AMENDMENTS

to the

STATE BUILDING CONSTRUCTION CODE

applicable to

GENERAL BUILDING CONSTRUCTION

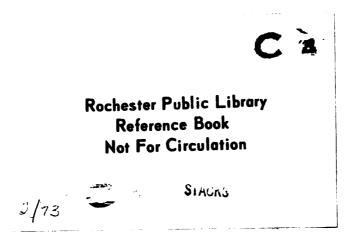
June 8, 1972



State of New York Nelson A. Rockefeller Governor

r OVERSIZE 343.747 N532sbg Amend. 1972

STACKS





STATE BUILDING CONSTRUCTION CODE applicable to GENERAL BUILDING CONSTRUCTION

Note: Matter underlined is new; matter in parentheses (()) is present wording to be deleted.

C 101 TITLE

These regulations, promulgated pursuant to Article 18 of the Executive Law of the State of New York, ((amending the regulations applicable to general building construction promulgated on February 20, 1956)) shall be known as The State Building Construction Code applicable to general building construction. They are hereinafter iferred to as this Code.

C 103 EFFECTIVE DATE

This Code shall take effect on ((April 1, 1961)) <u>September 15, 1972</u> and shall supersede the State Building Construction Code applicable to general building construction first promulgated on February 20, 1956 ((.)), and which was last amended on January 1, 1971.

C 105-1 NEW BUILDING

This Code shall apply to buildings for business, mercantile, industrial, storage, assembly, institutional, and miscellaneous occupancies and uses, including ((to)) their accessory structures ((,)) and ((to)) parts thereof, ((which are hereafter erected)) and to buildings containing mixed occupancies, but shall not apply to non-residential farm buildings outside of fire limits.

C 105-2.1 GENERAL

c--A building occupied for uses described above which is altered or repaired, when the cost of such alterations or repairs within any ((twelve)) <u>six</u>-month period exceeds 50 per cent of the cost of replacement of the building at the beginning of that ((twelve-)) <u>six</u>-month period.

C 105-2.2 ROOF COVERING

Whenever more than 25 per cent of the roof covering of a building is replaced in any ((twelve-)) <u>six</u>-month period, all roof covering on such building shall be made to comply with applicable regulations of this Code.

90690 N 532 Lga June 8, 1972

C 105-2.3 ADDITION OR ALTERATION

Any addition or alteration ((, regardless of cost,)) made to a building shall be made in conformity with applicable regulations of this Code.

C 105-7 FALLOUT SHELTERS

This Code shall not apply to fallout shelters intended for emergency use where such fallout shelters are constructed or installed or proposed to be constructed or installed to provide safety and security to the occupants in accordance with <u>approved</u> specifications ((and)) <u>,</u> standards, <u>or regulations</u>. ((contained in regulations or orders issued by the New York State Civil Defense Commission.))

C 105-8 WORKMANSHIP

Workmanship shall conform to generally accepted good practice in the applicable trade.

C 108-3 DEFINITIONS

approved. Approved by the enforcement officer under the regulations of this Code, or approved by an authority designated by law or this Code ((.)) or acceptable in accordance with the condition set forth in section C 107.

combustible. Material or combination of materials which ((will ignite and support combustion when heated at any temperature up to 13828F. (750°C.))) is not noncombustible. See definition of noncombustible.

construction classification.

---type 1, fire-resistive construction. That type of construction in which the walls, partitions, columns, floors and roof are noncombustible with sufficient fire resistance to withstand the effects of a fire and prevent its spread from story to story. <u>See section</u> C402-1d.

---type 2, noncombustible construction. That type of construction in which the walls, partitions, columns, floors and roof are noncombustible and have less fire resistance than required for fireresistive construction. See section C402-ld.

---type 3, heavy timber construction. That type of construction in which the exterior walls are of masonry or other noncombustible materials having equivalent structural stability under fire conditions and a fire-resistance rating of not less than 2 hours; the ((in which)) interior structural members including columns, beams and girders, are of heavy timber, in heavy solid or laminated masses, but with no sharp corners or projections or concealed or inaccessible spaces; ((in which)) the floors and roofs are of heavy plank or laminated wood construction, or of any other material providing equivalent fire-resistance and structural properties ((. Noncombustible structural members may be used in lieu of heavy timber, provided the fire-resistance rating of such members is not less than 3/4 hours.)) , or construction is as set forth in the generally accepted standards.

court, inner, depth. Least horizontal dimension measured perpendicular to the width.

court, outer, depth. Least horizontal dimension measured perpendicular to the width.

curb level. The elevation of the curb ((opposite the center of the front of the building. If a building faces on more than one street, the curb level shall be the average of the elevations of the curbs at the center of each side or front of the building. Where no curb level or equivalent has been)) established by the municipal authority. ((, the average elevation of the finished grade immediately adjacent to the front of the building shall be considered as the curb level. If a building faces on more than one street where no curb level has been established, the average of the elevations of the finished grade on each street side of the building shall be considered as the curb level.)) See section C 203-lg.

exit. ((A way of departure from the interior of a building or structure, to the exterior at street or grade, including doorways, passageways, hallways, corridors, stairways, ramps, fire escapes, and all other elements necessary for egress or escape.)) That portion of the way of departure from the interior of a building or structure to the exterior at street, or grade level accessible to a street, consisting of:

b--an interior stairway; or

c--a horizontal exit; or

d--a door to the exterior at grade; or

e--an exterior stairway, or ramp.

fire - and smoke-detecting system. An approved installation of equipment which automatically actuates a fire alarm when the detecting element is exposed to fire, smoke or abnormal rise in temperature.

a--corridors, stairways and lobbies enclosed in construction having a fire-resistance rating, including the door opening thereto from a habitable, public or occupied space; or

fire retardant wood. Wood that has been treated by an approved pressure IMPREGNATION PROCESS WITH FIRE-RETARDANT CHEMICALS IN accordance with generally accepted standards, and is legibly marked as to its performance characteristics. When used as a structural element or as furring, flamespread rating shall be no greater than 25 with no evidence of progressive combustion, and test shall be for at least 30 minutes. When used as interior finish or trim, flame-spread rating shall be in conformity with section C 403-2, and test shall be for at least 10 minutes.

flanmable. ((Capability of materials or combinations of materials to ignite)) Capable of igniting within 5 seconds when exposed to flame ((.)), and continuing to burn.

heater room. Space containing central heat producing or heat transfer equipment.

- ---high capacity. Containing equipment having an individual or combined rated gross capacity of 1,000,000 Btu per hour or more, or capable of operating at more than 15 psi for steam or more than 30 psi or 250° F. for hot water.
- ---moderate capacity. Containing equipment having an individual or combined rated gross capacity from 250,000 to 1,000,000 Btu per hour, and operating at less than 15 psi for steam or less than 30 psi or 250° F. for hot water.
- ---low capacity. Containing equipment having a rated gross capacity of less than 250,000 Bfu per hour, and operating at less than 15 psi for steam or less than 30 psi or 250° F. for hot water.

hëight, building. ((Vertical distance measured from curb or grade level to the highest level of a flat or mansard roof, or to the average height of a pitched, gabled, hip or gambrel roof, excluding bulkheads, penthouses and similar constructions enclosing equipment or stairs, providing they are less than 12 feet in height and do not occupy more than 30 per cent of the area of the roof)) The height of a building is expressed in both feet and stories. See sections C 203-lg and C 203-lh.

legal open space. Open space on the premises, such as yards or courts, or an open space at least 25 feet wide permanently dedicated to public use which abuts the premises.

mezzanine. An intermediate floor between the floor and ceiling of any ((story, covering less than the floor area immediately below)) space that is completely open or provides adequate visibility.

noncombustible. Material or combination of materials which will not ignite, ((and)) support combustion, or liberate flammable gas when <u>subjected to fire</u> when ((heated at any temperature up to 1382° F. (750° C.), during an exposure of 5 minutes.)) <u>tested in accordance</u> generally accepted standards.

open parking structure. ((Unenclosed or partially enclosed)) <u>A</u> structure for the parking of motor vehicles ((.)) <u>having at least</u> 75 per cent of two exterior sides of each story permanently open.

((passageway. Nonhabitable space which serves as a means of travel to or from enclosed areas. See definitions of corridor, hallway, lobby, and vestibule.))

sleeping room. Room used for sleeping primarily for single tenant occupancy.

smoke-detecting system. See definition of fire- and smoke-detecting system.

automatic

sprinkler system. ((A complete' sprinkler system which is installed in compliance with generally accepted standards.)) <u>A system of</u> piping and appurtenances designed and installed in accordance with generally accepted standards so that heat from a fire will automatically cause water to be discharged over the fire area to extinguish it or prevent its further spread.

story. Portion of a building which is between one floor level and the next higher floor level or the roof. ((If a mezzanine floor area exceeds one third of the area of the floor immediately below, it shall be deemed to be a story.

A basement shall be deemed to be a story when its ceiling is 6 or more feet above the finished grade. A cellar shall not be deemed to be a story. An attic shall not be deemed to be a story if unfinished and without human occupancy.)) See sections C 203-lh and C 203-li.

C 109 Safety During Construction

c--Fuel-burning equipment furnishing temporary heat during construction, except portable equipment, shall be provided with a smoke pipe, chimney or flue to convey the products of combustion to the exterior without creating a health hazard. Confined spaces having portable fuel-burning equipment shall be adequately ventilated so as to prevent dangerous accumulation of products of combustion.

Group C6 -- Institutional:

Buildings in which the primary or intended occupancy or use is for persons domiciled or detained under supervision, subclassified as follows:

Group C6.1 for ((employees and staff and for)) persons whose movements are not limited and have a normal sense of perception. ((, domiciled under supervision.))

Group C6.2 for persons whose movements are limited because of illness, ((age,)) physical or mental handicap, except ((convalescent,)) nursing, and old-age homes regulated by the State Building Construction Code applicable to multiple dwellings.

C 202-2 Classification by Type of Construction

c--Openings in fire walls, fire separations, shafts and exit enclosures shall be provided with opening protectives as required by Section ((C 402-4.10.)) <u>C402-4.11.</u>

e--Where a building is constructed of two or more types of construction, the construction classification of the entire building shall be the lowest of such types of construction.

TABLE C 202-2.---MINIMUM FIRE-RESISTANCE REQUIREMENTS OF STRUCTURAL ELEMENTS

(by types of construction; fire-resistance ratings in hours)

				Constr	ruction class	sificatio	on		
Structural element	Type l (Fire- resistive)		Type 2 (Non combustible)		Type 3 (Heavy	Type 4 (Ordinary)		Type (Wood f	5 <u>8</u> Frame)
	la	lb	2a	2b	timber)	4 ą.	4 _Ъ	5a	5ъ
Exterior:	·						_	2/1	
Bearing walls Nonbearing walls ¹ , ²	4	3	2	nc	2	2	2	3/4	с
Nonbearing walls ¹ , ²	2	2	2	nc	2	2	2	3/4	с
Panel and curtain walls ¹ , ²	3/4	3/4	3/4	nc		- - - 			
Party walls ³	4	3	2	2	((4)) <u>3</u>	2	2	2	2
Interior:									
Fire walls ⁴	4	3 3	2	2	((4)) <u>3</u>	2 3/4	2 c	2 3/4	2
Bearing walls or partitions Partitions enclosing stairways, hoistways,	4	3	2	nc	2	3/4	с	3/4	с
<pre>shafts, other vertical openings; and ((hallways:)) corridors:</pre>	$\frac{2^{6}}{(2^{6})}$	<u>26</u> ((2 ⁶))	<u>26</u>	<u>26</u> ((2 ⁶))	<u>26</u> ((2 ⁶))	<u>26</u>	<u>26</u> ((2 ⁶))	3/4	<u>3/4</u>
((on outside exposure))	$((2^{6}))$	((2 ⁶))	((²⁶))	((2 ⁶))				((3/4))	((3/4))
((on inside exposure))	((1))	((1))	((3/4))	((3/4))	((3/4))	((3/4))	((3/4))	((3/4))	((3/4))
((Nonbearing walls and partitions)) Con- struction separating tenant spaces ⁵	1	1	((3/4))1	. ((3/4))1	((3/4)) <u>1</u>	((3/4)).	1 ((3/4))]	3/4	3/4
Columns, beams, girders and trusses (other								5/ 1	5/ 1
than roof trusses):									
supporting more than one floor, or one									
floor and a roof	4	3	2	nc	с	3/4	С	3/4	с
supporting one floor or a roof	3	2	3/4	nc	с	3/4 3/4 3/4	с с	3/4	С
Floor construction including beams	3	2	1	nc	с	3/4	с	3/4	С
Roof construction including purlins,	27	7۲	o /\.7						
beams and roof trusses	2'	1'	3/47	nc	с	3/4	с	3/4	с

(For footnotes, see next page)

Table C 202-2 (continued)

.

Footnotes to table C 202-2

- 1. Rating may be required due to distance separation in conformity with section C 401-3.
- 2. For exceptions, see section C 401-3.3b and section C 401-3.4b.
- 3. Party walls shall comply with section C 401-7.
- 4. Fire walls shall comply with section C 402-2.
- 5. For other requirements, see table C 402-4.
- 6. In building not more than three stories in height, 1 hour in type 1 construction; 3/4 hour in type 2, 3, and 4 construction. For exceptions see section ((C 402-4.6.)) <u>C 402-4.7.</u>
- 7. For exceptions, see ((section C 402-3c.)) sections C 402-3d and C 402-3e.
- 8. Not permitted within fire limits.

C 202-3 Classification by Fire Hazard

c--Buildings of group C3 and C4 occupancies shall be classified on the basis of the fire load, as low hazard, moderate harard, or high harard, as follows:

low hazard (groups C3.1 and C4.1) where the average fire load for the entire fire area is not more than 80,000 Btu per square foot;

moderate hazard (groups C3.2 and C4.2) where the average fire load for the entire fire area is more than 80,000 Btu per square foot, but not more than 160,000 Btu per square foot;

high hazard (groups C3.3 and C4.3) where the average fire load for the entire fire area exceeds 160,000 Btu per square foot; or where explosives are processed or stored, or where ((combustible gases or flammable li uids are manufactured or stored.)) explosive mixtures, dangerous gases, or uncontrollable reactions can occur that endanger life or become a fire hazard.

C 203-1 General Requirements

b--((The premises of every building within the scope of this Code shall front on one or more streets, or on one or more driveways giving access for all purposes to a street or streets, and the main entrance of the building shall be connected with a street or with such driveway.)) Buildings shall be 100 feet or less from a street, road or driveway providing access for fire-fighting equipment.

((e--The height, number of stories, and fire areas per story between exterior walls or between exterior walls and fire walls, indicated for each occupancy and use group of each type or subtype of construction, shall not exceed those set forth in tables C 203-la, C 203-lb, C 203-lc, and C 203-ld, with increases permitted in accordance with the regulations set forth in sections C 203-l.l and C 203-l.2.))

 $((f)) e^{-}$ (No change)

((g--On a sloping site, whereever habitable space is provided below the highest curb level as permitted in section C 206-2, all construction below such level shall be type 1, except where the lowest story is at the same elevation as and is open to a street at least 50 feet wide, and is accessible for fire fighting from such street.)) <u>f--In buildings of type 2, 3, and 4</u> construction, more than three stories in height, the floor of the lowest story and all construction below, shall be type 1.

C 203-1 (Continued)

g--The height in feet of a building shall be determined from a datum established by the average elevation of paved open spaces which are suitable for the approach of fire department equipment, and curb levels where established, both of which are within 50 feet of the exterior walls of the building; where such distance is exceeded the height in feet shall be determined as set forth in section C 203-lh. Such height shall be measured from such datum to the highest level of a flat or mansard roof, or to the average height of a pitched, gabled, hip or gambrel roof, excluding bulkheads and other roof construction as set forth in section C 203-li (5).

