identification system shall be subject to the approval of the fire commissioner.

(3) In addition to the visual devices required above, audible signal devices indicating operation of the fire alarm signal system shall be provided in the fire command station, mechanical control center and the regularly assigned location of the fire safety director. Provisions shall be made for silencing the audible signal and transferring this signal to lamp, indication.

(4) Operation of a manual station shall automatically transmit a fire alarm signal to the fire department via a central office of an operating company franchised by the board of estimate, and cause the **fire alarm signal system to**

sound continuously **throughout the floor where activated and the floor above.**

(5) The fire alarm signal may be sounded over loud speakers as provided in reference standard RS17-3B so located that their operation will be heard clearly above any ambient noise, and shall be controlled from the fire command station in such a manner that the fire alarm signal can he sounded on the individual floors or throughout the building.

(6) The electrical supply for this modified fire alarm system, including the amplifiers, shall be in accordance with applicable laws, rules and regulations.

(7) An approved product of combustion ionization detecting device or a combination of an approved smoke detecting device and an approved fixed temperature thermostatic device shall be installed at each elevator landing. The device shall be located in the ceiling immediately above a call button. The activation of this device shall have the same effect as specified in subparagraphs (a) through (e) of paragraph (8) of this subdivision and in addition cause the overriding of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS18-1.

(8) In buildings which are provided with air-conditioning and/or mechanical ventilation systems that serve more than the floor on which the equipment is located, the activation of any of the detectors installed in such air-conditioning and/or mechanical ventilation systems in accordance with the provisions of RS13-1 of the reference standards shall:

a. cause the fire alarm signal system to sound continuously throughout the floor where activated and the floor above.

b. cause a fire alarm signal to be transmitted to the fire department via a central station of a franchised operating company.

c. cause the firm alarm signal system to sound at the fire command station required by section C26-1704.8 and to sound an alarm in the mechanical control center and at the regularly assigned location of the fire safety director, and to operate an information display system as provided in paragraph (1) above.

d. stop the air supply into and the air return from the floor where activated by actuation of approved remote control reversible fire shutters or by automatically shutting down the air supply fans and the air return fans of the floor where activated, notwithstanding the provisions of sections 1001 through 1005 of RS13-1 of the reference standards relating to air supply and air return controls in case of fire.

e. cause the activation of the air exhaust fans and dampers in smoke shafts and/or the pressurizing fans in stair enclosures.

(9) A building equipped throughout with an automatic sprinkler system including a water flow alarm shall be exempt from the installation of any detectors Pursuant to paragraph (7) of this subdivision and section 1006 of reference standard RS13-1 provided the activation of the sprinkler water flow alarm shall have the same effect as specified in subparagraphs (a) through (e) Of Paragraph (8) Of this subdivision and in addition cause the overriding

of the programming for car stops of all automatic elevators serving the floor where activated and bring them non-stop to the floor levels designated by section 210.13C of reference standard RS18-1.

(10) Existing office buildings 100 feet or more in height shall comply with the requirements of this subdivision within three years of the effective date of this local law. If such work is not completed within eighteen months of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and time schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this paragraph, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation.

(11) In existing office buildings 100 feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may waive or modify the requirements of paragraph (1) through (9) of this subdivision (g) and accept alternatives fulfilling the intent of these requirements.

(h) Buildings classified in occupancy group E, less than 100 feet in height occupied or arranged to be occupied for an occupant load of more than one hundred persons above or below the street level or more than a total of five hun dred persons in the entire building, and within two years of the effective date of this local law, existing office buildings less than 100 feet in height, occupied or arranged to be occupied, as hereinabove specified, shall be provided with a system acceptable to the commissioner, which shall:

(1) consist of equipment which shall have the capability of two-way voice communication from a fire command station to the warden on each floor of the building and the mechanical control center, to be used for fire emergencies and fire drills.

(2) have the capability of transmitting a fire alarm signal from the fire command station to the fire department via a central station of a franchised operating company.

26. The title of section C26-1704.6 of such code is amended as follows:

§ **C26-1704.6. Location and identification of sending stations and sounding devices.**

§ 27. Section C26-1704.6 of such code is hereby amended by relettering existing subdivisions (e) and (f) to be (f) and (g) respectively and by adding a new subdivision (e), to follow subdivision (d), to read as follows:

(e) Identification of equipment -fire alarm sending stations for all systems shall be painted red. A diagonal white stripe one inch wide from upper left hand corner to lower right hand comer shall be painted or applied to sending stations which trans mit a fire alarm signal to the fire department via a central station of a franchised operating company. The stripe shall not render any lettering illegible or obliterate the station number,

§ 28. Section C26-1704.7 of such code is hereby amended by adding a new subdivision

to follow subdivision (f), to read as follows:

(g) Where the building is subject to the provisions of section C26-1704.5(f) or (g) with respect to the requirement for a modified class E fire alarm signal system, the standpipe fireline telephone and signaling system may be combined with such fire alarm system provided:

(1) the alarms and two-way voice communication with the fire command station include the pump room and gravity tank or pressure tank room, and

(2) a designated floor station of the modified class E fire alarm signal system is located at or near the main standpipe riser on every floor.

§ 29. Sections C26-1704.8 and C26-1704.9 of such code are hereby renumbered to be sections C26-1704.9 and C26-1704.10 respectively and the renumbered section C26-1704.9 is amended to read as follows:

§ C26-1704.9. Installation. --Installation, source of energy, wiring, and other requirements shall comply with reference standard RS 17-3, RS-17-3A or RS 17-3B as applicable.

§30. Sub-article 1704.0 of article 17, part 11, title C, chapter twenty-six of such code is hereby amended by adding thereto a new section to be section C26-1704.8, to follow section C26-1704.7, to read as follows:

§ C26-1704.8. **Communication system and fire command station-Buildings** classified in occupancy group E, 100 feet or more in height, and existing office buildings 100 feet or more in height, shall be provided with the following:

(a) a communication system acceptable to the commissioner consisting of:

(1) loud speakers on each floor of the building, in each elevator and each stair enclosure, which shall be capable of being operated from the fire command station. (2) a two-way voice communication capability between the fire command station and the following locations:

a. a designated floor warden station on each floor

b. mechanical control center

c. elevators

d. air-handling control rooms

e. elevator machine rooms

(b) The fire command station shall be located in the lobby of the building on the entrance floor as part of the elevator control panel or immediately adjacent thereto. Such command station shall be adequately illuminated and shall contain the following: (1) the loud speaker and communication capability described in (a) above.

(2) the audible alarm signal required in section C26-1704.5(f) and section C26-1704.5 (g).

(3) manually reset information display system to indicate the floor where the alarm was activated.

(4) means to control the sounding devices on any floor or throughout the building.

(5) means to manually transmit a fire alarm signal to the fire department via a central station of a franchised operating company.

(6) means for silencing the audible alarm signals when the loud speakers are in use and for activating the audible alarm systems automatically when use of the

loud speakers are terminated. Switches used for this purpose shall be of the selfrestoring type.

(7) display lamps to include on/off condition of air-handling systems unless such lamps are provided in the mechanical control center.

(8) means for testing the display lamps, local alarms and the connection to the central station of a franchised operating company.

(c) Existing office buildings 100 feet or more in height shall comply with the requirements of this section within three years of the effective date of this local law. If such work is not completed within eighteen months of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the specified time. Such plan and time schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this paragraph, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation.

§31. Section C26-1800.8 of such code, as amended by local law number fifty-four of the year nineteen hundred seventy, is hereby amended to read as follows:

§ C26-1800.8. Elevator in readiness. --(a) In every building exceeding 100 feet in height, all floors shall be served by at least one elevator which shall be kept available for immediate use by the fire department during all hours of the night and day, including holidays and Sundays. There shall be available at all times a man competent to operate the elevator, except that no attendant shall be required for buildings between 100 feet and 150 feet in height having automatic or continuous pressure operation elevators with keyed switches meeting the requirements of reference standard RS18-1 so as to permit the sole use of the elevators by the fire department.

(b) In buildings classified in occupancy group E, 100 feet or more in height, and in existing office buildings 100 feet or more in height, the number of elevators that shall be kept available for immediate use by the fire department as provided for in subdivision (a) of this section, shall be as follows:

(1) Where a floor is serviced by three or less elevator cars, every car shall be kept available.

(2) Where a floor is serviced by more than three elevator cars, at least three elevator cars with a total rated load capacity of not less than 6,000 pounds shall be kept available for every floor. Such cars shall include not more than two cars which service all floors and at least one other car in another bank servicing that floor. If the total load capacity of all cars servicing the floor is less than 6,000 pounds, all such cars shall be kept available.

(3) Such elevators which have automatic or continuous pressure operation shall be controlled by keyed switches meeting the requirements of reference standard RS 18-1.

(4) In buildings classified in occupancy group E 100 feet or more in height, other than existing office buildings 100 feet or more in height, all other automatically operated cars shall have manual operation capability.

(c) Notwithstanding the retroactive provisions of section C26-1801.1, existing office buildings 10D feet or more in height shall comply with the requirements of this section within three years of the effective date of this local law, If such work is not completed

within eighteen months of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and time schedule shall be subject to approval of the commissioner. Failure to comply with the provisions of this paragraph, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation.

§ 32. Appendix to part 11 of title C of such chapter of such code is hereby amended by adding thereto a new building code reference standard, to follow reference standard RS5-16, to be known as reference standard RS5-17 to read as follows:

REFERENCE STANDARD RS 5-17

Standards for the Installation of Smoke Shafts

1. Smoke shafts shall be constructed as required for shafts in section C26-504.6.

2. Shafts may serve more than a single compartment on a given floor but in all cases shall have at least one wall common to or abutting the compartments served, or each added compartment shall be connected to the shaft by an individual duct with the same fire resistive rating as required for the smoke shaft.