H--The height in stories of a building shall be determined from a datum established by the average elevation of the finished grade adjoining the exterior walls of the building, where such walls face legal open space or abut ophersppen space which wis fevel of 6 reto feet or more. Areaways, driveways, and entrances of abrupt change in elevation and totaling 10 per cent or less of the length of the wall shall not be included in determining the average elevation.

i--The following locations shall not be deemed to be a story:

- (1) A mezzanine with a floor area less than 10,000 square feet and less than one third of the floor area of the space wherein the mezzanine is contained.
- (2) A basement where the finished floor immediately above is less than 7 feet above the average elevation of the finished grade as described in this section.
- (3) A cellar.
- (4) An attic not meeting the requirements for habitable space.
- (5) Roof constructions enclosing stairs or equipment other than for elevators, provided they are less than 12 feet in height and do not occupy more than 30 per cent of the area of the roof on which they are located; and elevator hoistway and elevator machine rooms.

C 203-1 (Continued)

j--A building of low or moderate hazard occupancy having a height of one story for the major portion and two stories for the remainder shall be classified as a one-story building provided it is in conformity with the following:

- (1) The area per story of the two-story portion is not more than 10 per cent of the gross floor area of the one-story portion.
- (2) The two-story portion is separated from the one-story portion as set forth in table C 402-4.
- (3) The two-story portion is of a type of construction as required for its height, fire area, and occupancy, except that the type of construction shall be at least that required for the one-story portion.
- (4) The two-story portion is used for low hazard occupancy accessory to the occupancy of the one-story portion.
- (5) Exits from the second story are enclosed to the exterior in construction having a fire-resistance rating conforming to the requirements of table C 202-2.
- (6) The building is not increased in height on the basis of a sprinkler installation as provided in section C 203-1.2c.

k--In a two-story building of type 5 construction, having a cellar or basement that is not a story, the exterior walls of the cellar or basement shall be of masonry construction extending the full height of the basement or cellar.

TABLE C 203-la. --HEIGHT AND FIRE AREA FOR BUILDINGS OF GROUP Cl, C2, C3, and C4 OCCUPANCY

See sections ((C 203-1,)) C 203-1.1 and C 203-1.2 for increased height or fire area; see section ((C 405-3)) <u>C 406-4</u> for ((special)) sprinkler requirements

Maximum	Height		Bas	ic fire	area by cons	truction cl	assificati	on in squ	uare fee	t	
 In stories	In feet	Ty: (Fire(r	pe Type l ėsėstėvė)t		ype 2 mbustible)	Type 3 (Heavy	Type 4 (Ordinar		Type (Wood f	$rame)^{\perp}$	
Storres	1000	la	lb	2a	2b	timber)	4a	4ъ	5a	5b	
				LOW H	AZARDCl, C	3.1, C4.1					
l	un	un	un	21,ûn0	18,0003((4))	21,000 ³		12,0003	9,000	6,000	
2	40	un	un	21,000	15,000	18,000	15,000	9,000	6,000	3,000	
3	55	un	un	18,000	np	15,000	12,000	6,000	np	np	
4	70	un	un	15,000	np	12,000	9,000	np	np	; np	
5	85	un	un	12,000	np	np	np	np	np	np	
6	100	un	un	np	np	np	np	np	np	np	
More than 6	More than 1	100 un	un	np	np	np	np	np	np	np	
			M	DERATE H	AZARDC2, C	3.2, C4.2					
12	un	un	un	18,000	15,000 ³	15,000((3	³⁾⁾ 15,000 ⁽	(3))8,000	6,000	9 4,000	
	40	un	30,000	15,000		12,000	12,000	6,000	4,000	0 2,000	
2	55	ún	28,000	12,000	np	9,000	9,000	np	np	'np	
3 4	70	un	26,000	10,000	np	np	np	np	np	np	
5	85	un	24,000	np	np	np	np	np	np	np	
6	100	un	22,000	np	np	np	np	np	np	np	
More than 6	More than 1		np	np	np	np	np	np	np	np	
					 IAZARDC3.3,	c4.3 <u>4</u>					
			15,000	8,000	6,000	6,000	6,000	4,000	3.00	0 2,000	
L	un	24,000	19,000	7,000	5,000	5,000	5,000	np	np	np	
2	40	23,000	14,000	6,000	np	np	np	np	np	np	
3	55	22,000	12,000	np	np	np	np	np	np	np	
4	70 95	21,000		np	np	np	np	np	np	np	
5	85	20,000	np	-	np	np	np	np	np	np	
More than 5	More than 8	35 np	np	np	цЪ	115	Ъ		••P	۲	

(For footnotes, see next page)

Table C 203-la (Continued)

Footnotes to Table C 203-la

- 1. Not permitted within fire limits.
- 2. For aircraft hangars, basic fire areas may be increased 25 per cent.
- 3. Fire area of a one-story building may be unlimited provided that the building is located outside the fire limits, has open unobstructed space on all sides accessible for fire fighting, ((not less than 75 feet wide for high hazard, 60 feet wide for moderate hazard, and 40 feet wide for low hazard,)) as set forth in section C 203-1.1a, and such space shall be at least 50 feet wide. ((and has heat)) Heat banking areas, and ((has)) an automatic sprinkler system as set forth in sections ((C 402-4.3)) C402-4.4 and C 511-4, respectively ((.)), shall be provided.
- 4. ((Requirements of footnote 3 applicable, except that heat banking areas and sprinkler systems are not required where the roof deck has 3/4-hour fire resistance or the roof deck is noncombustible, the roof covering is Class A and the insulation and vapor seal, if any, is noncombustible.)) See section C 406 for fire protection equipment requirements.

Central Library of Rochester and Monroe County · Business DivisionTABLE C 203-1b.---HEIGHT AND FIRE AREA FOR BUILDINGS OF GROUP C5 OCCUPANCY

See sections ((C 203-1,)) C 203-1.1 and C 203-1.2 for increased height or fire area; see section ((C 405-3)) C 406-4 for ((special)) sprinkler requirements²

Basic fire area by con	,	Height	Maxir
	Type l (Fire resistive)	-	In
heavy 2a 2b timber	la lb	'eet	Stories
16,000 12,000 12,000	un un	un	l.
14,000 6,000 6,000	un un	40	2
12,000 np np	un un	55	3
	un 24,000		4
	un 22,000	85	5
000 np np np	un 20,000	_00	6
		ore	More
np np np	un np	in 100	than 6

¹ Not permitted within fire limits.

² Exhibition buildings with a fire area of more than 32,000 square feet shall be provided with heat banking areas and an automatic sprinkler system as set forth in sections C 402-4.4 and C 511-4, respectively.

TABLE C 203-1C (III-812) - HEIGHT AND FIRE AREA FOR BUILDINGS OF GROUP C6 OCCUPANCY

See sections C2O3-1 and C2O3-1.1 for increased fire area; see section ((C4O5-3)) C 4O6-4 for ((special)) sprinkler requirements.

(No change in table)

TABLE CERTAL Library of Rochester and Monroe County Business Divisiones

See sections ((C 203-1,)) C 203-1.1 and C 203-1.2 for increased fire area; and section ((C 401-3.2)) C 108-3 (Open Parking Structure) for enclosing wall requirements.

Number of parking levels¹ Basic Fire area by construction classification in square feet

		Type l resistive)	Type (noncomb)		Type 3 (Heavy timber)		nary)		oe 5 frame)
	la	lb	2a	2b		4a	4b	5a	<u>5b</u>
l	un	un	un	un	np	np	np	np	np
2	un	un	un	30,000	np	np	np	np	np
3	un	un	un	30,000	np	np	np	np	np
4	un	un	un	30,000	np	np	np	np	np
5	un	un	((40,000)) 50,000	((np)) 30,000	np	np	np	np	np
6	un	un	$((\frac{35,000}{35,000}))$	((np)) 30,000	np	np	np	np	np
More than 6	un	un	((np)) 50,000 ²	$\frac{30,000}{((np))}$ 30,000 ³	np	np	np	np	np

1

Parking permitted on roof in addition to the parking level indicated.

2 Ν

Not more than 10 stories.

3

Not more than 8 stories.

C 203-1.1 Increase in Fire Area on Basis of Accessibility

e--The fire areas set forth in tables C 203-la, C 203-lb, C 203-lc and C 203-ld are based on a building having frontage on one street or legal open space at least 50 feet wide. If a ((fire area)) building faces or abuts such streets or spaces on two sides, ((it)) the fire area may be 50 per cent larger than the basic areas shown in these tables; on three sides, 75 per cent larger; on four sides, l00 per cent larger - providing ((that)) each such street or open space is served by fire hydrants, and the roadways are maintained clear, unobstructed, and accessible at all times for fire-fighting eqipment.

C 203-2 Existing Buildings

a-- No change.

b--Where an existing building of low or moderate hazard classification is altered or repaired as set forth in section C 105-2.1c, public space in such building shall not require a 9-foot height as set forth in section C 208-1, provided the public space is at least 8 feet high, and the alteration does not increase the building height, nor increase the floor area of any story or floor level.

- C 203-3 Open Parking Structures
 - a--At end of paragraph change as follows: ((C 402-4.9.)) C 402-4.10.
- C 204-3 Courts

a--Outer courts shall have a minimum width of 3 inches for each foot of height of the enclosing walls but not less than 5 feet measured at any point. The ((length)) <u>depth</u> of an outer court shall not exceed four times the width.

b--Inner courts shall have a minimum width of 4 inches for each foot of the height of the enclosing walls, but the least horizontal dimension of such courts shall ((not)) be not less than 10 feet. The ((length)) depth of an inner court shall ((not exceed)) be at least $l\frac{1}{2}$ times the width.

C 205 SPACE

e--Public kitchen, medical laboratory, treatment, and similar space shall ((be provided with a cove base.)) have walls and floors constructed of nonabsorbent materials which are easily cleanable.

f--Walking surfaces to which persons have access and which are elevated more than 18 inches above adjacent surfaces, including but not limited to bridges, balconies, and mezzanines shall be protected by parapet walls or guardrails at least 3 feet in height and meeting the requirements set forth in section C 304-9, except where such guardrails will interfere with the intended use, as for example, lecture platforms, loading platforms and similar construction.

C 205 (continued)

g--Where exposed beams project below the ceiling of habitable or occupied space, and such beams occupy an area of 5 per cent or more of the area of the ceiling, the height of the space shall be measured from finished floor to the underside of the beams; where the ratio is less than 5 per cent, the height shall be measured to the ceiling, and the height to the underside of such beams shall be not less than 7 feet.

C 206-2 Location ((Below Curb Level)) in Respect to Grade Level

Floor level of habitable space shall be not more than 4 feet below the average adjoining finished grade; except that below-grade space is permitted as habitable space provided the grade adjoining one exterior wall for the width of the habitable space is at or lower than the floor level of the habitable space, the depth is not more than four times the height, and such space conforms to all other requirements for habitable space. ((Where a building is situated on a sloping site and the conditions of grade are such that a portion of a story or stories below the highest curb level meets the light and ventilation requirements such portions may be occupied as habitable space, provided such space does not exceed in depth four times its clear height.)) Public space, occupied space and play or recreation rooms may be located below grade.

C 207 OCCUPIED SPACE

c--Occupied space in buildings less than 100 square feet in gross area shall have a minimum clear height of 6 feet-8 inches.

C 208-1 Height

Public space shall be at least as high as is required for ((habitable)) occupied space, except that public space in buildings of group C5.1, C5.2 and C5.3 occupancy shall have a minimum height of 9 feet, measured from finished floor to finished ceiling, and public space below and above a balcony or mezzanine shall have a minimum clear height of 7 feet 6 inches.

C 209-2 Location of Toilet Rooms

f--Bathroom, shower room, toilet room and similar space shall ((be provided with a cove base, and floors shall be made waterproof;)) <u>have</u> waterproof floors; such waterproofing shall extend 6 inches or more above the floor except at doors, so that the floor can be flushed or washed without leaking.

g--Toilet rooms and bathrooms shall provide privacy.

C 209-3 ((Glass)) <u>Glazing</u> in ((Exits,)) <u>Doors</u>, Shower Stalls, <u>Fixed</u> <u>Panels</u> and Bathtub Enclosures.

> a--((Glass)) <u>Glazing</u> in ((exit)) doors, shower doors and enclosures, and bathtub doors and enclosures shall be so sized, constructed, treated or combined with other materials as to minimize effectively the possibility of injury to persons in the event the ((glass)) glazing is cracked or broken.

C 209-3 (Continued)

b--((Glass)) <u>Glazing</u> in <u>doors</u>, fixed side panels adjoining ((exit)) doors and interior partitions; where such glazing extends to within 18 inches of floor level, shall conform to the requirements of paragraph a of this section, in lieu thereof in fixed panels, permanent construction shall be provided to guard against accidental human impact.

c--Shatter-resistant material may be substituted for glass intended to be used as described in this section. Where used in exits such material shall conform to the requirements of ((section C 403.)) sections C 403-1, C 403-4 and C 403-5.

d--Where generally accepted standards require ((glass)) glazing to be identified, each piece ((of glass)) shall be permanently and legibly marked in conformity with the requirements of the generally accepted standards.

C 210-5 Ventilation for Nonhabitable Space

TABLE C 210-5 (I-819) -- MINIMUM OPENABLE AREAS FOR NATURAL VENTILATION

Space	Minimum openable area
Kitchenettes, bathrooms, toilet or shower rooms connected to, or in, habitable space	No ch a nge.
Bathrooms, toilet or shower rooms used by public, or employees	No change.
((Medical Laboratory, diagnostic and treatment space))	((3 square feet)).
Cellars, basements ((, attics, and crawl spaces))	((l square foot per 500 square feet of floor area.)) Openings <u>of suffi-</u> <u>cient area</u> ((so located as)) to pro- vide adequate ((cross)) ventilation. ((For cellars, openings may be area- ways.))

((c--Crawl spaces shall be ventilated by openings so located and of such area as to minimize deterioration of the structural members from condensation or other causes, in conformity with generally accepted standards.))

C 211-1 Stairways and Stairs

((b--Stairs within habitable, occupied, or public space, or stairs or escalators which are accessory or ornamental and are not part of a required exit, are not required to be enclosed if located as set forth in section C 402-4.6. They shall be located so as not to obstruct or interfere with any required exit.))

C 211-1 (Continued)

((c--Stairways used as intercommunicating or access stairs between not more than two stories within areas of the same occupancy or use need not be enclosed. Other stairs shall be enclosed as set forth in section C 212-6 for stairs serving as exits.))

b--((d)) No change.

c--((e)) No change.

C 211-2 Elevators

a--Elevators shall be installed in enclosed hoistway shafts which conform to the fire-resistive requirements as set forth in table C 202-2. Not more than four elevators shall be installed in a ((multiple)) hoistway ((.)) designed for more than one elevator.

c--Elevators shall not be in a common enclosing shaft with a stairway. ((, and the path of travel from one flight of stairs to the next shall not pass directly in front of elevator doors.))

C 212-1 General Requirements

c--A required exit from habitable, occupied ((,)) or public space in a building shall not lead through a kitchen serving a public dining room, a garage, or a moderate or high hazard occupancy. ((or high hazard occupancy.))

d-- Exits shall be enclosed ((with fire-resistive construction)) as set forth in table C 202-2, except as set forth in section C 212-6 and section ((C 402-4.6.)) C 402-4.7.

f-((Exits)) Exit from any room may lead through other rooms of the same tenancy except exit shall not lead through bathrooms or kitchens. Each tenant's space shall be provided with means of egress to required exits.

h--Slide escapes shall not be permitted as exits. ((, except in buildings of group C3 and C4 occupancy not more than six stories in height. Slide escapes shall be noncombustible; shall be constructed in conformity with generally accepted standards; and shall not constitute more than 25 per cent of the required means of egress from any building. One slide escape shall be considered the equivalent in capacity of a stairway 44 inches wide.))