3. The size of the shaft shall be uniform throughout and of such dimensions as to provide 60 air changes per hour in the largest compartment served and at a velocity of not less than 1,600 fpm nor more than 4,000 fpm.

4. Openings into the shaft shall be provided at each floor and shall be of a size to permit the number of air changes prescribed in 3 above at a maximum air velocity of 3,000 fpm. Such openings shall be located as high as possible and designed to vent the entire compartment. They shall be equipped with an opening protective or closure having a fire protective rating complying with table 5-3. Such closures shall be automatically openable individually upon the activation of a detector located at the return shaft of the compartment and upon the activation of any other detectors installed within the compartment.

5. An approved, automatically controlled, exhaust fan of such capacity as to exhaust 60 air changes per hour from the largest compartment served by the shaft and capable of maintaining not less than a 2-inch negative static pressure at its inlet under flow conditions shall be installed in the shaft.

a. The fan shall be located so that the bottom of the fan inlet is located not less than 3 feet above the top of the automatic protective closure in the highest fire floor served by the shaft.

b. The shaft shall terminate at least 3 feet above the roof level where it penetrates the roof and shall be provided with a protective weather closure which can be opened manually from the outside.

c. When the closure in the required opening on a floor opens, this shall automatically open the weather closure and start the fan.

d. The shaft exhaust fan shall also be controlled from a local start-stop station at the fan, and at either the mechanical control center or the fire command station.

e. The fan shall be operated from circuits that are separate from the general lighting and power circuits, either taken off ahead of the main switch or connected to an emergency power source when such source is provided.

§ 33. Appendix to part Il of title C of such chapter of such code is hereby amended

by adding thereto a new building code reference standard, **to follow reference standard RS 5-17,** to be known as reference standard RS 5-18 to read as follows:

REFERENCE STANDARD RS 5-18

Standards for the Pressurization of Stairs

1. Each stair shall be provided with air in such amount as to satisfy the following requirements:

a. The air shall be mechanically supplied at one or more levels. The net flow of air shall be upward at all levels.

b. Each fan shall supply 100 per cent outdoor air. Where this requirement is impractical and the lowest lobby area can be safely used to conduct air from the outside to the point of supply to the stair, such requirements may be waived by the commissioner.

c. Any supply ducts or shafts shall be of fire resistive construction with a rating not less than the fire protection rating of the stair enclosure and shall be provided with an intake closure complying with the requirements for opening protectives of chapter 26, title C of the administrative code and with an approved smoke detector located between the outside air intake and the supply fan. Upon the activation of this detector, the system shall shut down.

d. The maximum velocity of air supplied shall not exceed 3,000 fpm.

e. The intake closure shall open and the supply fan or fans shall start upon the activation of any detector in the building except that called for in c above.

2. An approved, automatically controlled louver and weather closure open to the exterior at the highest fire floor served by the stair shall be installed. The size shall be not less than 5 sq. in. per 100 cu. ft. of total shaft volume. Any existing fixed ventilating opening may be included in meeting this requirement.

3. Other operating requirements.

a. All weather closures may normally be in closed position.

b. The air supply fans shall provide positive pressure differential between the stair shaft and the design fire floor at a minimum of 0.05 inches of water column. At all other floor levels, including the roof and basement or basements, a minimum pressure differential of 0.02 inches of water column shall be maintained.

c- The determination of these pressure differentials shall be predicated upon the assumption that three stair doors are open, one of which shall be on the design fire floor and the other two chosen so as to give the most critical condition. Consideration shall be given to the inclusion of:

(1) A door on a floor at which the air supply is furnished. (2) The doors above and below the design fire floor.

d. Door opening force shall not exceed 25 pounds at the door knob utilizing mechanical assistance as required.

e. The maximum velocity permitted through a single open door shall not exceed 2,000 fpm with all other doors closed.

f. Air supply fans shall also be controlled from a local start-stop station at the fans and from either the fire command station or from the mechanical control center. These controls shall over-ride the automatic detection shut-down. The roof louver and weather closure shall open upon activation of the stair fans.

g. The fans shall be operated from circuits that are separate from the general lighting and power circuits, taken off ahead of the main switch and connected to an emergency power source when such source is provided.

§ 34. Reference standard RS 13-1 of the appendix to title C, part 11, chapter twentysix of such code is hereby amended by adding thereto a new section 1006 to follow section 1005, to read as follows:

§ 1006. Any building in occupancy group E, 100 feet or more in height, and any existing office building 100 feet or more in height, where a system serves more than the floor on which the equipment is located, in addition to the controls required by sections 1001 through 1005, shall be provided with:

a. 'Manual controls for operating individually each air supply and each exhaust or return fan in the system located as follows:

1. at the fire command station or in the mechanical control center.

2. in the room containing the affected air handling fans.

b. Manual controls for operating individually each remote control reversible fire shutter, when **such shutters are provided in** accordance **with the provisions of** section C26-1704.5 of the administrative code. Such controls shall be located at the fire command station or in the mechanical control center.

c. An approved products of combustion ionization detecting device or a combination of an approved smoke detecting device and an approved fixed temperature thermostatic device shall be located at the air return shaft at each floor and so located as to monitor each inlet to the air return shaft except that in an existing office building 100 feet or more in height where compliance would cause practical difficulty or undue hardship, the commissioner may accept other locations for such devices fulfihing the intent of the requirement.

§35. Subparagraph (a)(2) of section P107.3 of reference standard RS 16 of the appendix to such title, part and chapter of such code, is hereby amended to read as follows:

(2) Fire lines-Fire lines in buildings classified in all occupancy groups, except occupancy group J, shall be metered or connected to a metered water supply. Fire lines in metered buildings classified in occupancy group i, unmetered buildings or partially metered buildings, may be installed on an annual rate basis, except that, in partially metered premises if the fire line is confined to the metered business section the fire line shall also he metered or connected to a metered water supply. Buildings in occupancy group E, 100 feet or more in height and existing office buildings 100 feet or more in height are exempt from these requirements.

§36. Subdivision (b) of section 2 of reference standard RS17-1 of the appendix to such title, part and chapter of such code, is hereby amended to read as follows:

(b) Marking. --Each siamese connection shall be provided with caps painted red, and shall have the word "STANDPIPE" in letters 1 in. high and 1/8 in. deep cast in the body or on a nonferrous metal plate secured to the connections or mounted on the wall in a visible location, except that caps of each siamese connection used for combination standpipe and sprinkler systems shall be painted yellow and the words shall read "COMBINATION STANDPIPE AND SPRINKLER SYSTEMS."

§ 37. Paragraph (b) (1) of section 4 of reference standard RS17-1 of the appendix

to such title, part and chapter of such code, is hereby amended to read as follows: (1) The connections to the tank are made in such manner as to provide the required sprinkler and/or fire standpipe reserve. The domestic supply is above the sprinkler and/or standpipe reserve. The standpipe reserve is above the sprinkler reserve. Where a standpipe riser is used to supply water to sprinklers in buildings classified in occupancy group E, 100 feet or more in height, and in existing office buildings, 100 feet or more in height, the connection to the tank shall be made in such a manner as to provide the required sprinkler or standpipe reserve, whichever is greater.

§38. Section 3023 of reference standard RS17-2 of the appendix to such title, part and chapter of such code, is hereby amended to read as follows:

3023. SIZE OF RISERS. Each system riser should be of sufficient size to supply all the sprinklers on the riser on any floor of one fire section as determined by the standard schedule of pipe sizes. There should be one or more risers in each building and in each section of the building divided by fire walls. Where the conditions warrant, the sprinklers in an adjoining building or section cut off by fire walls may be fed from a system riser in another fire section or building. Standpipe risers may be used to supply water to the automatic sprinklers on each floor of a building classified in occupancy group E, 100 feet or more in height, or an existing office building, 100 feet or more in height, provided:

(a) The capacity and pressure of the available water supply is at least equal to the capacity and pressure required for the sprinklers.

(b) Provision is made to prevent excessive pressure on the sprinkler heads.

(c) A floor control valve is provided for the sprinkler system on each floor. The floor control valve shall be independent of the standpipe hose outlet valve and shall not obstruct the water flow.

(d) Each sprinkler system controlled by a floor control valve is provided with: (1) A drain valve piped to a satisfactory location, and

(2) An inspector's test connection.

(e) All water supply control valves including sprinkler floor control valves are electrically supervised.

(i) A water flow alarm is provided at the primary source of the water supply for the riser for the purpose of indicating operation of the standpipe system

§ 39. Appendix to part Il of title C of such chapter of such code is hereby amended by adding thereto a new building code reference standard, to follow reference standard RS 17-3, to be known as reference standard RS 17-3A to read as follows:

REFERENCE STANDARD RS 17-3A

Standards for the Installation of Class E Fire Alarm Signal Systems 1.

SOURCES OF ELECTRICAL ENERGY

(a) Two sources of electrical energy shall be provided for direct wire class E fire alarm signal systems as follows:

(1) The primary source shall be generated electric power, not exceeding a potential of 277 volts supplied by utility company power or isolated plants.

(2) The secondary source shall be adequate emergency power if available or storage battery power.

(b) Systems utilizing radio or combination radio wire system shall be connected on each story to a reliable power source, suitably fused, such as the floor lighting panel where either a tap shall be made from the bus bar or a spare non-switched fuse gap or circuit breaker shall he utilized. Circuit breakers if used shall be painted red and locked in the "on" position.

(c) One source of energy shall be connected to the system at all times. The primary and secondary power sources shall be so arranged and controlled by automatic transfer devices or circuitry that when the primary source of power fails, the secondary source will be connected automatically to the fire alarm signal system. Intermediary devices between the fire command station and the source of current supply other than the transfer switch are prohibited. All installations shall comply with the applicable sections of the New York city electrical code.

2. UTILITY COMPANY POWER

(a) Connections to utility company power service shall be made on the street side of the service switch. When the utility company requires the installation of a metering current transformer cabinet to be installed ahead of the main switch, connections to fuse cutouts shall be made on the house side of the current transformer cabinet.

(b) Fuses shall be of the enclosed cartridge type. The use of screw plug fuses is prohibited. The cutouts for the fire command station shall be three pole cartridge fuse type, with the neutral fuse replaced by a solid copper bar.

(c) Where the service to the building exceeds 277/480 **volts a.c., a stepdown trans**former with fusible switch protection for the primary windings, shall be supplied for the class E fire alarm signal system. The transformer shall be adequate for the combined total requirements of the systems and shall have an additional capacity of 50 per cent above normal requirements. A fuse cutout panel shall be supplied, connected to the load side of the stepdown transformer, with three-pole cartridge fuse cutouts for supply to the system. No other load shall be connected to this transformer.

3. ISOLATED PLANTS

(a) Energy from isolated electric light and power plants may be used as a primary source of supply only when there is more than one generating unit and the plant is always in operation when the building is occupied. Wliere an isolated plant is installed in a premises for emergency light and power supply it shall be automatically connected to the power supply, via an automatic transfer switch, when there is utility company power failure. The fire alarm service connection shall be taken from the main bus of the house switchboard and installed in accordance with the service requirements for utility company power supply.

(b) Where the generated voltage of the isolated plant exceeds 277/480 volts a.c. section 2(c) shall be applicable.

4. STORAGE BATTERY SUPPLY

(a) The battery supply except for radio systems shall be designed to provide for 24 hour supervisory operation of the system followed by a 6 hour total system load. An approved type trickle charger shall he provided to maintain the battery supply at full charge. The battery and the trickle charger shall be located in a cabinet where the battery exceeds 75 cu. in. in size. Smaller batteries and chargers may be an integral component of the equipment being powered. The cabinets shall be ventilated unless the battery

is a sealed unit type requiring no ventilation. Cabinets shall be elevated at least I foot, but not more than 5 feet above the floor and shall be located in clean dry places where the temperature will be at least 40 degrees fahrenheit but not more than 110 degrees fahrenheit. Battery cabinets shall be constructed so that the condition of the elements may be observed without disturbing the cells. In no case shall a storage battery be located in the same room with a gas meter. Installations shall be equipped with a switchboard or panel of approved material on which are mounted volt meters, ammeters, circuit breakers, fuses, resistors, switches, starting devices for motors, field rheostats for generators and other apparatus for charging and operating the battery, except where the battery and chargers are an integral component of the equipment being powered.

(b) Battery power for radio systems and radio/wire systems shall be supplied by NICAD or equivalent type trickle charged batteries designed by the manufacturer to meet the above operational requirements.

5. **ASSOCIATED SYSTEMS**

(a) Smoke detection systems.

(b) Sprinkler waterflow alarms.

(c) Thermostatic alarms.

(d) Locked door-fail safe release systems.

(e) Elevator communication and interconnection.

6. WIRING

(a) This standard shall apply to the wiring of all the components of the class E system including all the associated systems enumerated in 5 above. Radio systems and carrier current transmission systems shall be exempt except for conductors used for service wiring and wire extensions.

(b) Wiring shall be in multi-conductor cable installed from each floor to a terminal box located to supply the circuitry for a maximum of five floors above and five floors below the, terminal box. This terrainal box with its cover fastened with machine screws, painted fire department red and stenciled "INTERIOR FIRE ALARM SYSTEM" shall be located in a satisfactory closet or cabinet.

(c) Multi-conductor cable used for signaling communication shall be No. 22 A.W.G. minimum. Voice communication pairs shall be No. 22 A.W.G. minimum, twisted and shielded pairs. Power supply conductors shall be No. 16 A.W.G. minimum and may be part of the multi-conductor cable. Multi-conductor cable shall be provided with a minimum of 10 per cent spare pairs. Insulation of conductors shall be teflon or its equivalent with a minimum of 15 mils wall insulation and shall be of a type that will not support flame, be capable of withstanding a 600 volt insulation breakdown test and be Underwriters Labs. Inc. listed for these requirements. Cable used shall be protected with a sheath and an outer jacket of 25 mils minimum insulation colored fire department red and labeled for its entire length --"FIRE ALARM SERVICE."

(d) Multi-conductor cable and its branches may be installed in cable form, suitably supported and fastened, without enclosure in raceways or conduits provided the cable approved for such use is not subject to tampering or physical hazard and is otherwise protected by the building construction. Cable otherwise exposed to view if not run in shafts or closets designed for the vertical distribution of **telephone or light and power** shall be enclosed and protected by rigid heavy wall conduit, tubing or other approved

raceway, surface or concealed except that aluminum conduits are prohibited for buried underground use or imbedded in concrete in floors, walls or ceilings. Flexible steel armour will be permitted only for final connections to sensing or alarm devices and shall be Underwriters Labs. Inc. labeled and of lengths not exceeding 24 inches where a rigid connection cannot be practically made.

(e) Alarm signaling systems using multi-conductor cable shall operate on 50 volts or less.

(f) Remote manual or automatic control for the air handling systems from a mechanical control center may be multiplexed using conductors of No. 22 A.W.G. minimum.

(g) Conductors for wiring speakers in alarm signal systems shall be at least No. 16 A.W.G. Speakers shall be wired independently in order to provide reliable alarm signals so that loss of a portion of the wiring on a floor shall not disable the entire alarm reproductive capability of that floor. Insulation for speaker wiring shall be teflon or its equivalent designed for 600 volt breakdown test and Underwriters Labs Inc. listed.

(h) Associated systems listed in 5 above shall **be interconnected with Class E fire** alarm signal systems and shall have their actuation indicated at the fire command station.

(i) All conduits shall be grounded to a water main by approved ground clamps or by other means conforming with the electrical code of the city **of New York with a con**ductor equal in size to the largest conductor used in the system; but in no case shall the ground conductor be smaller than No. 10 A.W.G.

(j) Splices in electrical conductors in vertical risers are prohibited except when the length of conductors exceeds 150 feet in vertical risers, an approved terminal cabinet may be used. Splices in horizonal runs shall be avoided. Splices when necessary in horizontal runs shall be made in approved junction boxes. Splices shall be made with Underwriters Labs. Inc. listed mechanical connectors or shall be soldered and taped to assure reliable service. Telephone Co. type punch down terminals may be used. The covers of terminal cabinets and junction boxes shall be painted fire department red to indicate that it contains splices or terminal strips.

(k) Electrical conduits shall enter only at the sides or bottom of control cabinets, unless designed and approved for entry on the top.

(1) All openings in walls, floors, or ceilings where conduits pass through shall be fire stopped in accordance with parts Il, title C of this chapter.

(m) Conductors for class E fire alarm signal systems and associated systems may be run in the same conduits. Conductors for other electrical systems in the building shall not be installed in these conduits. Conduits shall be installed in accordance with tables I and 2 of article 5, section B30-47.0 of the administrative code.

(n) Connections of conductors to binding posts shall be made in a manner to assure reliable service.

7. FIRE ALARM SENDING STATIONS, CLASS "E" --NON-CODED MANUAL STATION, AND FLOOR WARDEN STATION

(a) There shall be at least one (1) fire alarm sending station in each story of a building located in each path of escape. Additional stations shall be installed so that no point m any floor shall be more than 200 feet from the nearest station.

(b) A floor warden station on each floor **shall be located between required stair**ways, required vertical exits or other required exits. All types of systems shall include a

telephone type handset at the floor warden station with integral signaling to the fire command station and may be a part of the speaker system. The handset shall be red and equipped with armor over the wiring between the hand set and its housing which may be installed flush, semi-flush or surface mounted. The homing shall be painted red and identify its function. Equipment shall be installed within a box recessed or surface mounted large enough to include the hand set and test facility, by means of a key, to test the floor automatic and manual alarm device wiring. A pilotlight shall indicate the live condition of the floor warden station.

Doors of sending stations shall be painted red and lettered "FIRE EMERGENCYOPEN DOOR TO OPERATE" or words to this effect. Instructions for operating the station shall be permanently affixed or be an integral part of the station. Instruction cards shall be provided at each station protected by glass or plastic. Designation number of station shall be prominently displayed on instruction card or on cover of station.

(c) All current-carrying parts shall be insulated from parts carrying current of opposite polarity with approved insulating material.

(d) All pull-lever type stations shall be constructed with a door or other approved means to protect the "pull lever" against accidental injury. The warding "IN CASE OF FIRE OPEN DOOR AND PULL DOWN LEVER" in raised letters or equivalent instructions, shall appear on the door.

(e) For systems using break-glass or break-rod type stations, at least one extra glass rod or glass pane for each station in the system shall be kept in the building. Break glass stations shall have the glass rod or pane mounted on the surface of the station covers or mounted internally in such a manner that the glass must be broken to actuate the sending station. Suitable hammers on chains attached to the stations or other approved means of breaking the glass, shall be provided. Stations accomplishing the "break glass" principle using other approved means -shall not be required to provide hammers or spare glasses.

(f) Non Coded Stations:

(1) Non coded closed circuit fire alarm stations may be operated by a break-glass or break-rod or a pull lever device so arranged that the alarm cannot be interfered with except by resetting or replacement of the glass or rod by an authorized person.

(2) The construction and materials shall be equivalent to that of the standard approved type coded closed circuit station described in reference standard RS 17-3 -xcept that the contacts shall be of sufficient capacity to safely carry the entire operating current of the alarm circuit without excessive heating.

(g) Station Testing Devices --Provisions shall be made for a silent test of sending station mechanisms without operating the signaling devices. Such test device shall be designed to prevent any person, except those in authority, from operating the same and to prevent the possibility of the box being left inoperative after the test.

(h) Provision shall be made to supply an audible and **visual signal at the fire com**mand station from the floor warden station.

(i) A designated station on each floor shall have the capability of operating the loud speakers for that floor.