C 212-1 (Continued)

i--The minimum width of exits shall be 44 inches, except for doors as set forth in ((sections C 212-10, C 212-3.1u, C 212-4.1d and \overline{C} 212-4.1e, and except that such width may be 36 inches for exits from boiler rooms and similar service spaces, in stairways from mezzanines not used for sale or display purposes, and)) table C 212-5.1; for stairways as set forth in sections C 212-4.1d and C 212-4.1e; and except that such width may be 36 inches ((in)) for required stairways in buildings not more than two stories in height, and for stairways to mezzanines if any where the floor area of the ((second story)) upper level is not more than 2500 square feet. The width of an exit shall be measured at the narrowest point in the line of travel, except that handrails may project on each side a distance not exceeding 3-1/2 inches, and door jambs may project into the required width of doorways not more than 2 inches for each 22-inch unit of width. In determining the width of exits, the capacity of exit stairways and ramps is not required to be cumulative from story to story, except where two or more stairways or ramps join and continue as a single unit. Where exits from assembly space join with exits from other occupancies on the same story, their widths shall be cumulative. The capacity of exit tunnels and enclosed mezzanine passageways is not required to be cumulative at points of entry.

j--Exits shall be located so that they are readily accessible and visible, and arranged so that there are no ((as to avoid pockets or)) dead ends ((.)), except that dead ends extending not more than 50 feet are permitted in group Cl, C2, C3.1, C3.2, C4.1 and C4.2 occupancy, and not more than 20 feet in group C5, C6.1 and C6.2 occupancy. ((In no case shall pockets or dead ends extend more than 50 feet beyond an exit stairway.)) Exits shall not be concealed nor the direction to exits obscured by mirrors, draperies, paneling or other objects, furnishings, or finish.

k--Exits and ways of departure shall be maintained so as to provide free and unobstructed egress from all parts of the building. No locks or fastenings to prevent free escape from the inside of any building shall be installed, except that in buildings of group C6.3 occupancy, locks or fastenings on exit doors may be installed provided that supervisory personnel is continually on duty, and that effective provisions are made to remove occupants in case of emergency.

n--High or moderate capacity heater rooms ((Spaces housing heat producing equipment capable of operating at more than 15 psi or having an individual or combined rated gross capacity of 250,000 Btu per hour or more, incinerators)), refuse rooms or rooms having incinerators, refrigerating machinery ((other than that permitted by section C 508-1.2)) as set forth in section C 508-1.6d, ((and)) oil-filled transformers or equipment producing or using hazardous gas or vapor, shall not ((be located directly under an exit or lobby, and any opening between such spaces and a required exit shall be through a)) have an opening between such space and an exit, lobby, or occupied space not accessory thereto, unless such opening is through an intervening vestibule ((of 2-hour fire-resistive construction with opening protectives having a fire-resistance rating of at least 1-1/2 hours.)) having a fire-resistance rating as set forth for the enclosure of such equipment. When serving a high capacity heater room such vestibule shall be ventilated to the outer air. Where such rooms are located above or below an exit, lobby or occupied space, the horizontal separation shall be of a masonry construction having a fire-resistance rating of not less than 2 hours.

C 212-1 (Continued)

o--((Spaces more than 300 square feet in area containing equipment described in paragraph n of this section shall have two exits, one of which may be a spiral stair at least 22 inches wide or fixed ladder of non-combustible construction directly to the exterior.)) <u>Rooms and elevated</u> spaces more than 300 square feet in area containing equipment described in paragraph n of this section shall have two exits, except that approved fixed noncombustible construction providing means for reaching grade may be substituted for one exit. Where such rooms are located on a roof, there shall be at least one door to roof and another approved means of access to roof that is remote from such door. Means for reaching grade from roof shall consist of at least one stairway or, where such stairway is not required, shall consist of approved fixed noncombustible construction.

p--Elevated spaces for equipment or storage with an area of more than 100 square feet and less than 300 square feet, which are not required to be enclosed shall have a stair at least 22 inches wide, a fixed ladder of noncombustible construction at least 18 inches wide, or a spiral stair at least 22 inches wide.

C 212-2 Passageways, Ramps, Tunnels, and Horizontal Exits

a--Passageways, corridors, ramps, tunnels, and vestibules shall have a minimum floor-to-ceiling height of 7 feet 6 inches, and a minimum width of 44 inches, except as required by table C 212-2. They shall be designed to keep their length to a minimum. Smoke stops shall be provided at intervals not exceeding 150 feet in group C3.3, C4.3, C6.2 and C6.3 occupancies, and 300 feet in other occupancies. Smoke stops in buildings of low and moderate occupancy, may be maintained in an open position provided they are equipped with means for both manual and automatic release. For automatic release, smoke detectors shall be provided on both sides of the smoke stop door, and release shall be actuated as set forth in section C 511-9a.

b--Waiting space is permitted to be open to a corridor where a guardrail or other barrier is provided between the waiting space and corridor, and the waiting space is sprinklered, except that in lieu of sprinklers, the following shall be permitted:

Waiting space shall not exceed 100 square feet in area. Construction of space shall conform to the requirements for corridors.

<u>c--((b))</u> No change.

- \underline{a} --((c)) No change.
- $e^{-((d))}$ No change.

TABLE C 212-2. -- MINIMUM WIDTH OF PASSAGEWAYS, AISLES, CORRIDORS, AND TUNNELS

ويجرز معادة بمركبة والمترجة المترجعينية ومراقا ومراقع			
Occupancy	Component	Location	Minimum Width in inches

Footnote 1 -- <u>A corridor shall be considered a main corridor where an</u> assembly space, or more than six classrooms open into such corridor. If lockers are placed in the corridors, this dimension shall be measured between the doors of such lockers when standing open.

 $\underline{\mathbf{f}}$ --((e)) No change.

g--((f)) Horizontal exits which serve as a required means of exit ((between areas of the same tenancy in a story)) shall have a continuously available path of exit travel leading from each side of the horizontal exit to an enclosed stairway or other required exit leading to legal open spaces outside the building. The floor area on either side of a horizontal exit shall be sufficient to hold the occupants of both floor areas, allowing not less than 3 square feet of floor area per person. Exit openings serving areas on both sides of a wall ((in walls)) shall be protected by opening protectives ((.)), and shall consist of ((If swinging doors are used, there shall be adjacent openings having)) doors ((opening)) swinging in opposite directions with a sign on each side of the wall indicating which door is the exit from that side ((.)), except that only one such door is required where fire area on each side is occupied by not more than 50 persons, as determined by table C 212-8a. Bridges and open-air or enclosed balconies that form a part of the horizontal exit shall be constructed of noncombustible material, and floors shall be solid and unpierced. ((The floor level of unenclosed balconies and bridges shall be not less than 4 inches nor more than 7-3/4 inches below the building floor level.)) Access to bridges and unenclosed balconies shall be through a landing as set forth in section C 212-4.3b.

((g--When horizontal exits are provided on stories located sixteen or more stories above grade, each required stairway shall be supplemented by at least one passenger elevator.))

((i--Open sides of bridges, balconies, or roof extensions used as exits shall be protected by parapet walls or railings at least 3 feet in height and meeting the requirements set forth in section C 304-9b.))

C 212-3.1 Theaters

c--Steps shall ((not be placed in any main floor aisle except at the rear of the main floor in stadium-type auditoriums. The maximum slope in aisles on the main floor shall not exceed 1 in 6. In mezzanines, balconies, and other open tiers above the main floor, steps shall be placed in aisles to overcome differences in level when the slope)) <u>be provided</u> in longitudinal aisles only when the slope of such aisles exceeds 1 in 10. Steps shall be the full width of the aisles, shall be illuminated, and shall conform to the requirements for interior stairways in regard to treads and risers ((.)) as set forth in table C 212-4.1. Where, because of the slope, level surfaces other than treads are required, such surfaces shall be not less than 24 inches in width.

TABLE C	212-3.1 MINIMUM DIMENSION REQUIREMENTS]	FOR
	SEATS, BENCHES, AND AISLES	

Component	In theaters, in inches	In outdoor assemblies, in inches
No change.	No change.	((27)) <u>28</u> ((8)) <u>10</u> No change.

d--Longitudinal aisles shall be increased in width toward the exit at the rate of 1/4 inch for each foot of length of such aisle from its beginning to an exit door or cross aisle, or between cross aisles, except that where an exit is provided at each end the aisle ((width)) shall be ((at least the average required width throughout.)) of uniform width. Such width shall be not less than the average of the smallest and largest widths required for an aisle with an exit at one end. No aisle may be diminished in width at any point of travel toward an exit. ((Handrails shall be provided on the wall side of balcony wall aisles.))

f--Facias of boxes, balconies, and tiers shall have railings not less than 26 inches high above the floor. Railings at the ends of aisles extending to the facia shall be at least 30 inches high for the width of the aisles, or 36 inches high if at foot of steps, except that, if the aisle is level for a distance of 2 feet from the bottom step to the facia, the railing shall be at least 32 inches high. Cross aisles, except where the backs of seats on the front of the aisle project 24 inches or more above the floor of the aisle, shall be provided with railings at least 26 inches high. Handrails shall be provided on the Railings shall be constructed in

C 212-3.1 (continued)

h--((In addition to the required exits, each mezzanine, balcony, or other open tier above the main floor, with a capacity in excess of seven hundred and fifty persons, shall have required supplementary exits in accordance with table C 212-8c. Supplementary exits shall be in accordance with the requirements for required exits.)) The number of exits required in mezzenines, balconies, or other open tiers above the main floor, shall be as set forth in table C 212-8c. Cross aisles shall ((be provided with)) lead to exits at each end. ((Required supplementary exits shall be located at the end of the cross aisle. Exits)) Such exits shall be located not more than one fourth the length of the cross aisle from the end of such cross aisle and shall be at least 44 inches in width. Additional exits, at least 44 inches wide, shall also be provided so that the distance between exits ((from)) on a ((cross)) side aisle does not exceed 75 feet. Required exits shall lead directly to a foyer or hallway communicating with ((a)) an exit stairway. No step shall be permitted in any cross aisle except that one step leading to an aisle may project into the cross aisle.

((i--Cross aisles on the main floor shall connect either two longitudinal aisles or one longitudinal aisle and one exit door, but are not required to extend through a side block of seats where neither a side aisle nor an exit door is required or provided. Where there are less than twenty-seven rows or less than four blocks of seats, a cross aisle shall extend to each side exit not served by a side aisle, but such cross aisle is not required to extend through the central block of seats when a crossover is provided in front of the first row of the central block of seats. This crossover shall meet all the requirements of a cross aisle, except that where there are less than forty rows of seats in the central block, the width may be 36 inches. Where there are twenty-seven or more rows and four or more blocks of seats, cross aisles shall be provided dividing the number of rows approximately equally and so that no block of seats shall have more than twenty-two rows.))

<u>i--Where there are twenty-seven or more rows and four or more blocks of</u> <u>seats on the main floor, cross aisles shall be provided dividing the num-</u> <u>ber of rows approximately equally and so that no block of seats has more</u> <u>than twenty-two rows. Such cross aisles shall connect either two longi-</u> <u>tudinal aisles or one longitudinal aisle and one exit door, but are not</u> <u>required to extend through a side block of seats where neither a side</u> <u>aisle nor an exit door is required or provided. A cross aisle shall ex-</u> <u>tend to each side exit not served by a side aisle, but such cross aisle is</u> <u>not required to extend through a central block of seats when a crossover</u> <u>is provided in front of the first row of the central block of seats. Such</u> <u>crossover shall meet all the requirements of a cross aisle, except that</u> <u>where there are less than forty rows of seats in the central block, the</u> <u>width may be 36 inches.</u>

r--((Exit doorways shall have a clear width of at least 5 feet.)) Where doors are hung on top and bottom pivots, they shall not, when opened, project more than 6 inches into the required clear width of the exit.

((u--Motion picture projection booths shall be provided with at least two exits, each at least 24 inches wide, remote from each other.))

TABLE C 212-3.2.--NUMBER AND WIDTH OF EXITS FORLECTURE HALLS IN BUILDINGS OF GROUP C5.5 OCCUPANCY

(No change in table)

C 212-4.1 General Requirements

((a--At least one of the required stairways shall continue to the roof or setback roof in buildings three or more stories high, except when the slope of the roof exceeds 15 degrees. Required stairways which do not continue to the roof shall be connected at the top story by public passage-ways, hallways, or corridors. Access by scuttle and ladder shall be provided to a roof which is not accessible by a stairway.))

a--At least one stairway shall continue to the roof in buildings three or more stories in height and having not more than 3 stairways, except where the slope of the roof exceeds 15 degrees. In such buildings having more than 3 stairways, at least two stairways shall continue to the roof. Stairways which do not continue to the roof shall be connected at the top story by corridors to the stairways which do continue to the roof or to each other.

b--Access to the roof by scuttle and ladder shall be provided for a building two stories in height, where the roof is not accessible by a stairway, and where the slope of the roof is 15 degrees or less.

((b)) <u>c</u>--No change.

((c)) <u>d</u>--Stairways which serve as a required exit from any story shall be so arranged, and of such size, construction, and materials that they will provide safe ascent or descent. They shall terminate at street level and be connected to a street, or other legal open space, and they shall conform to all requirements of this section and table C 212-4.1 ((.)) <u>, except that minimum headroom shall be 6 feet 6 inches for exit stairs of open parking structures and group C7 occupancy, where employees only are permitted above the grade-level story. In buildings three or more stories in height, such stairways shall be enclosed to provide continuous passage from the highest landing to a landing at grade level without leaving the stairway enclosure.</u>

((d)) e-- No change.

 $((e)) \underline{f}$ -- No change.

 $((f)) \underline{g}$ -- No change.

C 212-4.1 (Continued)

((g)) <u>h</u>-A unit of width for stairways shall be 22 inches. Credit for fractions of units shall not be allowed except that a credit of one-half unit shall be allowed for 12 inches of clear width added to one or more 22-inch units of width. The capacity of stairways shall be in accordance with table C 212-8b, except that where the story height exceeds 10 feet, the tabulated number of persons per 22-inch unit may be increased by one for each 16 inches of height in excess of 10 feet, plus one person additional for each 5 square feet of unobstructed floor space on the landings within the stair enclosure. The depth of landings and platforms shall be equal to the width of the stairs. The stairway capacity may be increased by 100 per cent and the door capacity by 50 per cent where the entire building is equipped with a sprinkler system ((.)) that is not otherwise required. ((If more than six 22-inch units are required, the exit shall be arranged into two or more stairways so that no)) <u>No exit</u> stairway shall exceed ((exceeds)) 132 inches in width.

((h)) i - No change.

((i)) <u>j</u> - Stairs or steps shall have not less than three risers ((and shall have a guardrail on any open side,)) except as provided in ((sections C 212-2f, C 212-4.3b and)) section C 212-5.1h. Such stairs or steps shall have a guardrail on the open side, or a screened enclosure as set forth in section C 212-4.3b.

- ((j)) k-- No change.
- ((k)) <u>1</u>-- No change.
- ((1)) m-- No change.
- ((m)) n-- No change.
- ((n)) o-- No change.

TABLE C 212-4.1.

---DIMENSION REQUIREMENTS FOR EXIT STAIRS, HANDRAILS, AND GUARDRAILS

Component		Minimum ¹	Maximum			
	Height	Length	Width	Height	Length	Width
Vertical rise of any run of stairs: Group C5 cccupancy Other than group C5 Headroom over landing floors and tread nosing	7 ft			8 ft ⁴ 12 ft		
Stairway	1 10		44 in			132 in
Landing: Terminal Intermediate Tread <u>exclusive of nosing</u> ² ((In schools, including		50 in ³ 44 in. <u>44 in</u>	44 in 44 in <u>9</u> 늘 in		<u>132 in</u>	
nosing))		((44 in))	$((10\frac{1}{2})$ in))	((132 in))	
<pre>((On other than schools, exclusive of nosing)) Riser² ((:)) ((In schools)) ((In other than schools)). Handrail ;</pre>		((44 in)) <u>44 in</u> ((44 in)) ((44 in))	((9 ¹ / ₂ in)) $\frac{7 \ 3/4 \ in}{((6\frac{1}{2} \ in))}$ ((7 3/4 in)	((132 in)) <u>132 in</u>)((132 in)))((132 in))	
Top above landing floor((:) ((in schools)) ((in other than schools)) Top above tread nos-	((29 in))			((<u>36 in</u> ((<u>33 in</u>) ((<u>36 in</u>)	}	
<pre>ing((:)) ((in schools)) ((in other than schools)). Projection from finished</pre>	<u>30 in</u> ((26 in)) ((30 in))			((<u>36 in</u>) ((36 in)	}	
wall Clearance to finished wall Guardrail: Top above landing			1 <u>1</u> 2			3 1 in
floor ((:)) ((in schools)) ((in other than schools)) Top above tread nos-	(<u>33 in</u> ((45 in)) ((33 in))					
ing ((:)) ((in schools)) ((in other than schools))	<u>30 in</u> ((42 in)) ((30 in))					

¹ For exceptions, see section C 212-1i.

² The product obtained by multiplying height of riser by width of tread, expressed in inches, shall be not less than 70 nor more than $77\frac{1}{2}$ ((except that in schools such product shall be not less than 65.)).

```
<sup>3</sup> 42 inches in 36-inch wide stairways.
```

- 4
 - $12\frac{1}{2}$ feet in exterior stairways.

C 212-4.3 Exterior Stairways

b--Access to exterior stairways from any floor area shall be through exit doors at floor level, and the platform on which the door opens shall be a not less than 4 inches nor more than 7-3/4 inches below the floor level ((.)) or the door shall open on a landing having the same level as the floor of that story, where means are provided to prevent accumulation of snow and ice on the landing. Perforations or openings not exceeding 1/2 inch in lesser dimension, are permitted in treads, landings and platforms. In buildings three or more stories high, open ((Open)) sides of exterior stairways shall be protected with substantially constructed noncombustible screened enclosure at least 48 inches high, except ((as set forth in paragraph c of this section.)) that in buildings of group C5.5 occupancy such screened enclosures shall be at least 60 inches high. Adjacent wall openings shall be protected in conformity with section ((C 401-4.1e.)) C 401-4.1f.

((c--Open sides of exterior stairways in buildings of group C5.5 occupancy shall be guarded by substantially constructed nonccmbustible screened enclosures at least 60 inches high.))

- $((d)) \underline{c}$ -- No change.
- $((e)) \underline{d}$ -- No change.

e--Exterior stairways and landings on buildings more than 2 stories in height of group C5 occupancy shall be protected with suitable overhead noncombustible construction.

f--Construction shall be in conformity with generally accepted standards.

- C 212-4.4 Smokeproof Towers
 - a--At end of paragraph change as follows: ((C 402-4.6.)) C 402-4.7.
- C 212-4.5 Escalators
 - a--At end of paragraph change as follows: ((C 402-4.6.)) C 402-4.7.

C 212-5.1 General Requirements

a--Doors in required exits shall swing outward in the direction of exit travel, except that doors from individual rooms may swing inward provided that such rooms are not occupied by more than fifty persons, do not contain a high hazard occupancy, are not more than 1000 square feet in area, and wherein the distance to a door does not exceed 50 feet; and as set forth in paragraph b of this section. Vertically operated doors and shutters shall not be permitted in an exit. Doors on stairways shall not have openings therein. Doors on a ((public passageway, hallway,)) corridor ((or stairway)) shall not have openings therein, ((except that louvers shall be permitted in doors of toilet rooms and sink closets;)) nor shall transoms above such doors be permitted ((.)) except that louvers and transoms are permitted in doors of toilet rooms and sink closets and except as set forth in paragraph b of this section.

c--Exit doors from any floor area or occupied space shall be readily openable ((from any floor area or occupied space,)) shall be arranged so that they can not be locked against exit from such area or space, and shall be equipped with self-closing and other necessary devices which will maintain them in a normally closed position, except that ((they may be maintained in an open position provided that they are fitted with fusible link holds and friction devices that will permit the doors to be readily released both manually and automatically.)) <u>self-closing opening protec-</u> tives, other than those to stairways, may be maintained in an open position provided they are equipped with means for both manual and automatic release. For automatic release, a smoke detector shall be provided near each such opening protective on the occupied side, and release shall be actuated as set forth in section C 511-9a.

d--The exit doors to the exterior of buildings of group C3.3, C4.3, and C5 occupancy, and exit doors from assembly spaces, ((C5.1, C5.2, C5.3) and C5.5 occupancy, and other assembly spaces having a capacity of more than ninety-nine persons,)) shall be equipped with approved fire exit bolts which release when pressure is applied to the releasing devices. Such releasing devices shall be bars or panels extending not less than two thirds the width of the door, ((and)) shall be placed ((near the latch side)) not less than 30 inches nor more than 44 inches above the floor ((.)), and shall clearly indicate the latch side or push side of the door. Fire exit bolts are not required on the main entrance doors or similar doors ((that are normally)) without spring latches and which are unlocked when the space is occupied \cdot ((, nor in buildings of group C5.4 occupancy.))

C212-5.1 (cont'd.)

e--No ((single)) swing-type exit door ((in a doorway of an exitway)) shall be more than 44 inches ((nor less than 28 inches)) in width nor less than that set forth in table C 212-5.1. ((, except that each leaf of a pair of doors shall be not less than 24 inches in width and doors in supplementary exits from assembly space shall be not more than 60 inches in width. The width of any exit doorway shall be considered as the nominal width of its door.)) Each unit of width for doorways shall be 22 inches, and credit for fractions of units shall not be allowed except that a credit of one-half unit shall be allowed for 12 inches of clear width added to one or more 22-inch units in an opening. A 40-inch door shall be accepted as two units. (Where a doorway is divided into two or more separate door openings, each such opening shall be measured separately in computing the number of units of exit width. Where only one exit is provided, the minimum width of the exit doorway shall be 36 inches.))

f--The total width of exit doorways or openings shall be not less than required to provide for the total number of persons served by such exit doorways or openings, as determined in accordance with section C 212-8. The total width of exit doorways ((,)) or openings, through which an exit stairway discharges, shall be at least equal to the width of that stairway. ((Where two or more exit stairways converge, the exit doorways or openings through which the combined stairways discharge shall be at least equal in total width to three-fourths the combined width of such exit stairways.))

h--((Every grade-level)) <u>A grade-story main</u> exit door to the exterior shall open on a level grade, or <u>a</u> landing not less in depth than the swing of the door, extending at least 12 inches beyond each side of the door jamb. Such grade or landing shall be not less than 4 inches nor more than 7-3/4 inches below the level of the door sill. <u>A landing</u> shall be provided at other than a main entrance, and shall be at least one riser above the adjoining grade.

	Location	Minimum widt of door, in inches
From an	o cc upied space having two exits	28
From an	occupied space where one exit is permitted	36 ²
From a c	orridor to an enclosed stairway	40 ²
From a s	tairway to a door discharging to grade level or exterior	44 ²
From an	assembly space, capacity less than 300 persons	442
From an	assembly space requiring double doors, each leaf	30
	o cc upied spa c e having an area not exceeding 150 square ended for no more than two occupants	28
From one	e fire area through an opening in a fire wall	40
wh	e main exit of a building to the exterior here one door is provided here double doors are provided, each leaf	44 36
From the	e emergency exit from a boiler room	22
From a b	ooiler room having one exit	36
From spa	ace where there is bed traffic	44
	ojection room, work rooms intended for one person, a not exceeding 100 square feet	24
Doors re	equired for physically handicapped (clear opening)	32
Through	an overhead garage door (wicket type)	28

D

Е

door in a doorway.

 2 Minimum door width of 30 inches is permitted where there is more than one

C 212-6 Exit Enclosures

a--Exits shall be enclosed ((with fire-resistive construction)) as set forth in table C 202-2, except as set forth in paragraph b of this section and in section ((C 402-4.6)) <u>C 402-4.7</u>. <u>Cor-</u> <u>ridors and</u> ((interior)) <u>required interior</u> stairways in buildings ((three stories or mor)) <u>more than two stories</u> in height shall be ((separately enclosed.)) <u>separated from each other</u>. Not more than one opening to such stairways shall be provided on each story, and the opening shall be from a corridor or from a vesti-<u>bule conforming to the requirements for exits</u>. In a two-story <u>building where two required interior stairs are open to and</u> <u>connected by an exit corridor</u>, such stairs shall be separated from each other by at least one opening protective at each level.

C 212-6 b--Stairways without enclosures are permitted from ((a)) an open mezzanine, balcony or other open tier above the main floor. ((shall be permitted without enclosure. Stairways from the second story in buildings not more than two stories in height are not required to be separately enclosed, provided they form part of an enclosed exit. Exterior stairways shall conform to the requirements set forth in section C 212-4.3. Stairways from buildings or structures without enclosing walls are not required to be enclosed provided such buildings or structures conform to the requirements of paragraphs e and g of section C 401-3.2.))

> c--Stairways from buildings or structures without enclosing walls are not required to be enclosed provided such buildings or structures conform to the requirements of paragraphs d and f of section C 401-3.2.

d--((c-))No openings shall be permitted in stairway enclosures except the required doors for entrance or exit ((,)) as set forth in section C 212-6a, windows in exterior walls, and window or skylight at roof.

- ((d)) <u>e</u>--At end of paragraph, change as follows: ((C 402-4.6.)) <u>C 402-4.7.</u>
- ((e)) <u>f</u>--At end of first paragraph, change as follows: ((C 402-4.6.)) <u>C 402-4.7.</u>
- ((f)) g--No change.
- C 212-7 d--Make the following change: ((exist)) <u>exits</u>

TABLE C212-7 -- MAXIMUM TRAVEL DISTANCE TO EXITS

First or grade story

Above- and belowgrade stories<u>3</u> Unsprinklered Sprinklered

No change

No Change

1 No Change.

2 No Change.

Occupancy

³<u>The maximum travel distance on a floor located more than 15 feet below</u> <u>finished grade shall be 75 feet in unsprinklered buildings and 100 feet</u> in sprinklered buildings.

C 212-8 Determination of Required Widths, Number, and Types of Exit

a--Change last paragraph as follows:
Fourth, establish the types of exits as set forth in paragraphs
b, c, d, and e ((, and f)) of this section.

C 212-8 Determination of Required Widths, Number, and Types of Exit

b--The ((minimum)) number of required exits shall consist of enclosed stairways or smokeproof towers from above- and below-grade ((stories)) <u>levels</u>, with the following alternatives permitted in lieu of one stairway or tower where two or more ((enclosed stairways)) are required: ((a smokeproof tower;)) an enclosed ramp; a horizontal exit; an exterior stairway in buildings not exceeding five stories in height, except as set forth in paragraph c of this section. an enclosed escalator in buildings not exceeding five stories in height; ((a slide escape as set forth in section C 212-lh;)) a spiral stair as set forth in section C212-4.1 ((d))e; an open stairway as set forth in section C 212-6.

TABLE C 212-8b.---CAPACITY OF STAIRWAYS AND DCORS TO STAIRWAYS

Occupancy	Stairways	Doors ³
Cl	. 60	90
C3.1	. 60	90
C4.1	. 60	90
C2	50	((75)) <u>80</u>
C3.2	• 50	((75)) <u>80</u>
C4.2	• 50	((75)) <u>80</u>
¢3.3	• 30	50
C4.3	. 30	50
C5	. 60 ²	90 ²
c6.1	• 50	((75)) <u>80</u>
c6.2	. 50	((75)) <u>80</u>
c6.3	• 30	50

In number of persons per 22-inch unit of exit width

¹For increased capacity when story height exceeds 10 feet, or when the building is sprinklered, see section C 212-4.1 ((g)) <u>h</u>.

²100 for tiers or floor areas not more than one story above the grade story.

³Where the building is sprinklered, capacity shall be increased 50 per cent.

TABLE C 212-8c.

---MINIMUM NUMBER OF EXITS IN BUILDINGS OF GROUP C5 CCCUPANCY

		Minimum	number
Capacity of floor	Main floor	or	zzanine, balcony other open tier a ove the main floor
or tier, in persons	Required exits	Required exits	((Required supplementary exits))
Less than ((76)) <u>51</u>	l	2 ((1))	((0))
<u>51</u> ((76)) to 300	2	2 ((1))	((0))
301 to 600	3	((2)) <u>3</u>	((0))
601 to 750	4	((2)) <u>4</u>	((0))
751 to 1200	4	((2)) <u>4</u>	((2))
1201 to 1500	5	((2)) <u>5</u>	((2))
1501 to 1800	5	((2)) <u>6</u>	((4))
For each additional 600 in excess of 1800	l	((-)) <u>1</u>	((1))

((¹ If capacity does not exceed one hundred and fifty persons, one exit may be be a supplementary exit.))

¹ See section C 212-3.2f.

((TABLE C 212-8d. (VIII-821)---LCCATIONS WHERE ONE EXIT IS PERMITTED.))

(Delete entire Table C 212-8d and substitute the following:)

A TABLE C 212-8d. --LOCATIONS WHERE ONE EXIT IS PERMITTED,

L Applicable only to spaces that open to a corridor or directly to the exterior at grade.

L		Description of location and		e of travel to an does not exceed
	Occupancy	floor area in square feet ¹	Sprinklered	Unsprinklered
	c1 ³ c3.1 ³	Below grade, less than 2000	100	75
U	c4.13	Grade and above grade, less than 2500	100	100
N		Garages as provided in section C 213-1d	100	100
D	c2 ³ c3.2 ³ c4.2 ³	Below grade, less than 1000, and no person regularly employed	75	50
Ε	c6.1 ³	Grade and above grade, less than 2000	100	75
R	C3.3 C4.3	Below grade, less than 500, no person regularly employed	50	50
\mathbf{L}		Grade and above grade, less than 1500	50	50
I	C5 ²	Motion picture projection booths using nonflammable film		
N	C6.2 C6.3	Utility rooms below grade less than 500, no person regularly employed		
Ε		Grade, less than 1500	50	50

¹ See also section C 212-10.

² See section C 212-3.2f.

D

- ³ A mezzanine not more than 2000 square feet in area and no dimension greater than 50 feet is permitted to have one exit.
- ⁴ One exit is permitted from a story of a building of low hazard occupancy not more than 3 stories in height, and from a story of a building of moderate hazard occupancy not more than 2 stories in height; provided no upper story is more than 2000 square feet in area; and there is at least one opening for emergency use in each tenancy. Such openings shall be openable from the inside without the use of tools, shall have a minimum area of 4 square feet, with a minimum dimension of 18 inches.
- ⁵ One exit is permitted from a cellar or basement in a building of low or moderate hazard occupancy, provided no person is regularly employed therein, and the area does not exceed 1000 square feet.

C 212-8 (continued)

c--In buildings of group C5.5 and C6.1 occupancy ((, not)) exceeding three stories in height. ((where two or more enclosed stairways are required, an exterior stairway shall be permitted in lieu of one stairway.)) and in buildings of group C6.2 and C6.3 occupancy of any height, an exterior stairway shall not be permitted. ((In buildings of group C6.2 and C6.3 occupancy an exterior stairway shall not be permitted in lieu of a required enclosed stairway.))

d--In buildings of group C5.1, C5.2 and C5.3 occupancy, not exceeding five stories in height where two or more enclosed stairways are required, exterior stairways shall be permitted for not more than one half the total required number of stairways.