8. ALARM SOUNDING DEVICES

(a) Approved speakers shall be provided as the sounding devices. The alarm shall be a generated gong, bell, horn, **whistle or other acceptable signal. Chim**

be installed only with the approval of the commissioner. Approved speakers shall have heat resistant driven elements and shall conform to reference standard RS 17-5.

When recessed speakers are used they shall conform to the performance requirements of reference standard RS 17-5. Speakers when mounted on walls shall be mounted upon tenant walls in preference to building core walls.

(b) Recessed speakers if used shall be located not more than 10 feet from the entrance to each required exit to insure proper alarm signal reproduction. This spacing is based upon normal 8 feet - 10 feet ceiling height. Surface mounted type speakers shall be mounted within 10 feet of each egress to insure proper alarm signal reproduction. For unusual conditions and higher ceilings, speakers shall not be mounted more than 20 feet above floor.

(c) The alarm sounding devices may be utilized for other audio purposes including building security if means is provided to insure fire alarm priority.

9. FIRE ALARM SYSTEM CONTROL BOARDS AND COMMAND STATIONS

(a) Supervising Circuit:

(1) Class "E" fire alarm systems shall be supervised.

(2) The supervising circuit shall be provided with a trouble signal arranged to sound continuously in case of failure of the primary power source. The trouble signal shall be so located that it will be within audible range of a responsible person in the building.

(3) Trouble signals may be fitted with silencing switches only when the switch is connected in such a manner that the act of silencing the signal by the operation of the switch automatically transfers the trouble signal to a red lamp on the fire command station. When the trouble has been repaired, the alarm signal shall sound until the silencing switch has been reset to operate under normal conditions.

(4) The trouble signal shall give a distinctive signal.

(b) Protection of Sending and Sounding Devices-In fire alarm signal systems, sending stations and sounding devices shall he enclosed in metal casings, made dust proof and damp proof when necessary, and clearly marked with instructions for use.

(c) Standards of Electric Alarm Apparatus-All electrically actuated apparatus used in fire alarm systems shall be so designed and constructed that it will operate satisfactorily at an input voltage level 15 per cent below or 10 per cent above normal rated voltage.

(d) Insulation:

(1) Insulating materials used shall be varnished cambric, bakelite, mica, or equivalent insulating material.

(2) The use of fiber or paper as an insulating material is prohibited.

(3) The insulating materials used shall be capable of withstanding an insulation breakdown test of 1,000 volts a.c. plus twice operating voltage applied for 1 minute. (e) Electromagnets:

(1) Electromagnet windings shall be impregnated with an insulating, moisture repelling compound of the silicone or epoxy type.

(2) Electromagnet coils used on alternating current, when composed of enameled wire shall have additional approved insulation on each wire. The coils may **be of the form-wound type.**

(3) A protective cover to prevent mechanical damage shall be provided over the entire coil.

(4) Electromagnetic coils shall be fastened to prevent floating.

(5) Electromagnet cores shall be of the best grade of ferrous material so as to reduce to a minimum the possibility of failure due to residual magnetism.

(6) Electromagnet cores for use on alternating current shall be of laminated construction or other approved method to prevent heating and promote efficiency.

(7) Electromagnetic cores of relays shall be treated to prevent corrosion. Paint or varnish shall not be used for this purpose.

(8) Non-magnetic freeze pins shall be used to prevent two magnetic surfaces from making physical contact with each other.

(f) Wiring:

(1) All connections shall be secure and properly protected, and where subject to motion, shall be of approved flexible wire. All wiring of the fire command station and station circuits and supervisory circuits shall be approved.

(2) Binding posts when used, shall be of such a design that the wire is held between two flat surfaces. Binding posts shall be mounted on an approved terminal block or insulating strip. The space between binding posts shall be at least 1/2 inch, unless they are separated by approved barriers.

(3) Printed circuits cards, when used shall be 1/16 inch thick glass fiber epoxy resin, with color coded ejectors (used to group cards according to function so that they may be quickly located), with plated through holes as feed through on all logic cards. The connector fingers shall be gold plated over nickel. The boards shall be screened with ink to furnish all component designation which shall aid in locating specific circuits and components on the board

(g) Relays:

(1) The armatures of all relays shall depend on gravity or magnetic attraction for their operation and may be assisted by a spring.

(2) Adjustments shall be of such a character that they can be securely locked. (h) Overload protective devices:

Electronic circuits shall provide protection of all equipment and circuits by opening up the circuit to the equipment or devices protected. The operation of this "overload circuit" shall cause the trouble signal to sound at the fire command station.

(i) Control boards shall operate so that troubles in individual zones may be shunted out without affecting the rest of the system.

(j) Provision shall be made for sufficient wire gutter space around the panel. Gutter space shall be a minimum of 2 inches at sides, top, and bottom. Wire in gutter space shall be properly laced in a neat and workmanlike manner on all control boards.

(k) Conduit knockouts shall not be provided in the top of the control board cabinet, unless designed and approved for entry on top.

(1) A wiring diagram of the alarm system approved by the commissioner and the approved card of instruction properly marked and securely fastened shall be provided within the control board cabinet and at the fire command station. When it becomes necessary to mount the diagram outside of the cabinet, the diagram "I be framed under glass or equivalent material.

(m) Control Boards:

(11) Control boards and amplifiers used for voice communication and alarms shall be located in a safe, moisture and dust free location secure from unauthorized tampering. Otherwise a ventilated cabinet provided with a lock and key, suitably identified, shall be provided.

(2) Amplifiers for class E systems shall have the capacity to deliver sufficient power to operate all alarm sounding devices and voice communication system and have a 50 per cent reserve power capacity. In addition the amplifiers shall be wired in such -a manner that the imminent failure or actual failure of amplifiers shall shut down the amplifier and indicate a trouble condition. Removal of an amplifier shall be indicated by a trouble signal at the fire command station. Opening of the control cabinets shall be supervised by a tamper switch producing a manually resetable trouble alarm at the fire command station.

(n) Fire Command Station:

The fire command station shall contain all the components described in the building code and shall have the capability of overriding floor warden stations. The command station console shall be provided with a hinged cover which permits the flashing "FIRE?' visible signal to be seen. The cover shall be provided with an approved lock and key. The fire command station shall be provided with an information display system so located as to provide minimum distortion due to an angular line-of-sight and ambient lighting conditions. This display shall have the capability to monitor the following systems in order of listed priority:

(1) Manual Fire Alarm
(2) Smoke Detection
(3) Sprinkler Waterflow
(4) Elevator Lobby Detector
(5) Fire Signal Activation
(6) Central Office Notification
(7) Fan System on-Fan System off
(8) Fail Safe Locked Door
(9) Fire Systems Trouble
(10) Fire Signal Trouble
(11) Tamper Switch Alarm
(12) Power Source
(13) Test/Normal Mode

(14) Other Information as Desired 10. PAINTING OF EQUIPMENT All enclosing cases for fire alarm, sprinkler alarm, smoke detection, and associated systems alarm apparatus shall be painted fire department red, except where approval is given by the commissioner to deviate from this requirement, The lobby information display system may be painted or finished to suit the owner of the building.

11. INFORMATION DISPLAY SYSTEMS

(a) Information display system used in connection with class E fire alarm signal systems shall be of an approved electrically supervised type. The indicating devices shall describe the purpose they serve. The printed designation on unit or building information

tion display system indicators shall be legible. The mechanism shall be so arranged **that once operated, the indicating** device must be reset manually. All conditions indicated shall remain displayed until manually cleared at the fire command station.
(b) A unit information display system shall be so designed that the operation of any station in the unit causes a visible and audible signal.
(c) Trouble displays shall be so arranged that the indicating device will reset automatically when the cause of trouble has been removed. The trouble information display system shall be so designed that it will indicate visible and audible trouble signals in the event of trouble occurring on any circuit monitored. The trouble information display system shall be actuated by the operation of supervisory devices.
(d) A silencing switch shall be provided for trouble signals, but shall not affect subsequent trouble signals.
(e) Information display systems shall be so designed that vibration from without or that caused by a trouble signal within will not operate the indicating devices.
(f) All remote information display systems shall be installed in a separate steel cabinet painted red, provided with approval lock and key. Information display system cabinets shall be marked in white letters at least one inch high with the words "FIRE ALARM INFORMATION DISPLAY SYSTEM, ZONE -" or "FIRE ALARM TROUBLE INFORMATION DISPLAY SYSTEM", whichever the case may be.
(g) Information display systems located in the lobby of a building whether **an integral part of the fire command** station or wall mounted shall have the legend "FIRE" in red letters three inches high together with an audible signal in addition to the lamp, target drop, cathode ray tube, light emitting diode, nixie, etc. and a separate or distinctive trouble signal shall sound. The audible signal accompanying an alarm shall be automatically silenced when the fire command station is operated by the fire safety director or his delegated substitute. Remote information display systems shall operate in the same manner.
(h) The display shall provide a minimum of four simultaneous alarm indicators with an overflow indication for additional alarms. Provisions shall be made to distinguish alarm conditions from non-alarm conditions. The display shall be updated as new information becomes available. If the same condition exists for more than one point on .1 floor or for more than one floor in a building, such as a fire gong actuation or public address, a separate output entry shall be displayed for each point or floor.
(i) Display Format --Each output entry shall include self -identifying mnemonic codes for the type of signal, building or area designation, floor or stair number and point location, and time of day. Systems utilizing gravity drops or lamps as point identification, may provide a hard copy print out.

(j) Maintainability:

(1) Manual display of all points of annunciation for test purposes shall be provided.

(2) Capability shall be provided for interrogating any station or sensing ele ment for test purposes, either at the remote device or by interrogation from the fire command station. Intervals of testing shall be as approved.

(3) Equipment designed shall be modular so that all repairs may be performed on-site by substitution of duplicate components by authorized personnel.

(4) One each of these parts that are of a modular nature shall be included as spares at the fire command station.

12. LICENSED CONTRACTORS

Only a person holding a license or a special license in accordance with the provisions of the New York city electrical code, shall install, alter, or repair electrical wiring or apparatus for fire alarm systems in any building.