((d--Areas occupied by bedridden patients which exceed 3000 square feet, in buildings of type 2b, 3 or 4 construction, shall be provided with a horizontal exit, or a ramp, or other required exit directly to grade level at exterior. There shall be no steps in such exits.))

e--In a two-story building of group Cl, C2, C3.1, C5.1, C5.4 and C5.5 occupancy, an exterior balcony having at least two exterior stairways is permitted as the only exit under the following conditions:

- 1) Exterior balcony shall have no dead ends.
- 2) Balcony and stairway shall be constructed of heavy timber or noncombustible materials.
- 3) Exits from interior spaces shall open directly onto such balcony.
- 4) Width of such balcony shall be at least 5 feet.

((e--Horizontal exits or exterior stairways shall not be in excess of one half the total required number of exits from any one fire area.))

((f--Supplementary exits may be enclosed stairways, exterior stairways, or any combination thereof.))

C 213-1 General Requirements

a--Motor vehicles may be parked or stored in the open upon the premises, but no vehicle may be parked or stored nearer than <u>5 feet from an</u> <u>opening in a noncombustible wall which is equipped with an opening</u> <u>protective, or nearer than 10 feet ((to any)) from a combustible wall</u> ((of a building)) or ((any unprotected)) from an opening in a noncombustible wall ((.)) which is not equipped with an opening protective.

b--The storage or handling of gasoline or other flammable liquids, and the refinishing of motor vehicles, shall be in conformity with generally accepted standards. ((The area used for such services shall be separated by construction having a fire-resistance rating in conformity with section C 402-4.9.))

((d--Each fire area in excess of 5000 square feet of every story of a garage shall be provided with at least two exits. Entrances for vehicles may serve as required exits where the doors conform to the requirements of section C 212-5.1.))

d--An above-grade garage space or open parking structure with a floor area of more than 5000 square feet shall be provided with at least two exits; where located below-grade and the floor area exceeds 2000 square feet, at least two exits are required. Pass-through doors shall conform to section C 212-5.1 with bottom of doors not more than 12 inches above floor level.

e--Where two or more exits are required, an automobile ramp connecting not more than three parking levels is permitted as one of the exits.

f--((e)) No change.

 \underline{g} --((f)) No change.

<u>h</u>--((g)) Central heating equipment for a garage shall be separated as required in section ((C 402-4.8,)) <u>C 402-4.9</u>, and all heating equipment installed in such garage shall comply with the requirements of section ((C 504-2.15.)) <u>C 504-2.14</u>.

C 213-1 (continued)

((h)) <u>i--Above-grade</u> ((Garage areas)) garages in excess of 5000 square feet in area and below-grade garages in excess of 1000 square feet in area shall be provided with mechanical ventilation in conformity with section C 508-3.

((i)) <u>j</u>--Garages shall be provided with fire protection equipment in conformity with section ((C 405)) <u>c 406</u>.

- ((j)) <u>k</u>--No change.
- C 213-2 Garages in, or Attached to, Buildings (822.2)

b--Access between a building of any occupancy or use and a garage shall be as set forth in section $((C \ 402-4.9.)) \ C \ 402-4.10.$

C 215-1 General Requirements

b--Buildings set forth in table C 215-1 shall be equipped with facilities to provide access and a safe environment for the physically handicapped. Cumulative gross floor area shall ((include)) be the sum of the gross ((floor area)) areas of all floor levels of one or more buildings of the same occupancy on the same premises.

1--In a building of mixed occupancy where the sum of the areas of each of the occupancies is more than that indicated in table C 215-1 for the largest single occupancy of the mixed occupancy, facilities for the physically handicapped shall be required in such largest occupancy, except as set forth in paragraph e of this section.

TABLE C 215-1-- BUILDINGS THAT REQUIRE FACILITIES FOR THE
PHYSICALLY HANDICAPPED

(No change)

Footnote 1 - (no change)
Footnote 2 - (no change)
Footnote 3 - ((Applicable to occupancies listed in column 1 where the
 cumulative gross floor area of such occupancies exceeds
 the average floor areas for those occupancies as set
 forth in column 2.)) See section C 215-11.

<u>C 216</u> ENCLOSED PASSAGEWAYS AND MALLS BETWEEN BUILDINGS

<u>C 216-1</u> <u>General Requirements for Enclosed Passageways</u>

Buildings connected by one or more passageways are considered to be a single structure, except that they shall be considered to be separate buildings under the following conditions:

- 1) Passageways are constructed of noncombustible construction not exceeding one story in height, and are used only for passage.
- 2) <u>Passageway does not exceed 10 feet in width and 10 feet in height.</u>
- 3) Entrance from a building to the passageway is through a self-closing 1[±]/₂ hour opening protective in an exterior wall having at least a 2-hour fire-resistance rating. Other openings in such exterior wall are protected in accordance with section C 401-4.1.
- 4) <u>Distance between exterior walls of the buildings connected</u> by such passageway is at least 20 feet.

C 216-2 General Requirements for Enclosed Malls

Structures connected by enclosed malls are not required to have fire separation between such structures and malls under the following conditions:

- 1) The structures are of low or moderate hazard occupancy.
- 2) The combined structure meets the requirements for accessibility on all sides, as set forth in section C203-1.1a.
- 3) <u>Structures more than one story in height are equipped with</u> an automatic sprinkler system, where required exits from structures are through a mall.
- 4) Malls shall be at least of the following types of construction:
 - a) Below-grade.....Type la
 - b) One story in height.....Type 2b
 - c) Two stories in height.....Type 2a
 - d) More than 2 stories in height.....Type 1b

C 216-2 (continued)

- 5) <u>Malls are provided with sprinkler system for moderate hazard</u> use in accordance with generally accepted standards.
- 6) <u>Tenant spaces requiring two or more exits have at least half</u> such exits opening directly to the exterior or to enclosed exit passageways.
- 7) <u>A tenant space required to have only one exit, may have such</u> exit opening into the mall, provided such tenant space does not have access to other levels of the building.
- 8) Vents from spaces in the buildings do not terminate in the mall.
- 9) The mall is provided with smoke vents, having an open-vent area of at least one per cent of the floor area of the mall. Such vents shall be permanently open or of the automatic type as set forth in section C 406-8a.
- 10) <u>Malls are at least 25 feet wide and do not contain combustible</u> material.
- 11) Standpipe system is provided in accordance with section C 511-5.
- 12) Exit doors from the mall have fire exit bolts, lead directly to the exterior, are spaced at intervals so that distance of travel does not exceed 200 feet, are of a width as set forth in table C 212-5.1, and have sufficient capacity for at least ½ the occupancy load of spaces that are connected to mall at main mall level. Fire exit bolts are not required for doors without latches and which are unlocked when the space is occupied.
- 13) Fire alarm system is provided so that there is an audible signal in all portions of the structure as per section C 511-2.1a and connected to the local fire department.
- 14) Emergency lighting conforms to table C 507.
- 15) <u>Non-swing doors between tenant spaces and enclosed mall are</u> locked in an open position when such space is occupied.
- 16) Fuel gas piping and equipment is not located in mall.
- 17) Exit from below grade is not through the grade-level mall.

GENERAL REQUIREMENTS

a--Buildings and parts thereof shall be capable of sustaining safely their own weight and the loads to which they may be subject $((\cdot))$, as set forth in this part of this Code.

d--Crawl spaces and unheated concealed spaces below roofs shall be ventilated by openings so located and of such area as to minimize deterioration of the structural members from condensation or other causes, in conformity with generally accepted standards.

<u>e</u> ((d))-Buildings ((built in soil which is water bearing at any season of the year)) shall be constructed so that ground and surface water will not penetrate into habitable spaces, basements and cellars. Surface adjoining buildings shall be arranged so as to divert surface water away from the building.

f--Materials, assemblies, connections, fastenings and structural members to which they are attached, shall be structurally stable, with allowances made for differences in the expansion and contraction coefficients of connected materials in conformity with generally accepted standards for the material involved.

C 303-2

Controlled Materials

((The safe working stresses of materials which have been identified and certified for quality and strength by a recognized authoritative inspection service, grading organization or testing laboratory, or are identified by manufacturer, producer, and mill test as meeting generally accepted standards, shall conform to the specifications and stresses for such materials in such standards.)) Where controlled materials are identified and certified for quality and strength by a recognized authoritative inspection service, grading organization, or testing laboratory acceptable to make such tests, such materials shall conform to the specifications and stresses for controlled materials as set forth in generally accepted standards. When a material is formed and cast in the field, tests prior to the construction and during the construction shall be made, and the composition and strength of the material shall be certified by any of the above appropriate agencies ((and)) or by the architect or engineer responsible for the design.

C 301

C 303-3 Ordinary Materials (832.3)

Materials which do not conform to the requirements for controlled materials shall be considered ordinary materials, and their quality and safe working stresses shall conform to the specifications and stresses for ordinary materials in generally accepted standards. When quality and safe working stresses are not so specified, they shall be determined by test in conformity with section ((C 305-1.)) C 305. When a material is formed and cast in the field, tests during the construction shall be made and its composition and strength certified by any of the appropriate agencies designated under section C 303-2, ((and)) or by the architect or engineer responsible for the design.

- C 304 DESIGN LOADS
- (833)
- C 304-1 General Requirements (833.1)

A building and all parts thereof shall be of sufficient strength to support the design loads and to resist the deformations caused by such loads to which they may be subjected, without exceeding the allowable stresses as described in section $((C \ 3C5-1.)) \ C \ 305$. Such loads shall include the dead load and the following imposed loads where applicable: live, snow, wind, soil pressure including surcharge, hydrostatic head, and impact loads.

_

TABLE C 304-2.2. ---UNIFCRMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS

Occupancy or use	Uniformly distributed loads, psf	Concen- trated loads in pounds
Cl Business Business machine equipment Office space: <u>(not including storage areas)</u> <u>Record storage</u>	. 100 501 . <u>120</u>	
C2 Mercantile		
(NO CHANGE)		
C3 Industrial		
(NO CHANGE)		
C4 Storage		
(NO CHANGE)		
C5 Assembly Colleges, schools (exclusive of dormitories Classroom Laboratories Lecture halls Fixed seats Movable seats	60	
C6 Institutional		
(NO CHANGE)		

TABLE C 304-3.

---SNOW LOADS¹

In pounds per square foot

Zone numbers		Roc	of slope	from b	c ri zcata	a1 ²	
on snow map	0 ⁰	20 ⁰	30 ⁰	40 ⁰	50 ⁰	60° or more	
((20 ⁴)) ((25 ⁴)) 30 35 40 45 50 60 70 ³ 80 ³ 90 ³		•••••	((11)) ((14)) 17 20 23 25 28 34		((2)) ((3)) 3 4 4 5 5 6	((0)) ((0)) 0 0 0 0 0 0	

1 For minimum imposed loads, see section C 304-10c.

- 2 For slopes between those tabulated, compute loads by straightline interpolation.
- 3 For snow zones 70, 80, and 90 on snow map, use same tabular values as for zone 60.
- ((4 For snow zones 20 and 25 on snow map, use same tubular values as for zone 30.))

SNOW MAP OF NEW YORK STATE 1/

1/ Change the figures 20 and 25 on the Snow Map to figure 30.

TABLE C 304-4a		WINI	D LOADS:	WALLS,	EAVES,	CORNICES,
	TOWERS,	MASTS	AND CHIM	NEYS		

In pounds per square foot

At height above g rad e in feet	Walls ¹ , <u>4</u>	Eaves and cornices ²	Towers, masts and chimneys <u>4</u>
501 to 600 ³	. 34	68	60
		66	58
401 to 500			
301 to 400	. 32	64	56
201 to 300	. 30	60	53
101 to 200		56	49
61 to 100		48	42
41 to 60	•	42	37
26 to 40		36	32
		30	26
$\underline{0}((16))$ to 25	•		20
$/\overline{0}$ to 15	. 12	24	2 <u>1</u> /

- 1 Exterior walls shall be capable of withstanding wind load on both the interior and exterior surfaces, acting non-simultaneously. ((Tabular values are for square or rectangular structures. For structures hexagonal or octagonal in plan, use projected area and multiply tabular values by 0.8; for structures round or elliptical in plan, use projected area and multiply values by 0.6. For tents, the wind pressure shall be 10 psf on the projected area.))
- 4 Tabular values are for square and rectangular structures. For structures hexagonal or octagonal in plan, use projected area and multiply tabular values by 0.8; for structures round or elliptical in plan, use projected area and multiply values by 0.6.
- C 304-10 Combined Loads

c--On roofs ((not used as promenades, the minimum imposed load shall be 20 psf perpendicular to the roof surface, where snow plus wind loads total less than 20 psf.)) where the slope is such that the snow load plus the wind load total less than 20 psf, the minimum imposed load shall be 20 psf perpendicular to the roof surface.

C 304-12 Loads Imposed During Construction or Demolition

((A11)) Loads imposed during construction or demolition on flooring, structural members, walls, bracing, scaffolding, sidewalk sheds or bridges, hoists and temporary supports of any kind incidental to the erection, alteration, or repair of any <u>structure shall not subject</u> the structure or elements thereof, to loads beyond the design <u>capacity</u>. ((building shall be of such strength as to suffer no structural damage when subject to the temporary loads and wind load imposed during construction.))

((C-305-1	General))
(((1834.1)))

- ((C 305-2)) ((Load Test on Completed Work))
 - ((a--Safe performance under load tests or other suitable tests, if required by the enforcement officer and made in conformity with generally accepted standards, shall be evidence of the acceptability of the construction.))
 - ((b--The assembly shall be capable of sustaining the dead load and two times the uniformly distributed imposed load, excluding impact, without structural failure for a minimum of 24 hours.))

C 306-1 General Requirements

(835.1)

Buildings and their structural components subject to this Code shall, when submitted to the tests set forth in this section, meet the performance criteria prescribed for each test. Failure to meet the test criteria shall be evidence of noncompliance with this Code.

TABLE C 401-3.2.

in feet

				le walls wit nce ratings		ble walls ombustible facings		
	Less than Less than 4 hours 2 hours Height At but at but at					giving p of	Combustible walls with combustible	
	in	least	least	least	Less than	At least	Less than	exterior
Hazard Classification	stories	4 hours	2 hours	3/4 hour	3/4 hour	3/4 hour	3/4 hour	facings
WITHIN FIRE LIMITS								
Low	l	0	о	<u>[0]5</u>	5	np	np	np
20,000	2	Ő	0 0	<u> </u>	10	np	np	np
	3 or more	0	0	Ś	10	np	np	np
Moderate	1	0		5	10	np	np	np
	2	0	5 <mark>5 5</mark> 5 5	10	15	np	np	np
	3 or more	0	5	10	np	np	np	np
High	ĩ	0	5	15	15	np	np	np
-	2	0	10	np	np	np	np	np
	3 or more	0	10	np	np	np	np	np
OUTSIDE THE FIRE LIMITS				-	_	. –		
Low	1	0	0	<u>[0]5</u>	5	5	10	15
	2	0	0	<u>7075</u>	5	5	15	20
	3 or more	Ō	0		10	np	np	np
Moderate	1	Ő	0	5	10	10	15	50
	2	0	0	5	10	10	20	50
	3 or more	0	0	10	np	np	np	np
High	1	0	5	15	20	30	50	100
-	2	0	10	20	30	np	np	np
	3 or more	0	10	np	np	np	np	np

1 Buildings of group C5 and C6 occupancies shall be considered as low hazard for determining distance separation.

C 401-3.2 Then Required

(845.3b) a---Distance separations set forth in table C 401-3.2 shall be required, except as provided in paragraphs ((e, f, g, h, i, and j)) <u>d, e, f, g, h, and i</u> of this section.