13. USED OR REBUILT APPARATUS

Used apparatus shall not be re-used for any interior fire alarm system until the same has been reconditioned in the shop of an approved manufacturer of interior fire alarm apparatus. Approval shall be obtained from the commissioner prior to installation. The use of reconditioned apparatus whose manufacturer has discontinued manufacturing equipment is prohibited.

14. STANDPIPE FIRELINE TELEPHONE AND SIGNAL SYSTEM

Where the standpipe telephone and signal system is -arranged to be used as a class E fire alarm signal system as provided in the building code, retractable telephone handsets shall be provided in pump rooms. The telephone in pump rooms shall be equipped with a loudspeaking receiver so that a voice can be distinctly heard at least 15 feet from the receiver.

15. LOCKED DOOR FAIL SAFE SYSTEMS

(a) Stairway reentry doors which are locked from the stairway side as permitted in section C26-604.4 of the building code shall be provided with an electrical fail safe strike release mechanism that will permit the door to be opened without a key when any automatic fire detecting device operates, elevator "Fireman Service" operates or power failure shall occur. In addition, provision shall be made to permit these doors to be opened from the command station or mechanical control center. This system shall be manually reset.

(b) Wiring for these systems shall comply with rule 6 a, b, c and d of this reference standard and be electrically supervised for open and shorted or grounded circuits.

(c) Transformers for release mechanisms shall be rated for the proper use load, identified and located in proximity of the power supply for other fire alarm systems.

(d) The release mechanisms shall be operated from a separate control relay having the capability of indicating trouble on a separate trouble signal and at the information display system on the command console and at the mechanical control center. The mechanism shall also indicate a "failed!' and "open!' status on the command console and at the mechanical center.

16. RADIO SYSTEM

A radio or radio/wire system shall comply with the following requirements:

(a) The emergency notification portion of the system equipment **shall** be capable of the following:

(1) Have the capability of individual, group or entire building notification of an alarm tone and voice intelligibility.

(2) Receivers and wire extension speakers shall be permanently mounted to a wall or pillar.

(3) There shall be automatic switch over to emergency battery **power supply.**

(b) **Two way communication shall be accomplished by fixed transmitters and receivers.**

(e) Equipment shall be Federal Communications Commission (FCC) approved, FM type, solid state, above 150.8 MHz. Selective signalling shall be accomplished by a minimum of 2 tone code operation.
(d) The antenna shall be designed and installed for use at the fire command station transmitter and be capable of transmitting to all fixed stations.
(e) The fire command station unit shall have the capability of locking out all other remote control points.

17. SPRINKLER WATERFLOW ALARMS

A sprinkler waterflow alarm may be arranged to be used as part of a class E fire alarm signal system provided the alarm signal system shall be an approved electrically supervised closed circuit information display system capable of indicating the floor where the sprinkler was activated.

18. CARRIER CURRENT TRANSMISSION SYSTEM

A carrier current transmission system shall comply with the following requirements: (a) The emergency notification portion of the system shall be capable of the following:

(1) Have the capability of individual, group or entire building notification of an alarm tone and voice intelligibility.

(2) Receivers and wire extension speakers shall be permanently mounted to a wall or pillar.

(3) There shall be automatic switch over to emergency power supply.

(b) Two way communication shall be accomplished by fixed transmitters and receivers.
(c) The fire command station unit shall have the capability of locking out all other remote control points.
(d) Wiring of all components including all associated systems enumerated in Rule 5 above, shall comply with the following:

(1) Wiring when required in addition to the building power and lighting cir cuitry shall be in multi-conductor cable installed from each floor to a terminal box suitably located. This terminal box with its cover fastened with machine screws, painted fire department red and stenciled "INTERIOR FIRE ALARM SYSTEM" shall be located in a satisfactory closet or cabinet.

(2) Multi-conductor cable used for signaling communication shall be No. 22 A.W.G. minimum. Voice communication pairs shall be No. 22 A.W.G. minimum, twisted and shielded pairs. Multi-conductor cable shall be provided with a minimum of 10 per cent spare pairs. Insulation of conductors shall be teflon or its equivalent with a minimum of 15 mils minimum insulation and shall be of a type that will not support flame, be capable of withstanding a 600 volt insulation breakdown test and be Underwriters Labs. Inc. listed for these requirements. Cable used shall be protected with a sheath and an outer jacket of 25 mils minimum insulation colored fire department red and labeled for its entire length --"FIRE ALARM SERVICE."

(3) Proper isolation and hi pass signal devices shall be installed on the building power distribution system to insure an interference free and safe transmission path for carrier current transmission systems and shall **be acceptable by the bureau of gas and electricity.**

(4) Multi-conductor cable shall operate on 50 volts or less.

(e) All components shall be board of standards and appeals approved.

§ 40 Appendix to part 11 of title C of such chapter of such code is hereby amended by adding thereto a new building code reference standard to follow reference standard RS 17-3A, to be known as reference standard RS 17-3B, to read as follows:

REFERENCE STANDARD RS 17-3B

Standards for the Installation of Modified Class E Fire Alarm Signal Systems.

1. SOURCES OF ELECTRICAL ENERGY

(a) Sources of electrical energy shall be provided for modified class E fire alarm signal systems as follows:

(1) The source shall be generated electric power, not exceeding a potential of 277 volts supplied by utility company power or isolated plants or storage battery power.

(b) Systems utilizing radio or combination radio/wire system shall be connected on each story to a reliable power source, suitably fused, such as the floor lighting panel where either a tap shall be made from the bus bar or a spare non-switched fuse gap or circuit breaker shall be utilized. Circuit breakers if used shall be painted red and locked in the "on" position.

(c) When emergency supply is provided one source of energy shall be connected to the system at all times. The primary and secondary power sources shall be so arranged and controlled by automatic transfer devices or circuitry so that when the primary source of power fails, the secondary source will be connected automatically to the fire alarm signal system. Intermediary devices between the fire command station, existing fire alarm and signal system control panels and the source of current supply other than the transfer switch are prohibited. All installations shall comply with the applicable sections of the New York city electrical code.

2. UTILITY COMPANY POWER

(a) Connections to utility company power service shall be made on the street side of the service switch. When the utility company requires the installation of a metering current transformer cabinet to be installed ahead of the main switch, connections to fuse cutouts shall be made on the house side of the current transformer cabinet.

(b) Fuses shall be of the enclosed cartridge type. The use of screw plug fuses is prohibited. The cutouts for the fire command station shall be three pole cartridge fuse type, with the neutral fuse replaced by a solid copper bar.

(c) Where the service to the building exceeds 277/480 volts A.C., a stepdown transformer with fusible switch protection for the primary windings, shall be supplied for the modified class E fire alarm signal system. The transformer shall be adequate for the combined total requirements of the systems and shall have an additional capacity of 50 per cent above normal requirements. A fuse cutout panel shall be supplied, connected to the load side of the stepdown transformer, with three-pole cartridge fuse cutouts for supply to the system. No other load shall be connected to this transformer.

3. ISOLATED PLANTS

(a) Energy from isolated electric light and power plants may be used as a primary source of supply only when there is more than one generating unit **and the plant is always in operation when the building is occupied. Where an isolated plant is installed in a**

premises for emergency light and power supply it shall be automatically connected to the power supply, via an automatic transfer switch, when there is utility company power failure. The fire alarm service connection shall be taken from the main buss of the house switchboard and installed in accordance with the service requirements for utility company power supply.

(b) Where the generated voltage of the isolated plant exceeds 277/480 volts a.c., section 2(c) shall be applicable.

4. STORAGE BATTERY SUPPLY

(a) The battery supply, except for radio systems, when storage battery equipment is used shall be designed to provide for 24 hour supervisory operation of the system followed by a 6 hour total system load. An approved type trickle charge shall be provided to maintain the battery supply at full charge. The battery and the trickle charger shall be located in a cabinet where the battery exceeds 75 cu. in. in size. Smaller batteries and chargers may be an integral component of the equipment being powered. The cabinets shall be ventilated unless the battery is a sealed unit type requiring no ventilation. Cabinets shall be elevated at least I foot, but not more than 5 feet above the floor and shall be located in clean dry places where the temperature will be at least 40 degrees fahrenheit but not more than 110 degrees fahrenheit. Battery cabinets shall be constructed so that the condition of the elements may be observed without disturbing the cells. In no case shall a storage battery be located in the same room with a gas meter. Installations shall be equipped with a switchboard or panel of approved material on which are mounted volt meters, ammeters, circuit breakers, fuses, resistors, switches, starting devices for motors, field rheostats for generators, and other apparatus for charging and operating the battery, except where the batteries and chargers are an integal component of the equipment beink powered.

(b) Battery power for radio systems and radio/wire systems shall be supplied by NICAD or equivalent type trickle charged batteries as designed by the manufacturer to meet the above operational requirements.

5. ASSOCIATED SYSTEMS

(a) Smoke detection systems

(b) Sprinkler waterflow alarms

(c) Thermostatic alarms

(d) Locked door-fail safe release systems

(e) Standpipe fire line signaling and telephone systems as modified for class E systems

(f) Elevator communication and interconnection

6. WIRING

(a) This standard shall apply to the wiring of all the components of the modified class E systems, except for radio systems, including all the associated systems enumerated in 5 above. Radio systems and carrier current transmission systems shall be exempt for conductors used for service wiring and wire extensions.

(b) Wiring utilizing existing conduit systems for interior fire alarm, standpipe signal, etc. may be/ in multi-conductor cable installed from each floor to a terminal box located to supply the circuitry for a maximum of five floors above and five floors below the terminal box. This terminal box with its **cover fastened with machine screws, painted fire depart**

ment red and stenciled "INTERIOR FIRE ALARM SYSTEM" shall be located in a satisfactory closet or cabinet.