> ((c--Exterior walls or portions thereof located beyond the required distance separation shall be exempt from the requirements imposed by distance separations.))

- ((d)) <u>c</u> (No change)
- ((e)) <u>d</u> (No change)
- ((f)) <u>e</u> (No change)
- ((g)) f (No change)
- ((h)) g (No change)
- ((i)) <u>h</u> (No change)
- ((j)) i (No change)

C 401-3.3 Construction Limitations Within Fire Limits

((b--Where distance separations conform to the requirements of table C 401-3.2, nonbearing exterior walls, including panel and curtain walls, of noncombustible construction, shall not be required to have any fireresistance rating, provided a continuous vertical separation or spandrel at least 3 feet in height, with a fire-resistance rating of at least 1 hour, is constructed at the floor level of each story, except where such walls form a part of an exit required to be enclosed. Such separation or spandrel shall not be required on open parking structures, or on buildings not more than two stories in height.))

b--Nonbearing exterior walls of noncombustible construction shall not be required to have a fire-resistance rating where distance separations conform to the requirements of table C 401-3.2, and provided a continuous vertical separation or spandrel at least 3 feet in height, or a horizontal extension of at least 2 feet, with a fireresistance rating of at least 1 hour, is constructed at the floor level of each story. Such walls shall be required to have a fire-resistance rating where they form a part of an exit or other space required to be enclosed. A separation or spandrel shall not be required on open parking structures, or on buildings not more than two stories in height.

> ((d--Eaves, cornices and exterior trim may be constructed of combustible materials provided they do not encroach upon the minimum distance separations set forth in table C 401-3.2, or do not extend outward from the exterior wall more than 2 feet and are not less than 5 feet distant at any point from a lot line or similar appurtenance on another building; if they exceed these limitations, they shall be constructed of noncombustible materials.))

C 401-3.4 Construction Limitations Outside the Fire Limits

((b--Where distance separations conform to the requirements of table C 401-3.2, nonbearing exterior walls, including panel and curtain walls, of noncombustible construction, shall not be required to have any fire-resistance rating, provided a continuous vertical separation or spandrel at least 3 feet in height, with a fire-resistance rating of at least 1 hour, is constructed at the floor level of each story, except where such walls form a part of an exit required to be enclosed. Such separation or spandrel shall not be required on open parking structures, or on buildings not more than two stories in height.))

b--Nonbearing exterior walls of noncombustible construction shall not be required to have a fire-resistance rating where distance separations conform to the requirements of table C 401-3.2, and provided a continuous vertical separation or spandrel at least 3 feet in height, or a horizontal extension of at least 2 feet, with a fire-resistance rating of at least 1 hour, is constructed at the floor level of each story. Such walls shall be required to have a fire-resistance rating where they form a part of an exit or other space required to be enclosed. A separation or spandrel shall not be required on open parking structures, or on buildings not more than two stories in height.

((c--Eaves, cornices and exterior trim may be constructed of combustible materials provided they do not encroach upon the minimum distance separation for buildings with walls having combustible exterior facings as set forth in table C 401-3.2; if they exceed these limitations, they shall be constructed of noncombustible materials.))

((d)) <u>c</u> No change

C 401-4.1 General Requirements

<u>a--Windows in exterior walls of buildings may be glazed with plastic</u> <u>materials provided that on each story such glazing does not exceed 25 per</u> <u>cent of the area of the wall having the glazing, and each piece is not more</u> <u>than 4 feet in vertical dimension and 12 square feet in area, and is in con-</u> <u>formity with the provisions of this section, and section C 404.</u>

((a)) \underline{b} (No change)

((b)) <u>c</u>--Exterior wall openings in buildings for low, moderate and high hazard occupancies, less than 10, 20, and 30 feet, respectively, from an opening in a facing wall or from a building of type 5<u>b</u> construction, shall be equipped with opening protectives.

((c)) <u>d</u>--An exterior wall opening which is directly above another opening in the ((same wall)) <u>next lower story</u> shall be equipped with an opening protective, except ((when the vertical separation between the openings is at least 3 feet, or when the two openings are separated by horizontal fire-resistive construction extending outward at least 2 feet from the wall.)) where one of the following conditions prevail: C 401-4.1 (continued)

A 1 1

Underlined

- 1) Between openings there is at least 3 feet vertical separation or 2 feet horizontal extension, that has the required fire-resistance rating.
- 2) One of the openings contains air-conditioning equipment and there is at least 2 feet vertical separation or 2 feet horizontal extension, that has the required fire-resistance rating.

Such opening protectives are not required for open parking structures, or for buildings not more than two stories in height.

((d)) <u>e</u> (No change)

((e)) <u>f</u>--Exterior wall openings, less than 10 feet from an exterior stairway or a bridge or balcony serving as ((a horizontal)) <u>an</u> exit, shall be equipped with opening protectives ((.)), except as set forth in <u>section C 212-8e</u>.

((f)) <u>g</u>--Openings in exterior walls of enclosed exits shall be equipped with opening protectives, except that such protectives shall not be required for openings in the first story of exterior walls facing a street or ((legal)) open space at least 30 feet wide.

((g)) <u>h</u> (No change)

i--The area of openings in exterior walls required to have a distance separation, shall be limited as indicated in table C 401-4.1. Where a spandrel is required such area shall be based upon the wall area less the spandrel area.

Distance separation	•		of exterior wall
or legal open space in feet	buildi	erate hazard ng height More than one-story	High haza
Less than 20	50	40	20
At least 20 but less than 30	100	60	30
At least 30	100	100	50

TABLE C 401-4.1.---OPENINGS IN EXTERIOR WALLS

51.

C 401-5.3 Skylights

a--Skylights and ((transparent or translucent)) roof panels shall conform to the requirement for roof coverings as set forth in section C 410-5, except as provided in ((paragraphs b and c of this section.)) <u>section C 401-5.3</u>.

b--Skylights and roof panels ((located)) in roofs ((of combustible construction)) not required to have a fire-resistance rating ((may)) are permitted to be glazed with ((combustible self-extinguishing)) plastic as set forth in section C 404, ((material,)) provided that each skylight or panel does not exceed 200 square feet in area, and that the distance between them is at least 5 feet.

c--Skylights and roof panels ((located)) in roofs required to have a fireresistance rating, ((of noncombustible construction, may)) are permitted to be glazed with ((combustible self-extinguishing)) plastic as set forth in section C 404 ((material)) provided that the aggregate area of such material does not exceed 20 per cent of the space below the skylight or panel, ((fire area under the roof,)) that the area of each skylight or panel does not exceed ((200)) 100 square feet, and that the distance between them is at least ((5)) 10 feet. ((No individual sheet of such glazing material shall exceed 50 square feet in area, between supports.))

d--Skylights shall be mounted above the plane of the roof.

((d--Skylights)) <u>e--Glass in skylights</u> and roof panels ((in which the glazing material has)) <u>on a roof having</u> a slope of less than 30 degrees shall be protected with screens above <u>and below the glass</u>, ((such glazing,)) conforming to the requirements set forth in section ((C 402-4.61.)) <u>C 402-4.7k</u>.

<u>f--Glazing in skylights and roof panels shall be readily breakable or</u> removable in an emergency.

C 401-8 Eaves, Cornices and Exterior Trim

a--Eaves and cornices of combustible construction shall not encroach upon required distance separation, shall not extend vertically more than 5 feet, and shall be prohibited on buildings more than two stories in height, except as provided in paragraph b of this section.

b--Eaves and cornices of combustible construction are permitted on buildings more than two stories in height provided they do not extend horizontally nor vertically more than 2 feet, and the soffit is of noncombustible construction.

<u>c--Where eaves and cornices of combustible construction as set forth in</u> <u>section C 401-8a, are at least 10 feet from an interior lot line or a</u> <u>similar building appurtenance on the premises, such eaves and cornices are</u> <u>permitted to extend horizontally not more than 5 feet.</u>

d--Where exterior trim of combustible construction, (other than eaves and cornices) exceeds 50 square feet in area and is located more than one story above adjoining finished grade on a building of other than type 5 construction; such trim shall be at least 5 feet from exterior wall openings at the same or higher elevation, or opening protectives shall be provided.

<u>C 401-9</u> Combustible Facings on Noncombustible Exterior Walls

<u>Combustible materials may be used as the exterior facing on walls of</u> <u>masonry construction without affecting the construction classification</u> of the building, provided the installation is as follows:

- 1) Combustible material is mounted directly to the wall.
- 2) The distance separation is not less than 15 feet.
- 3) Such combustible material is located not more than 35 feet above grade.
- 4) Distance from exterior wall openings is at least 10 feet.
- 5) Plastic material, where used, is in conformity with the requirements of section C 404-1.
- 6) Parapet walls having a fire-resistance rating of at least 2 hours are provided where combustible facing is less than 15 feet to a roof of combustible construction.

C 402-1 General Requirements

a--Structural elements or members, including walls, partitions, columns, beams and trusses, shall have fire-resistance ratings of not less than those set forth in table C 202-2, except as required by Sections C 402-2, C 402-3 and C 402-4. The fire-resistance ratings of the structural elements or members shall be determined in conformity with generally accepted standard fire test procedure. ((except that walls and partitions with fire-resistance ratings of less than 1 hour shall also meet the hose stream test requirements applicable to walls and partitions having 1-hour ratings.))

c--Exits, including passageways, hallways and stairways, and elevator and dumbwaiter hoistways, escalators, shafts and other openings in floors, shall be enclosed or protected as set forth in section ((C402-4.6.)) C 402-4.7.

<u>d--In buildings of type 1 and 2 construction, nonbearing partitions sub-</u> <u>dividing a tenant space are permitted as follows:</u>

Construction of partiti	Maximum area of	of buildings	Maximum height			
	space to be sub- divided, sq. ft.	in feet	in stories			
fire-retardant wood	10,000	150				
wood	2,000	150				
fire-retardant wood	20,000	40	2			

C 402-1 (continued)

e--Construction not required to have a fire-resistance rating may have combustible doors having no fire-resistance rating.

f--Flammable materials shall not be permitted as insulation or fill.

C 402-3 Protection of Columns, Beams, Girders and Trusses in Buildings of Type 1 and 2a Construction.

> a--Columns and vertical suspension members shall be individually encased throughout their length by fire-protective materials having fire-resistance ratings prescribed in table C 202-2 ((.)), except as provided in paragraphs d and e of this section.

b--Beams, girders and trusses supporting more than one floor or ((more than)) a roof and at least one floor, shall be individually encased throughout their length by fire-protective material having fire-resistance ratings prescribed in table C 202-2 ((.)), except as provided in paragraphs d and e of this section.

c--Beams, girders and trusses supporting only one floor or a roof shall be individually encased by fire-protective material or be fire protected by a continuous ceiling ((having)) to provide a fireresistance rating equivalent to that required for the floor or roof construction which they support or of which they form a part, as prescribed in table C 202-2; except as provided in paragraphs d and e of this section, and except that protection of such members is not required for roof construction ((for:

One story buildings of group C1, C3.1, C4.1, C5 and C6 occupancy, or)) where ((Where)) the lowest portion of such members is 20 feet or more above the floor next below ((in other buildings.)), provided the building is equipped with a sprinkler system or a fireand smoke-detecting system.

((d--Where beams, girders and other structural members are fire protected by a continuous ceiling, the concealed space above such ceiling shall be firestopped or divided with noncombustible material into areas not exceeding 5000 square fee, with no dimension greater than 100 feet. Solid web steel beams or girders may serve as part of such firestopping. Access to such concealed space shall be through a single opening having dimensions not to exceed 3 feet in either direction and protected by an opening protective conforming to the requirements set forth in section C 402-4.10⁽⁾)

C 402-3 (continued)

d--That portion of structural steel exposed on the exterior of a building, is not required to be encased or enclosed by fire-protective materials provided that the distance separation is not less than that set forth in section C 401-3.2 for noncombustible walls with a fire-resistance rating of less than 3/4 hour, and provisions are made to limit the average rise in the temperature of the steel under fire conditions to 1000° F.

e--In one-story buildings of group Cl, C3.1, C4.1, C5 and C6 cccupancy, roof construction and columns supporting roof construction are not required to be encased or enclosed by fire-protective materials, except that basic fire areas for such buildings shall be limited to 30,000 square feet or as set forth in tables C 203-la, C 203-lb, and C 203-lc, whichever is less; and except that unlimited fire area is permitted for such buildings, provided they are equipped with sprinkler systems.

 $((e)) \underline{f}$ --((If continuous)) Where ceilings that are required to provide a fire-resistance rating to a ceiling assembly, are pierced or recessed for fixtures, devices or duct outlets, adequate provision shall be made to maintain the integrity of ((the)) such ((required fire-resistance rating of the)) ceiling assembly.

g--Lintels more than 8 feet long that are located in bearing walls shall conform to the fire-resistance rating requirements for such walls as set forth in table C 202-2 except as provided in section C 402-3d.

C 402-4 Division by Fire Separations

a--Where a building has two or more occupancies or uses, or two or more tenancies of the same occupancy group, none being accessory to another, such occupancies or tenancies shall be separated vertically and horizontally by fire separations having fire-resistance ratings in conformity with the requirements of table C 402-4, except as provided in paragraph ((b and g)) \underline{f} of this section. ((concealed space shall be firestopped in conformity with the requirements of section C 402-5.))

((b--In buildings of type 2b, 3 or 4 construction, the horizontal fire separation between low and moderate hazard occupancies shall have a fire-resistance rating of at least 1 hour, and shall be finished on the moderate hazard occupancy side with noncombustible material.))

- ((c)) b No change.
- $((d)) \underline{c}$ No change.
- $((e)) \underline{d}$ No change.
- ((f)) e No change.
- $((g)) \underline{f}$ No change.
- ((h)) g No change.

	TABLI	ес4(02-4.	ΠΟΙΟ							JIRED B		I OCCUP	INCIES		
Occupancy	Cl	C2	C3.1	C3.2	C3.3	C4.1	c4.2	c4.3	C5.1	C5.2	C 5.3	C5.1	+ C5.5	c6.1	c6.2	c6.3
((Al)) Al	$((2^1))$	((3 ¹))) ((2 ¹)) pplicab	((np)) le to	((np)) One- a	((2 ¹))	((np)) -Famil	((np)) v Dwel	((2 ¹))	((3)) Table	((4)) A 402	((2 ¹))	((2 ¹))	((a ¹))	((2 ¹))	((2))
((B1)) ((B2)) B1	((2 ¹))	((31)) ((np))	((2⊥))	((np)) ((np))	((np)) ((np))	$((2^{\perp}))$ ((np))	((np)) ((np))	((np)) ((np))	((2)) ((2))	((3 ³)) ((np))	((43)) ((np))	(2)	((2)) ((np))	((np)) ((2))	((np)) ((2))	((np)) ((np))
B2 Č1			oplicab		Multip											
C2 C3.1 C3.2				TT T3		2 ¹ /										
C3.3 C4.1 C4.2				88 87 88		2 ¹ /										
C4.3 C5.1 C5.2				11 11 11												
C5.3 C5.4				17 11												
C5.5 C6.1 C6.2				11 11 11												
c6.3				11												

- 1 ((For fire separations)) One hour in type 2b, 3, and 4 construction and <u>3/4 hour in type 5</u> construction. ((, See section C 402-4b and g.))
- ² For restrictions on a high hazard use area, see section C 402-4.1; for restrictions on a moderate hazard use area, see section C 402-4.2.
- ³ Openings in separation not permitted.
- ⁴ Vertical fire separations shall not be required between two spaces for groups C5.1, C5.2, or C5.3 occupancies or any combination thereof where such spaces are occupied by one tenant.