(c) Multi-conductor cable used for signaling communication shall be No. 22 A.W.G. minimum. Voice communication pairs shall be No. 22 A.W.G. minimum, twisted and shielded pairs. Gong circuits shall be No. 12 A.W.G. **Power supply** conductors shall be No. 16 A.W.G. minimum and may be part of the multi-conductor cable. Multi-conductor cable shall be provided with a minimum of 10 per cent spare pairs. Insulation of conductors shall be teflon or its equivalent with a minimum of 15 mils wall insulation thickness and shall be of a type that will not support flame, be capable of withstanding a 600 volt insulation breakdown test and be Underwriters Labs. Inc. listed for these requirements. Cable used shall be protected with a sheath and an outer jacket of 25 mils minimum insulation thickness, colored fire department red and labeled for its entire length --"FIRE ALARM SERVICE".

(d) Multi-conductor cable and its branches may be installed in cable form, suitably supported and fastened, without enclosure in raceways or conduits provided the cable approved for such use is not subject to tampering or physical hazard and is otherwise protected by the building construction. Cable otherwise exposed to view if not run in shafts or closets designed for the vertical distribution of telephone or light and power shall be enclosed and protected by rigid heavy wall conduit, tubing or other approved raceway, surface or concealed except that aluminum conduits are prohibited for buried underground use or imbedded in concrete in floors, walls or ceilings. Flexible steel armor will be permitted only for final connections to sensing or alarm devices and shall be Underwriters Labs. Inc. labeled and of lengths not exceeding 24 inches where a rigid connection cannot be practically made.

(e) Alarm signaling systems using multi-conductor cable shall operate on 50 volts or less

(f) Remote manual or automatic control for the air handling systems from a mechanical control center may be multiplexed using conductors of No. 22 A.W.G. minimum.

(g) Conductors for wiring speakers in alarm signal systems shall be at least No. 16 A.W.G. Speakers shall be wired independently in order to provide reliable alarm signals so that loss of a portion of the wiring on a floor shall not disable the entire alarm reproductive capability of that floor. Insulation for speaker wiring shall be the equal of Teflon or its equivalent designed for 600 volt breakdown test and Underwriters Labs. Inc. listed.

(h) Associated systems listed in 5 above shall be interconnected with modified class E fire alarm signal systems and shall have their actuation indicated at the fire command station.

(i) All conduits shall be grounded to a water main by approved ground clamps or by other means conforming with the electrical code of the city of New York, with a conductor equal in size to the largest conductor used in the system; but in no case shall the ground conductor be smaller than No. 10 A.W.G.

(D Splices in electrical conductors in vertical risers are prohibited except when the length of conductors exceeds 150 feet in vertical risers, an approved terminal cabinet may be used. Splices in horizontal runs shall be avoided. Splices when necessary in horizontal runs shall be made in approved junction boxes. Splices shall be made with Underwriters

Labs. Inc. listed mechanical connectors or shall be soldered and taped to assure reliable service. Telephone Co. type punch down terminals may be used. The covers of terminal cabinets and junction boxes shall be painted fire department red to indicate that it contains splices or terminal strips.

(k) Electrical conduits shall enter only at the sides or bottom of control cabinets, unless designed and approved for entry on the top.

(1) All openings in walls, floors, or ceilings where conduits pass through shall be fire stopped in accordance with part II, title C of this chapter.

(m) Conductors for modified class E fire alarm signal systems and associated systems may be run in the same conduits. Conductors for other electrical systems in the building shall not be installed in these conduits. Conduits shall be installed in accordance with tables I and 2 of article 5, section B30-47.0 of the administrative code.

(n) Connections of conductors to binding posts shall be made in a manner to assure reliable service.

7. FIRE ALARM SENDING STATIONS. MODIFIED CLASS "E" --NONCODED MANUAL STATION AND FLOOR WARDEN STATION

(a) There shall be at least one (1) fire alarm sending station in each story of a building located in each path of escape. Additional stations shall be installed so that no point on any floor shall be more than 200 feet from the nearest station.

(b) A floor warden station on each floor shall be located between required stairways, required vertical exits or other required exits. All types of systems shall include a telephone type handset at the floor warden station with integral signaling to the fire command station and may be a part of the speaker system. The hand set shall be red and equipped with armor over the wiring between the hand set and its housing which may be installed flush, semi-flush or surface mounted. The housing shall be painted red and identify its function. Equipment shall be installed within a box recessed or surface mounted, large enough to include the hand set and test facility, by means of a key, to test the floor automatic and manual alarm device wiring. A pilot light shall indicate the live condition of the floor warden station.

Doors of sending stations shall be painted red and lettered "FIRE EMERGENCYOPEN DOOR TO OPERATE" or words to this effect. Instructions for operating the station shall be permanently affixed or be an integral part of the station. Instruction cards shall be provided at each station protected by glass or plastic. Designation number of station shall be prominently displayed on instruction card or on cover of station.

(c) All current-carrying parts shall be insulated from parts carrying current of opposite polarity with approved insulating material.

(d) All pull-lever type stations shall be constructed with a door or other approved means to protect the "pull lever" against accidental injury. The wording "IN CASE OF FIRE OPEN DOOR AND PULL DOWN LEVER" in raised letters or equivalent instructions, shall appear on the door.

(e) For systems using break-glass or break-rod type stations, at least one extra glass rod or glass pane for each station in the system shall be kept in the building. Break glass stations shall have the glass rod or pane mounted on the surface of the station covers or mounted internally in such manner that the glass must be broken to actuate the sending station. Suitable hammers on chains attached to the stations or other approved means of

breaking the glass, shall be provided. Stations accomplishing the "break glass" principle using other approved means shall not be required to provide hammers or spare glasses.

(f) Coded and Non Coded Stations:

(1) Coded stations shall be as described in reference standard RS17-3.

(2) Non coded closed circuit fire alarm stations may be operated by a break glass or break-rod or a pull lever device so arranged that the alarm cannot be interfered with except by resetting or replacement of the glass or rod by an authorized person.

(3) The construction and materials shall be equivalent to that of the standard approved type coded closed circuit station described in reference standard RS17-3 except that the contacts shall be of sufficient capacity to safely carry the entire operating current of the alarm circuit without excessive heating.

(g) Station Testing D evices -Provisions ions shall be made for a silent test of sending station mechanisms without operating the signaling devices. Such test device shall be designed to prevent any person, except those in authority, from operating the same and to prevent the possibility of the box being left inoperative after the test.

(h) Provision shall be made to supply an audible and visual signal at the fire command station from the floor warden station.

9. ALARM SOUNDING DEVICES

(a) Approved speakers *shall be provided as the sounding devices. The alarm sound shall be a generated gong, bell, horn, whistle or other acceptable signal. Chime sounds may be installed only with the approval of the commissioner. Approved speakers shall have heat resistant driven elements and shall conform to reference standard RS17-5.

When recessed speakers are used they shall conform to the performance requirements of reference standard RS17-5. Speakers when mounted on walls shall he mounted upon tenant walls in preference to building core walls.

(b) Recessed speakers if used shall be located not more than 10 feet from the entrance to each required exit to insure proper alarm signal reproduction. This spacing is based upon normal 8 feet-10 feet ceiling height. Surface mounted type speakers shall be mounted within 10 feet of each egress to insure proper alarm signal reproduction. For unusual conditions and higher ceilings, speakers shall not be mounted more than 20 feet above floor.

(c) The alarm sounding devices may be utilized for other audio purposes including building security if means is provided to insure fire alarm priority.

9. FIRE ALARM SYSTEM CONTROL BOARDS AND COMMAND STATIONS

(a) Supervising circuit:

(1) Modified class "E" fire alarm systems shall be supervised.

(2) The supervising circuit shall be provided with a trouble signal arranged to sound continuously in case of failure of the power source. The trouble signal shall be so located that it will be within audible range of a responsible person in the building. (3) Trouble signals may be fitted with silencing switches only when the switch **is connected in such a manner that the act of silencing the signal by the operation of the switch automatically transfers the trouble signal to a red lamp on** the fire command station. When the trouble has been repaired, the alarm signal shall sound until the silencing switch has been reset to operate under normal conditions.

(4) The trouble signal shall give a distinctive signal.

(b) Protection of Sending and Sounding Devices-In fire alarm signal systems, sending stations and sounding devices shall be enclosed in metal casings, made dust proof and damp proof when necessary, and clearly marked with instructions for use.

(c) Standards of Electric Alarm Apparatus-All electrically actuated apparatus used in fire alarm systems shall be so designed and constructed that it will operate satisfactorily at an input voltage level 15 per cent below or 10 per cent above normal rated voltage.

(d) Insulation:

(1) Insulating materials used shall be varnished cambric, bakelite, mica, or equivalent insulating material.

(2) The use of fiber or paper as an insulating material is prohibited.

(3) The insulating materials used shall be capable of withstanding an insulation breakdown test of 1,000 volts a.c. plus twice operating voltage applied for I minute. (e) Electromagnets:

(1) Electromagnet windings shall be impregnated with an insulating, moisture repelling compound of the silicone or epoxy type.

(2) Electromagnet coils used on alternating current, when composed of enameled wire shall have additional approved insulation on each wire. The coils may be of the form-wound type.

(3) A protective cover to prevent mechanical damage shall be provided over the entire coil.

(4) Electromagnetic coils shall be fastened to prevent floating.

(5) Electromagnet cores shall be of the best grade of ferrous material so as to reduce to a minimum the possibility of failure due to residual magnetism.

(6) Electromagnet cores for use on alternating current shall be of laminated construction or other approved method to prevent heating and promote efficiency.

(7) Electromagnetic cores of relays shall be treated to prevent corrosion. Paint or varnish shall not be used for this purpose.

(8) Non-magnetic freeze pins shall be used to prevent two magnetic surfaces from making physical contact with each other.

(f) Wiring:

(1) All connections shall be secure and properly protected, and where subject to motion, shall be of approved flexible wire. All wiring of the fire command station and station circuits and supervisory circuits shall be approved.

(2) Binding posts when used, shall be of such a design that the wire is held between two flat surfaces. Binding posts shall be mounted on an approved terminal block or insulating strip. The space between binding posts shall be at least 1/2 inch, unless they are separated by approved barriers.

(3) Printed circuits cards, when used shall be 1/16 inch thick glass fiber epoxy resin, with color coded ejectors (used to group cards according to function so that they may be quickly located), with plated through holes as feed through on all logic cards. The connector fingers shall be gold plated over nickel. The boards shall be screened with ink to furnish all component designation which shall aid in locating specific circuits and components on the boards.

(g) Relays:

(1) The armatures of all relays shall depend on gravity or magnetic attraction for their operation and may be assisted by a spring.

(2) Adjustments shall be of such a character that they can be securely locked.

(h) Overload protective devices:

Electronic circuits shall provide protection of all equipment and circuits by opening up the circuit to the equipment or devices protected. The operation of this "overload circuit" shall cause the trouble signal to sound at the fire command station.

(i) Control boards shall operate so that troubles in individual zones may be shunted out without affecting the rest of the system.

(j) Provision shall be made for sufficient wire gutter space around the panel. Gutter space shall be a minimum of 2 inches at sides, top, and bottom. Wire in gutter space shall be properly laced in a neat and workmanlike manner on all control boards.

(k) Conduit knockouts shall not be provided in the top of the control board cabinet unless designed and approved for entry on top.

(l) A wiring diagram of the alarm system approved by the commissioner and the approved card of instruction properly marked and securely fastened shall be provided within the control board cabinet and at the fire command station. When it becomes necessary to mount the diagram outside of the cabinet, the diagram shall be framed under glass or equivalent material.

(m) Control Boards:

(1) Control boards and amplifiers used for voice communication and alarms shall be located in a safe, moisture and dust free location secure from unauthorized tampering. Otherwise a ventilated cabinet provided with a lock and key, suitably identified, shall be provided.

(2) Amplifiers for modified class "E" systems shall have the capacity to de liver sufficient power to operate all alarm sounding devices and voice communication system and have a 50 per cent reserve power capacity. In addition the amplifiers shall be wired in such a manner that the imminent failure or actual failure of amplifiers shall shut down the amplifier and indicate a trouble condition. Removal of an amplifier shall be indicated by a trouble signal at the fire command station. Opening of the control cabinets shall be supervised by a tamper switch producing a manually resettable trouble alarm at the fire command station.

(n) Fire Command Station:

The fire command station shall contain all the components described in the building code and shall have the capability of overriding floor warden stations. The command station console shall be provided with a hinged cover which permits the flashing "FIRE" visible signal to be seen. The cover shall be provided with an approved lock and key. The fire command station shall be provided with an information display system so located as to provide minimum distortion due to an angular line-of-sight and ambient lighting conditions. This display **shall have the capability to monitor** the following systems in order of listed priority:

(1) Manual Fire Alarm
(2) Smoke Detection
(3) Sprinkler Waterflow
(4) Elevator Lobby Detector

(5) Fire Signal Activation
(6) Central Office Notification
(7) Fan System on-Fan System off
(8) Fail Safe Locked Door
(9) Fire Systems Trouble
(10) Fire Signal Trouble
(Il) Tamper Switch Alarm
(12) Power Source
(13) Test/Normal Mode
(14) Other Information as Desired

10. PAINTING OF EQUIPMENT

All enclosing cases for fire alarm, sprinkler alarm, smoke detection, and associated systems alarm apparatus shall be painted fire department red, except where approval is given by the commissioner to deviate from this requirement. The lobby information display system may be painted or finished to suit the owner of the building.

11. INFORMATION DISPLAY SYSTEMS

(a) Information display systems used in connection with modified class E fire alarm signal systems shall be of an approved electrically supervised type. The indicating devices shall describe the purpose they serve. The printed designation on unit or building information display system indicators shall be legible. The mechanism shall be so arranged that once operated, the indicating device must be reset manually. All conditions indicated shall remain displayed until manually cleared' at the fire command station.
(b) A unit information display system shall be so designed that the operation of any station in the unit causes a visible and audible signal.
(e) Trouble displays shall be so arranged that the indicating device will reset automatically when the cause of trouble has been removed. The trouble information display system shall be so designed that it will indicate visible and audible trouble signals in the event of trouble occurring on any circuit montored. The trouble information display system shall be actuated by the operation of supervisory devices.
(d) A silencing switch shall be provided for trouble signals, but shall not affect subsequent trouble signals.
(e) Information display systems shall be so designed that vibration from without or that caused by a trouble signal within will not operate the indicating devices.
(f) All remote information display systems shall be installed in a separate steel cabinet painted red, provided with approved lock and key. Information display system cabinets shall be marked in white letters at least one inch high with the words: "FIRE ALARM INFORMATION DISPLAY SYSTEM, ZONE-" or "FIRE ALARM TROUBLE INFORMATION DISPLAY SYSTEM", whichever the case may be.
(g) Information display systems located in the lobby of a building whether an integral part of the fire command station or wall mounted shall have the legend "FIRE" in red letters three inches high together with an audible signal in addition to the lamp, target drop, cathode ray tube, light emitting diode, nixie, etc. and a separate or distinctive trouble signal shall sound. The audible signal accompanying an alarm shall be automatically silenced when the fire command station is operated by the fire safety director or his delegated substitute. **Remote information display system shall operate in the same manner.**

(h) The display shall provide a minimum of four simultaneous alarm indicators with an overflow indication for additional alarms. Provisions shall be made to distinguish alarm conditions from non-alarm conditions. The display shall be updated as new information becomes available. If the same condition exists for more than one point on a floor or for more than one floor in a building, such as a fire gong actuation or public address, a separate output entry shall be displayed for each point or floor.
(i) Display Format-Each output entry shall include self -identifying mnemonic codes for the type of signal, building or area designation, floor or stair number and point location, and time of day. Systems utilizing gravity drops or lamps as point identification, may provide a hard copy print out.

Maintainability

(1) Manual display of all points of annunciation for test purposes shall be pro vided.

(2) Capability shall be provided for interrogating any station or sensing element for test purposes, either at the remote device or by interrogation from the fire com mand station. Intervals of testing shall be as approved.

(3) Equipment design shall be modular so that all repairs may be performed on-site by substitution of duplicate components by authorized personnel.

(4) One each of these parts that are of a modular nature shall be included as spares at the fire command station.

12. LICENSED CONTRACTORS

Only a person holding a license or a special license in accordance with the provisions of the New York city electrical code, shall install, alter, or repair electrical wiring or apparatus for fire alarm systems in any building.

13. USED OR REBUILT APPARATUS

Used apparatus shall not be re-used for any interior fire alarm system until the same has been reconditioned in the shop of any approved manufacturer of interior fire alarm apparatus. Approval shall be obtained from the commissioner prior to installation. The use of reconditioned apparatus whose manufacturer has discontinued manufacturing equipment is prohibited.

14. STANDPIPE FIRELINE TELEPHONE AND SIGNAL SYSTEM

Where the standpipe telephone and signal system is arranged to be used as a modified class E fire alarm signal system as provided in the building code, retractable telephone handsets shall be provided in pump rooms. The telephone in pump rooms shall be equipped with a loudspeaking receiver so that a voice can be distinctly heard at least 15 feet from the receiver.

15. LOCKED DOOR FAIL SAVE SYSTEMS

(a) Stair-way reentry doors which are locked from the stairway side as permitted in section C26-604.4 of the administrative code shall be provided with an electrical fail safe strike release mechanism that will permit the door to be opened without a key when any automatic fire detecting device operates, elevator "Fireman Service' operates or power failure shall occur. In addition, provisions shall be made to permit these doors to be opened from the command station or mechanical control center. This system shall be manually reset
(b) Wiring **for these systems shall comply with Rule 6 a, b, c, and d of this reference standard and be electrically supervised for open and shorted or grounded** circuits

(c) Transformers for release mechanisms shall be rated for the proper use load, identified and located in proximity of the power supply for other fire alarm systems.
(d) The release mechanisms shall be operated from a separate control relay having the capability of indicating trouble on a separate trouble signal and at the information display system on the command console and at the mechanical control center. The mechanism shall also indicate a "failed" and "open" status on the command console and at the mechanical control center.

16. RADIO SYSTEM

A radio or radio/wire system shall comply with the following requirements:
(a) The emergency notification portion of the system equipment shall be capable of the following:

(1) Have the capability of individual, group or entire building notification of an alarm tone and voice intelligibility.

(2) Receivers and wire extension speakers shall be permanently mounted to a wall or pillar.

(3) There shall be automatic switch over to emergency battery power supply.

(b) Two way communication shall be accomplished by fixed transmitters and receivers.
(c) Equipment shall be Federal Communications Commission (FCC) approved, FM type, solid state, above 150.8 MHz. Selective signaling shall be accomplished by a minimum of 2 tone code operation.
(d) The antenna shall be designed and installed for use at the fire command station transmitter and **be capable of transmitting to all fixed stations.**
(e) The fire command station unit shall have the capability of locking out all other remote control points.

17. SPRINKLER WATERFLOW ALARMS

A sprinkler waterflow alarm may be arranged to be used as part of a modified class E fire alarm signal system provided: the alarm signal system shall be an approved electrically supervised closed circuit information display system capable of indicating the floor where the sprinkler was activated.

18. CARRIER CURRENT TRANSMISSION SYSTEM

A carrier current transmission system shall comply with the following requirements:
(a) The emergency notification portion of the system shall be capable of the following:

(1) Have the capability of individual, group or entire building notification of an alarm tone and voice intelligibility.

(2) Receivers and wire extension speakers shall be permanently mounted to a wall or pillar.

(3) There shall be automatic switch over to emergency power supply.