402-4.1 Accessory High Hazard Occupancies

a--Where a building has two or more occupancies ((or uses)), the larger occupancy being low hazard or moderate hazard and the other occupancy, accessory high hazard ((one or more of which are classified as high hazard and the others are classified as low or moderate hazard, each being accessory to the other)), such high hazard occupancy ((or use)) shall be separated from other occupancies ((or uses)) in accordance with the following:

Where space for the high hazard occupancy ((or use)) amounts to more than 10 per cent of the fire area or more than 5000 square feet, such high hazard space shall be separated from the other occupancies ((or uses)) in conformity with the requirements of table C 402-4.

Where space for the high hazard occupancy ((or use)) amounts to 10 per cent or less of the fire area, or 5000 square feet or less, whichever is smaller, such high hazard space ((may)) <u>shall</u> be separated by noncombustible construction having a fire-resistance rating of at least 2 hours, with heat vents directly through the roof or an exterior wall without passing through intervening space, in lieu of the requirements of table C 402-4.

Where space for the high hazard occupancy ((or use)) amounts to 5 per cent or less of the fire area, or 2500 square feet or less, whichever is smaller, such high hazard space ((may)) <u>shall</u> be separated by noncombustible partial enclosures with heat vents directly through the roof or an exterior wall without passing through intervening space, and ((with fire-extinquishing equipment,)) provided with sprinklers in the high hazard space in lieu of the requirements of table C 402-4. <u>Such sprinklers shall conform to</u> the requirements of section C 511-4.

C 402-4.2 Accessory Moderate Hazard Occupancies

Where a building has two or more occupancies ((or uses, one or more of which are classified as moderate hazard and the others are classified as low hazard, each being accessory to the others)), the larger occupancy being low hazard and the other occupancy, accessory moderate hazard, such moderate hazard occupancy ((or use)) shall be separated from other occupancies ((or uses)) in accordance with the following:

Where space for the moderate hazard occupancy ((or use)) amounts to more than 10 per cent of the fire area, or more than 10,000 square fee, such moderate hazard space shall be separated from the other occupancies ((or uses)) in conformity with the requirements of table C 402-4.

$C \longrightarrow -4.2$ (continued)

Where space for the moderate hazard occupancy ((or use)) amounts to 10 per cent or less of the fire area or 10,000 square feet or less, whichever is smaller, such moderate hazard space ((may)) shall be separated by noncombustible construction having a fire-resistance rating of at least 1 hour, in lieu of the requirements of table C 402-4.

Where space for the moderate hazard occupancy ((or use)) amounts to 5 per cent or less of the fire area, or 5,000 square feet or less, whichever is smaller, such moderate hazard space ((may)) shall be separated by noncombustible partial enclosures with heat vents directly through the roof or an exterior wall without passing through intervening space, and with ((fire-extinguishing equipment)) sprinklers in the moderate hazard space in lieu of the requirements of table C 402-4. Such sprinklers shall conform to the requirements of section ((C 511-4.7.)) C 511-4.

C 402-4.3 Accessory Group Cl Occupancy

Where a building of high hazard or moderate hazard occupancy, has an accessory group Cl occupancy exceeding 1000 square feet in area, such group Cl occupancy shall be separated from the other occupancy by construction having a fire-resistance rating of at least 1 hour. For exception see C 402-4.10a.

<u>C 402-4.4</u> ((C 402-4.3)) Heat Banking Areas

a--In buildings or spaces where sprinkler systems are required, ((draft, curtains shall be installed to form)) heat banking areas ((.)) shall be provided. The maximum distances between draft curtains or between a draft curtain and a wall shall be 400 feet in a building of C3.1 and C4.1 occupancy, 300 feet in a building of ((C2,)) C3.2 and C4.2 occupancy, and 100 feet in a building of C3.3 and C4.3 occupancy.

((C 402-4.4)) <u>C 402-4.5</u> Stages and Auxiliary Areas

a--The stage of an assembly space shall be separated from the auditorium by a proscenium wall having a fire-resistance rating of at least 2 hours.

b--At end of second sentence make following change: ((C 402-4.10.)) C 402-4.11.

d--Stages of assembly spaces shall be equipped with automatic smoke ((or)) and heat vents in conformity with generally accepted standards ((.)), and as set forth in section C 511-9b.

- ((402-4.5)) Enclosure of Storage and Service Rooms
 - <u>c 402-4.6</u>

a--((Carpenter, repair and paint)) <u>Paint</u> shops, and other storage and service rooms or spaces where flammable materials are stored or used, shall be enclosed by construction having a fire-resistance rating of at least 2 hours. In buildings of group C5.2, C5.3, C5.4, C5.5, C6.2, C6.3 occupancies in which flammable materials are stored or used in such shops, rooms or spaces, or the fire load exceeds 80,000 Btu per square foot, access shall be ((only)) from the exterior of the building ((.)) <u>or from</u> the interior through a vestibule having at least a 2-hour fire-resistance rating.

<u>b--Carpenter and repair shops</u>, and stock rooms shall be enclosed by construction having a fire-resistance rating of at least 1 hour.

((b)) <u>c</u>--At end of paragraph make following change: ((C 402-4.9.)) <u>C 402-4.10.</u>

((c)) d --- (No change)

((C 402-4.6)) Enclosure of Exits, Stairways, Hoistways, and Shafts

C 402.4.7

c--Stairways and escalators, other than required enclosed exits, for travel between not more than two successive stories of one tenancy or occupancy, may be permitted without enclosure provided ((the total fire area of the two stories does not exceed the maximum fire area permitted for the higher story in accordance with tables C 203-la and C 203-lb; otherwise such openings shall be)) such openings are protected with automatic opening protectives, or by some combination of sprinklers, draft curtains, fire- and smoke-detecting and ventilating devices, in conformity with generally accepted standards.

e--((Intercommunicating or access stairs and escalators shall be permitted without enclosure where they connect the main entrance to the story immediately below, or to the story immediately above, or where they lead from the floor level to a mezzanine in the same story.)) Enclosures for intercommunicating stairs or escalators shall not be required where such stairs or escalators pass through only one floor to a room in each ((to or from a fully enclosed room in either)) of the stories which they connect. Such rooms shall be enclosed with construction having a fire-resistance rating of at least 1 hour, and area of each room shall not exceed 1000 square feet. C 402-4.7 (continued)

((f--Enclosures for exits, stairways, hoistways, and shafts shall be c continuous and have no openings other than those required for entrance or exit, or for venting as set forth in paragraphs k and l of this section; except that windows in exterior walls equipped with openings protectives shall be permitted.))

 $((g)) \underline{f} --- (No Change)$

((h--All openings)) <u>g--Openings</u> in enclosures for exits, stairways, hoistways, and shafts shall be protected with opening protectives conforming to the requirements set forth in sections <u>C 401-4.1</u>, C 401-4.2 and ((C 402-4.10.)) C 402-4.11.

- ((i)) <u>h</u>--Make following change: ((C 402-4.10,)) C 402-4.11,
- ((j)) <u>i</u> --- (No Change)

((k--)) j--A shaft exceeding 150 feet in height, and an enclosed ((A))stairway, shaft or ((enclosed)) hoistway having an area exceeding 4 square feet, ((passing through more than two stories)) penetrating two floors or more, other than mezzanine floors, and not extending through the roof, shall be provided with smoke vents having an area of at least $3\frac{1}{2}$ per cent of the stairway, shaft or hoistway area. Such vents shall have the same fire-resistance rating as required for the shaft enclosure. In no event shall the area of the smoke vent be less than 3 square feet for each elevator car or less than 72 square inches for other shafts. Single smoke vents shall be permitted only when such vents extend through the roof; when it is impractical to continue the smoke vent vertically through the roof, two smoke vents shall be provided, each having the same area as required for a single smoke vent, and terminating at different sides of the building, except that the area of each smoke vent may be decreased 50 per cent when mechanical ventilation is provided. When one or more sides of the stairway, shaft or hoistway is an exterior wall of the building other than on an interior lot line, the vents may be windows and louvered panels as set forth in paragraph ((1)) k of this section. Windows in hoistways shall be marked in conformity with section C 512-2.1m. Hoistways in buildings of group C1, C2, C3 and C4 occupancies may be equipped with an automatic sprinkler system in lieu of smoke vents. In buildings of low and moderate hazard occupancy, in lieu of the open type vent, automatic louvers or vents shall be furnished provided they are equipped with means for both manual and automatic operation. For automatic operation, a smoke detector shall be provided at each 50 feet of shaft height with the topmost detector within 3 feet of the vent, and release shall be actuated as set forth in section C 511-9a.

C 402-4.7 (continued)

- $((1)) \underline{k} ---$ (No change)
- ((m)) <u>1</u> --- (No change)
- ((n)) <u>m</u>--At end of sentence make following change: ((C 402-4.10.)) <u>C 402-4.11</u>.

 $\frac{c \ 402-4.8}{((c \ 402-4.7))}$ (846.4h)

Enclosure of Kitchens, Cooking Spaces and Public Dining Rooms

a--Kitchens and pantries serving public dining rooms, including but not limited to restaurants, cafeterias, coffee shops, and lunch rooms, shall be enclosed by construction having a fire-resistance rating of at least 2 hours; except that when a sprinkler system is installed in such kitchens and pantries, the enclosure may have a fire-resistance rating of 1 hour. Openings for the passing of food, dishes and trays between a kitchen and a public dining room shall be permitted provided the kitchen is equipped with ((an automatic sprinkler system)) a special sprinkler installation and the opening is not more than 36 inches in height; and is protected by an automatic 3/4-hour opening protective or by sprinkler heads on each side of the separation. Door openings between kitchens or pantries and the public dining rooms which they serve shall be protected with:

Self-closing 1-1/2-hour opening protectives when the kitchens or pantries are not sprinklered, or

Self-closing 3/4-hour opening protectives when the kitchens and pantries are sprinklered, or

Self-closing doors having a rating of less than 3/4hour when the kitchens and pantries are sprinklered and sprinkler heads are provided above such openings on each side of the separation.

Kitchen exhaust systems shall be fire protected as set forth in section C 509e.

d--Public dining rooms, coffee shops and other spaces used for similar purposes, which have no permanently installed equipment for cooking within such space, other than incidental counter service equipment provided with exhaust hoods, shall not be required to be enclosed or separated from other public space. ((Where a separation is provided between a dining doom and other public space, it shall be noncombustible material.))

- ((C 402-4.8)) Enclosure of Heat Producing Equipment and Refuse Rooms
 - $\frac{C \ 402-4.9}{\text{ a--((Fuel-burning heat producing equipment having an individual or combined rated gross capacity of 1,000,000 Btu per hour or more, or capable of operation at pressures in excess of 15 psi, and)) <u>High capacity heater rooms, and</u> incinerator ((s)) and refuse rooms, shall be located in a separate building or be enclosed by noncombustible construction having a fire-resistance rating of not less than 2 hours, except as set forth in paragraph ((g)) <u>f</u> of this section.$

b--((Fuel-burning heat producing equipment having an individual or combined rated gross capacity from 250,000 to 1,000,000 Btu per hour, and operating at pressures of 15 psi or less,)) Moderate capacity heater rooms shall be located in a separate room enclosed by construction having a fire-resistance rating of not less than 1 hour, except as set forth in ((paragraphs e and g)) paragraph f of this section. ((Gasfired space heaters in buildings of group C3.1, C3.2, C4.1 and C4.2 occupancies shall not be required to be enclosed.))

c--Fuel-burning suspended unit heaters in buildings of group C2, C3.1, C3.2, C4.1 and C4.2 occupancy, and floor-mounted unit heaters in buildings of group C3.1, C3.2, C4.1 and C4.2 occupancy, having a capacity of less than 1,000,000 Btu per hour, are not required to be enclosed except as set forth in sections C 504-2.14 and C 504-2.16.

((c)) <u>d</u>--((Fuel-burning heat producing equipment having a rated gross capacity of less than 250,000 Btu per hour, and operating at pressures of 15 psi or less,)) <u>Low capacity heater rooms</u> shall not be required to be ((separately)) enclosed except in buildings of group C5 and C6 occupancies, and except as set forth in paragraph e of this section.

((d)) e--Fuel-burning heat producing equipment for aircraft hangars, garages ((or)), gasoline service stations, ((other than direct-fired unit heaters,)) and for occupancies in which flammable materials are processed, used or stored, shall be located in separate buildings or in rooms enclosed by vaportight noncombustible construction having a fire-resistance rating of not less than 2 hours ((.)), except as set forth in section C504-2.14a. Entrance to ((such)) enclosed heater rooms shall be from the outside of the building, or through a vestibule ventilated in conformity with the requirements of section C 508-3.1b. Interior wall openings into such enclosing construction shall be limited to those necessary for entrance and for the passage of heating pipes and ducts. The space around such pipes and ducts shall be sealed with noncombustible material.

((C 402-4.8))

<u>c 402-4.9</u>

 $((e)) \underline{f}$ (No change)

((f--Space for fuel-burning heat producing equipment and incinerator and refuse rooms required to be enclosed in conformity with this section, shall not be located below exits nor open directly into exits.))

- ((C 402-4.9)) Garages and Open Parking Structures
 - C 402-4.10

a--Space in which motor vehicles ((, including buses, trucks and tractors,)) are serviced or repaired, shall be deemed to be group C3.2 occupancy and shall be separated from ((other space by fire separations)) accessory C1 or accessory C2 occupancy by construction having a fireresistance rating of at least one hour. ((in accordance with table C 402-4.)) Dispensing of gasoline shall not be permitted in garage or open parking structures. ((Space in garages or open parking structures for the sale of gasoline and oil, or the greasing of motor vehicles, shall be enclosed by construction having a fire-resistance rating of at least 2 hours, with openings equipped with automatic or self-closing opening protectives.))

- ((C 402-4.10)) Openings in Fire Walls and Fire Separations
 - C 402-4.11

a--Openings in fire walls, fire separations, and openings in walls, floors and ceilings that are ((in other interior walls and partitions)) required to have a fire-resistance rating, shall be protected by opening protectives having fire-resistance ratings as set forth in table ((C 402-4.10,)) C 402-4.11, except as otherwise permitted in section C 402-4.7 and paragraphs b, c, and e ((d, e, and h)) of this section. ((Vision panels in opening protectives shall be of materials and size that will maintain the integrity of the required fire-resistance rating.)) Opening protectives shall be equipped with devices conforming to the requirements of section C 212-5.1c.

TABLE ((C 402-4.10)) <u>C 402-4.11</u>---OPENING PROTECTIVES FOR INTERIOR WALL OPENINGS

NO CHANGE

((C 402-4.10)) C 402-4.11

> ((b--Two 1 1/2-hour opening protectives installed on opposite faces of the wall shall be deemed equivalent to one 3-hour opening protective when installed in conformity with generally accepted standards.))

((c--Openings in fire walls or between vertical fire separations required to have a fire-resistance rating of more than 2 hours, shall be protected by automatic or self-closing fire doors on each side of the wall. The combined fire-resistance rating of the fire doors shall be in accordance with table C 402-4.10.))

((d)) <u>b</u>--Doors in openings between exit passageways and classrooms in group C5.5 occupancy and between such passageways and patients' rooms in group C6 occupancy shall not be required to have a fireresistance rating, providing such rooms are under continuous supervision whenever occupied. Louvers, vision panels and transoms shall be permitted in conformity with section C212-5.1b.

((e)) <u>c</u>--Vision panels conforming to the requirements of generally accepted standards ((of materials that will maintain the integrity of the fire-resistance rating)) shall be permited in ((all)) 3/4-hour and 1 1/2-hour opening protectives. Enclosed spaces required to have a fire-resistance rating of not more than 1 hour, are permitted such a vision panel in a wall, in lieu of a vision panel in the door. ((except those that are required to be automatic.))

((f--Openings in floors or horizontal fire separations shall be protected in conformity with section C 402-4.6.)