(b) Two way communication shall be accomplished by fixed transmitters and receivers.
(c) The fire command station unit shall have the capability of locking out all other remote control points.
(d) Wiring of all components including all associated systems enumerated in Rule 5 above, shall comply with the following:

(1) Wiring when required in addition to **the building power and lighting cir** cuitry shall be in multi-conductor cable installed from **each floor to a terminal box**

suitably located. This terminal box with its **cover fastened with machine screws,** painted fire department red and stenciled "INTERIOR 'FIRE ALARM SYSTEM" shall be located in a satisfactory closet or cabinet.

(2) Multi-conductor cable used for signaling communication shall be No. 22 A.W.G. minimum. Voice communication pairs shall be No. 22 A.W.G. minimum, twisted and shielded pairs. Multi-conductor cable shall be provided with a minimum of 10 per cent spare pairs. Insulation of conductors shall be teflon or its equivalent with a minimum of 15 mils minimum insulation and shall be of a type that will not support flame, be capable of withstanding a 600 volt insulation breakdown test and be Underwriters Labs. Inc. listed for these requirements. Cable used shall be protected with ,, sheath and an outer jacket of 25 mils minimum insulation colored fire department red and labeled for its entire length --"FIRE ALARM SERVICE."

(3) Proper isolation and hi pass signal devices shall be installed on the building power distribution system to insure an interference free and safe transmission path for carrier current transmission systems and shall be acceptable by the bureau of gas an(] electricity.

(4) Multi-conductor cable shall operate on 50 volts or less.

(e) All components Shall be board of standards and appeals approved.

§ 41. Rule 210.13 of the modifications to the provisions of USASI A17.1 1965 of the reference standard RS18-1 of the appendix to such title, part and chapter of such code, as added by -In amendment and approved by the board of standards and appeals under calendar number 260-BCR, is hereby REPEALED and reenacted and a new rule 210.14 to follow the reenacted rule 210.13 is added to read as follows:

210.13. Automatic elevators designated for fire department use in compliance with the building code shall conform to the following requirements:

A. Controls and Devices. --(1) At the street floor, a three position switch shall be provided for each elevator or group of elevators to be controlled. Such switches shall be located in the corridor call button fixture or in a separate fixture which shall be located four feet or less from the corridor call button fixture and not exceeding seven feet above the floor level.

(a) The keyed switch shall have the following positions: "Normal", "Firemen Service" and "Door Open".

(b) In lieu of the "Door Open" position on the keyed switch, a "Door Open" button may be provided which shall be operable only when the keyed switch is in the "Firemen Service" position. Such "Door Open" button shall be located in the same fixture as the keyed switch.

(c) For elevators whose lowest terminals are above the street floor, a two position keyed switch shall be provided at the fire command station for each elevator or group of elevators terminating on that floor. Such switch shall have "Normal" and "Firemen Service" positions.

(2) At the lowest landing, for elevators whose lowest **terminals are above the** street floor, a three position keyed switch shall be provided for each elevator or for each group of such elevators. Such keyed switch shall have the same positions and be located in the same **manner as provided for in 1, 1 (a)** and 1 **(b) above.**

(3) In each elevator, there shall be a two position keyed switch and a "Door Open"

button. The position on the keyed switch shall he "Normal" and "Firemen Service".

B. Keyed Switches and Buttons

(1) All keyed switches required by this section shall be operable only by a city-wide standard key and shall also be made operable by the fire department standard key. The city-wide standard key shall be designed in accordance with the requirements of the fire department and shall be obtained only through fire department authorization. City-wide standard keys shall be kept on 'the premises by a person responsible for the maintenance and operation of the elevators in a location readily accessible to authorized persons in an emergency, but not where they are available to the public.

(2) Corridor switches in the "Door Open" position as well as "Door Open" buttons shall be of the momentary contact type and keys shall be removable from switches only in the "Normal" or "Firemen Service" positions.

C. "Firemen Service" Operation

(1) When a keyed switch, as described in A above, is placed in the "Firemen Service" position, all elevators controlled by the switch shall return non-stop to the street floor except that elevators whose lowest terminals are above the street floor shall return non-stop to their lowest landing. Such action shall override any other programming for car stops, but shall not affect the elevator safety circuits.

(2) In buildings equipped with beat and/or smoke sensing devices at elevator landings, the activation of any such devices shall cause the elevator or elevators servicing the floor on which the sensing device is activated to return non-stop to the street floor or to the lowest landing where the lowest terminal is above the street floor. Where the lowest landing of an elevator is above the street floor, the activation of beat and/or smoke sensing devices located in the elevator landing at such lowest landing floor shall cause such elevator to return non-stop to a floor two stories above the lowest landing or in the absence of a stop at that floor, to the nearest landing above the lowest terminal landing which is served by the elevator or group of elevators. Stich action shall override any other programming for car stops, but shall not affect the elevator safety circuits.

(3) When "Firemen Service" is initiated:

(a) an elevator travelling away from the street floor or from a lowest landing floor shall reverse at the next landing floor without opening its doors.

(b) door reopening devices for power operated doors which may be affected by smoke or heat so as to prevent door closure shall be rendered inoperative.

(4) When the elevator car reaches the street floor or other floor specified in C(l) or C(2) above, the car and hoistway doors shall open. The doors shall reclose after remaining open for not less than eight seconds or more than one minute.

(5) Subsequent operation of the car and hoistway doors shall be controlled in the following manner:

(a) by the keyed switch "Door Open" position or where a "Door Open" button is provided, by such button when the keyed switch is turned to "Firemen Service".

(b) the car and hoistway doors shall reclose after remaining open for not less than eight seconds nor more than one minute.

D. Operation of Elevators on "Firemen Service"

(1) To operate an elevator on "Firemen Service?', the keyed switch inside sueb elevator car shaH be turned to the "Firemen Service" position.

(2) such action shall put the elevators on manual operation and over-ride **any other** keyed switch controls and elevator landing call buttons.
(3) elevators on "Firemen Service' shall be operable only by a person in the elevator car. Means shall be provided within the car to permit such person after having made a floor selection to change such selection or direction of travel prior to reaching the originally selected floor.
(4) when the elevator reaches the selected floor, the elevator car and hoistway doors shall open only in response to the "Door Open" button in the car and shall remain open. If the "Door Open" button is released while the door is in the process of opening, the doors shall automatically reclose. Means for closing the car doors at such selected floor shall be provided within the car.

E. Identification of Switches and Buttons

(1) All keyed switch positions and buttons required by this rule shall be identified with the appropriate designation in red lettering.
(2) All cover plates for such switches and buttons shall bear the lettering "FOR FIRE DEPARTMENT USE ONLY".
210.14. Manually operated elevators designated for fire department use in compliance with the building code shall be provided with the following:

(1) A system to permit signalling the operator from the street floor to return non-stop to the street floor or the lowest landing floor when such landing floor is above the street floor.

(2) Power operated doors and door reopening devices shall be provided with controls for compliance with C(3)(b) and D(4) of rule 210.13.

§ 42. Subdivision (e) of rule 210.2 of ANSI A 17.1 1965 of reference standard RS 18-1 of the appendix to such title, part, and chapter of such code, is hereby amended by adding thereto a new paragraph to be paragraph 5 to follow paragraph 4, to read as follows:

5. become inoperative when a keyed corridor switch is placed in the "Firemen Service" position, so that all elevators controlled by the switch shall return non-stop to the street floor or to the lowest terminal floor where such lowest terminal floor is above the street floor.

§43. Section B30-166.0 of article twenty-two of title B of chapter thirty of the administrative code of the city of New York is hereby amended by adding thereto a new subdivision "o," to follow subdivision "n," to read as follows:

o. Wiring for door interlocks on elevator hoistway door frames shall be as follows:

1. In buildings classified in section C26-306.1 of the administrative code of the city of New York as occupancy group E, and 100, feet or more in height, wiring installed from the shaft riser to each such door interlock shall be mineral insulated sheathed cable type (MI) or conductors of mica. tape insulation with teflon or equivalent coated glass braid in a metal raceway or equivalent conductors with a maximum operating temperature of 392 degrees fahrenheit approved by the commissioner. Type MI cable terminations in the boxes containing the interlocks shall be sleeved with glass braid fillers or asbestos braid jackets.

2. In existing office buildings, 100 feet or more in height, as defined in sub-article 201.0 of article 2 of part Il, title C, chapter twenty-six of the administrative code, such

wiring and sleeving shall be required only for door interlocks on hoistway door frames of elevators kept available for immediate use by the fire department as provided in sub-division (a) of section C26-1800.8 of the administrative code. Installation of such cable or conductors and sleeving shall be completed within three years of the effective date of this local law. If such work is not completed within eighteen months of such effective date, the owner shall submit a statement to the commissioner, with a copy to the fire commissioner, setting forth a plan and time schedule for the performance of the work and completion within the prescribed time. Such plan and time schedule shall be subject to the approval of the commissioner. Failure to comply with the provisions of this paragraph, or to perform the work in accordance with the time schedule, as approved by the commissioner, shall constitute a violation

§ 44. **This local law shall take effect immediately, except as otherwise specifically** provided herein.

THE CITY OF NEW YORK, OFFICE OF *THE CITY* CLERK, SS:

I hereby certify that the foregoing is a true copy of a local law of The City of New York, passed by the Council on December 22, 1972, and approved by the Mayor on January 18, 1973.

HERMAN KATZ, City Clerk, Clerk of the Council.

CERTIFICATION PURSUANT TO MUNICIPAL Home RULE LAW SECTION 27

Pursuant to the provisions of Municipal Home Rule Law Section 27, 1 hereby certify that the enclosed local law (Local Law 5 of 1973, Council Int. 752-B) contains tile correct text and :

Received the following vote at the meeting of the New York City Council on December 22, 1972: 35 for, none against.

Was approved by the Mayor on January 18, 1973.

Was returned to the City Clerk on January 19, 1973.

NORMAN REDLICH, Corporation Counsel.