((g)) <u>d</u>--No Change.

C + 02-4.11 (continued)

((h)) e--((Where openings in fire walls or fire separations in buildings of group C2, C3.1 and C3.2 occupancies equipped with an automatic sprinkler system do not exceed 35 square feet in area, they may be protected with spray nozzles.)) In buildings of group C2, C3.1, C3.2, C4.1 and C4.2 occupancy equipped with an automatic sprinkler system, an opening in a fire wall or separation other than a shaft or stairway enclosure, not exceeding 35 square feet in area, is permitted without an opening protective provided such opening is protected by a sprinkler head on each side of the wall in lieu of an opening protective.

- ((i)) <u>f</u>--No Change.
- ((j)) <u>g</u>--No Change.
- C 402-5.1 General Requirements

Concealed spaces within wall, <u>ceiling</u>, partition, floor, stair, attic or cornice construction and around chimney, pipe and duct openings in such construction, and between tenancies, shall be firestopped or filled with noncombustible material to prevent the passage of flame, smoke, fumes, and hot gases.

C 402-5.2 Materials

((d--Flammable materials shall not be permitted as insulation or fill in concealed or attic spaces.))

C 402-5.3 Location

f--In buildings of type 3, 4, and 5 construction, the space in attics or between combustible floor or roof construction and a ceiling, shall be firestopped between occupancies or tenancies except that no area of such concealed space shall be greater than 3000 square feet. ((See section C 402.4.))

g--In buildings of type 1 and 2 construction, concealed spaces above a ceiling shall be firestopped or divided with noncombustible material into areas not exceeding 5000 square feet, with no dimension greater than 100 feet. Solid web steel beams or girders may serve as part of such fire-stopping. Where access is provided to the concealed space, such access shall be through a single opening having dimensions not exceeding 3 feet in either direction.

C 403-3 Use of Interior Finishes

b--In exit stairways and passageways in buildings ((more than four stories in height)) of group Cl, C2, C3.1, C3.2, C4.1, C4.2, C5.1, C5.2, C5.4, C5.5, C6.1 and C6.2 occupancy, interior finish shall be Class A. In corridors and passageways which are not part of an enclosed exit in such buildings, interior finish shall be Class A or B. ((In such locations in buildings not more than four stories in height of such occupancy groups interior finish shall be Class A or B.)) ((f--Class B and C finish, where permitted to be used in passageways or corridors, shall not extend more than 50 linear feet unless such finish is separated by at least 2 feet of noncombustible material at intervals not exceeding 50 linear feet.))

((g--Class C interior finish used on ceiling of buildings of type 1 and 2 construction shall be separated into areas of 500 square feet. Such separations shall be class A or B interior finish at least 2 feet wide.))

((h)) <u>f</u>--Class D interior finish shall not be <u>permitted</u>. ((used in buildings more than one story in height, or in buildings of group C5 and C6 occupancies, or in sleeping rooms. Where class D finish is permitted to be used in other locations, such finish shall be **limited** to not more than 1000 square feet in any room or space.))

((i--Partitions in buildings of type 1 and 2 construction shall be noncombustible, except that in buildings less than 150 feet in height of group Cl, C2, C3.1, C3.2, C4.1 and C4.2 occupancies, rooms or spaces may be subdivided by combustible construction with no required fire-resistance rating, providing that such rooms or spaces do not exceed 2000 square feet in area and are separated from corridors, hallways, and enclosed exits by fire separations having fire-resistance ratings as set forth in section C 402-4.6.))

- ((j)) g-- No Change.
- ((k)) h-- No Change.
- ((1)) i-- No Change.

C 403-4 Use of Interior Trim

((a--Interior trim in exits, stairways and passageways serving as required means of egrees from buildings more than three stories in height, and in all locations in buildings 150 feet or more in height, shall be of noncombustible material.))

((b--Interior trim and doors of wood may be used in all locations where noncombustible trim is not required by this section, or as permitted by section C 402-4.10d.))

a--In buildings of type 1 and 2 construction, interior trim in exits, stairways and passageways, shall be noncombustible or fire-retardant lumber, except that handrails may be combustible.

b--Interior wood trim is permitted wherever class B or C interior finish is required, except as set forth in paragraph a above.

c--Finish flooring of ((Wood)) wood or other combustible materials ((finish flooring)) may be used in any location except in ((areas of)) high hazard spaces and in exits of buildings ((classification, or in an exit or passageway serving as a required means of egress from buildings of group C6 occupancy having thirty or more sleeping rooms, or buildings)) more than three stories in height. ((Wood-block flooring at least 2 inches thick, laid with grain perpendicular to the floor, may be used in any location.))

C 403-5 Attachment of Interior Finish and Trim

a--Interior finish and trim shall be cemented or otherwise fastened in place with materials that will not, in burning, give off smoke or gases, denser or more toxic than given off by untreated wood or paper, and ((so)) that ((they)) will not readily loosen when subjected to a room temperature of 400° F. for a period of 30 minutes.

f--((In buildings of type 1 and 2 construction, wood finish flooring)) Finish flooring of wood and wearing surface materials including cork, rubber, linoleum, asphalt and composition tile, and other materials or similar combustible characteristics, where permitted by section C 403-4C, shall be attached directly to the ((noncombustible floor construction or to a wood subfloor fastened to wood sleepers or over insulating board.)) base, and concealed spaces, if any, shall be filled with noncombustible material.

- <u>C 404</u> PLASTIC MATERIAL
- <u>C 404-1</u> General Requirements

a--Plastic materials shall be classified in accordance with their burning characteristics as determined by tests conducted in conformity with generally accepted standards.

<u>b--Plastic materials in exits shall be legibly marked to identify the burning characteristics.</u>

c--The requirements of this section are limited to construction regulated by this Code, and shall not regulate plastic materials as permitted in Part 5 of this Code.

d--Plastic materials which give off smoke or gas denser or more toxic than given off by untreated wood or paper under comparable exposure to heat or flame, or which burn faster than $2\frac{1}{2}$ inches per minute determined by tests conducted in conformity with generally accepted standards, shall not be permitted.

e--Plastic materials used for light transmission in artificial lighting equipment are not required to conform to flame-spread ratings for interior finish, provided they conform to the following:

- 1) Fall from their frames at a temperature at least 200° F. below their ignition temperature; for exception see section C 403-3i.
- 2) Remain in place for at least 15 minutes at 175° F.
- 3) Smoke density rating as tested in conformity with generally accepted standards for plastic material, is not over 75.

f--Plastic materials for construction of structural elements shall not be permitted in buildings of group C3.3, C4.3, C6.2 and C6.3 occupancy nor in exits of buildings more than one story in height, except that plastics may be used for light transmission in artificial lighting equipment, provided they occupy an area not exceeding 20 percent of the ceiling area of the space in which they are located.

g--Plastic materials may be used as a roof over an unenclosed structure located at grade level, provided such roof does not exceed 10 feet in height and 1000 square feet in area.

h--One-story accessory structures, located at grade level, of low hazard occupancy, not exceeding 1200 square feet in area and 16 feet in height, may be constructed of plastic materials provided that the distance separation is not less than 20 feet.

- ((C 404)) <u>C 405</u> Fireplaces Nc Change
- ((C 404-1)) <u>C 405-1</u> General Requirements No Change
- ((C 404-2)) C 405-2 Hearths and Linings No Change
 - ((C 404-3)) <u>C 405-3</u> Mantels and Trim No Change.
 - ((C 405)) C 406 FIRE PROTECTION EQUIPMENT
 - C 4C6-1 General Requirements

a--A fire- and smoke-detecting system, installed in conformity with section C 511-3, shall be permitted in lieu of a required fire alarm system, or a required special sprinkler installation, or in lieu of both.

b--A sprinkler system installed in conformity with section C 511-4, shall be permitted in lieu of a required fire alarm system, or a required fire- and smoke-detecting system, or in lieu of both.

<u>c--Where fire protection equipment is required by this section for</u> <u>buildings of group C3.3, C4.3, C5.2, C5.3, C6.2 or C6.3 occupancy,</u> <u>and for structures connected to enclosed malls where the combined</u> <u>area exceeds 100,000 square feet, the activation of the equipment</u> <u>shall be transmitted to the local fire department.</u>

((C 405-1)) C 406-2

Fire Alarm System

A fire alarm system, installed in conformity with section C 511-2, shall be provided as follows:

Group Cl six stories
in height
Group C2In buildings more than two stories
in height
In enclosed malls as set forth in
section C 216-2 (13)
Group C3 The buildings more than two stories
in height, or where the distance
of travel to an exit is more than
100 feet
Groups C5.1, C5.2, C5.3In buildings where there are two
or more spaces each accommodating
one hundred persons or more
Group C5.4Not required
Group C5.5 one story
in height
Group C6 two stories
in height, or where there are more
than thirty sleeping rooms

((C 405-2)) C 406-3

Fire- and Smoke-Detecting System

A fire- and smoke-detecting system, installed in conformity with section C 511-3 shall be provided as follows:

Groups C6.2, C6.3	.In patients' rooms, lounges,
	lobbies, recreation spaces,
	kitchens, boiler rooms, incin-
	erator rooms, storage rooms,
	laundry rooms and maintenance
	shops.
Group Cl to C6.3	.In buildings more than 250 feet
	in height.

((c 405-3)) <u>c 406-4</u>

Sprinkler Systems

a--A sprinkler system, installed in conformity with section C 511-4, shall be provided as follows:

	, Where fire areas or heights are .in creased as set forth in section C 203-1.2
Group C2	.In enclosed malls as set forth in
Groups C3.3, C4.3	section C 216-2 (5) Where fire area is more than 1000 square feet, or building is more than one story in height
Groups C5.1, C5.2, C5.3, C5.5	Under and over stage areas and .auxiliary spaces such as dressing
Group C6.2	rooms, store rooms and workshops, and in exhibition buildings with a fire area of more than 32,000 square feet .In maintenance shops exceeding 100 square feet, incinerator rooms, and refuse rooms and ((In)) in
Groups Cl through C6.3	 buildings of type 2b, 3 and 4a construction more than one story in height and in buildings of type 4b, 5a and 5b construction. In cellar areas of 5000 square feet or more used for garages or for storage of combustible materials
Groups Cl through C6.3, except space for cold storage and refrigera- tion	In buildings without exterior access openings ((on each story for fire fighting)), and which are more than .two stories in height or have a fire area of more than 2500 square feet above the first story. Fixed windows shall not serve as access openings. Access openings shall be located on each story with maximum spacing of 50 feet, and reachable from adjoining grade by fire-fighting equipment.

((C 405-4)) C 406-5

Standpipe Systems

a--A standpipe system, installed in conformity with the requirements of section C 511-5, with outlets on each story for first-aid hose and for municipal fire department use, shall be provided as follows:

((Groups Cl through C6.3In buildings of t	ype l or 2a
construction more	than 70 feet
in height	
Groups Cl through C6.3In buildings of t	
struction more th	an 55 feet in
height	
Groups C3.3, C4.3In buildings more	than one story
in height))	
	eding three stories
C4.1, C4.2, C5, C6.1in height but not	exceeding five
stories, and havi	ng a floor area on
any level exceedi	ng 5000 square feet.
In buildings six	stories or more or
60 feet or more i	
Groups C3.3, C4.3, C6.2, C6.3In buildings more	
C6.3In buildings more	than one story in
	at it is not requir-
ed in sprinklered	buildings not more

than two stories in height.

((C 405-5)) C 406-6

Yard Hydrant System No Change

((C 405-6)) C 406-7

Watchman's System

A watchman's system shall be installed in buildings of group C6 occupancy with seventy-five or more occupants, in conformity with section C 511-8, except when such buildings are equipped throughout with a fire- and smokedetecting system.

C 406-8 Automatic Vents

 A	a Smoke-operated vents installed in conformity with section C 511-9a shall be provided as follows:
1 1	Group Cl through C6.3In stairways, hoistways and shafts where open type vents are not pro- vided, as set forth in section C 402-4.7j.
U n	Group C2 forth in section C 216-2 (9)
d e r	bSmoke- or heat-operated vents, installed in conformity with section C 511-9b and generally accepted standards, shall be provided as follows:
l i n	Groups C3.2, C3.3, C4.2, C4.3 Spaces having no shatterable win- dow, skylight or mechanical ven-
e d	tilation. Group C5 Group

C 502-1 General Requirements

e--For implementation of the performance requirements for plumbing in this Part, see State Building Construction Code applicable to Plumbing.

C 502-6 Required Plumbing Systems and Fixtures

c--Fixtures for employees whose usual working place is a building less than 100 square feet in gross floor area, may be located in other buildings on the same premises provided such fixtures are under the same ownership or control, are accessible at all times during the employee's normal working hours and the maximum distance of travel from the employee's usual working place to the fixtures does not exceed 500 feet horizontally.

C 503-3.1 General Requirements

f--Storage and regulating equipment of systems containing oxygen shall be separated from those containing flammable gas by a distance of not less than 20 feet, or shall be in separate rooms conforming to the requirements for heater rooms in garages as set forth in section ((C 402-4.8d)) C 402-4.9e.

- C 504-1
- (858.1) General Requirements

b--Buildings intended for occupancy between the ((first)) <u>fifteenth</u> day of ((November)) <u>September</u> and the <u>thirty</u>-first day of May of the following year shall be provided with heating equipment designed to maintain temperatures in occupied spaces for the comfort of the occupants relative to the physical activity in which they are usually engaged. The capability of the heating equipment to maintain such indoor temperature shall be based on the average of the recorded annual minimum outside temperatures for the locality.

C 501-2.4 (858.2d) Prohibited

Prohibited Locations for Heat Producing Equipment

a--Fuel burning equipment ((for)) or ash removal equipment shall not be installed in high hazard spaces, or in spaces intended for the storage or use of paints, paper or trash, except as permitted in generally accepted standards.

C 504-2.4 Prohibited Locations for Heat Producing Equipment

d--Fuel burning ((space heaters)) equipment which may be a potential hazard to occupants in the event of accidental contact shall not be installed in occupied spaces of buildings of group C6.2 or C6.3 occupancy. ((occupancies unless located at least 6 feet above the floor.))

C 504-2.5 ((Fastening and Connection of Equipment)) Fuel Supply Connection

((Fuel burning equipment, except that which is fully portable, shall be permanently fastened and connected in place.)) Fuel supply connection to ((such)) heat producing equipment shall be made with pipe or tubing of solid metal or with means conforming to the requirements of generally accepted standards.

C 504-2.6 Installation and Clearance

a--Heat producing equipment shall be of the fixed type

b--No Change.

C 504-2.7 Air Supply

c--Openings shall be adequate to provide air for combustion and ventilation for the simultaneous operation of all fuel burning equipment within ((such)) rooms. ((Openings designed for the purpose of supplying air for combustion or ventilation shall be fixed and shall provide a clear ventilated area equal to not less than the combined cross-sectional area of all the smoke pipes and gasvent connections leading from such equipment.))

C 504-2.8 Removal of Products of Combustion

a--Equipment for burning solid or liquid fuel shall be connected to suitable chimneys or flues, or vented as set forth in paragraph d of this section, and shall not be connected to gasvents.

((b--Fuel burning space heaters located in habitable spaces, nonhabitable spaces, or spaces that are normally kept closed shall be connected to a suitable chimney, flue, or gasvent.))

((c)) <u>b</u>--Gas-fired <u>space heating</u> equipment shall be connected to a suitable chimney, flue or gasvent or shall be vented as set forth in paragraph d of this section. Gas-fired equipment other than space heaters shall be vented to the exterior when the discharge of products of combustion into the space where the equipment is installed would be a hazard.

 $((d)) \underline{c}$ --No Change.

d--Equipment having an integral venting system in which the inlet for combustion air and the outlet for products of combustion are connected directly to the exterior shall be permitted without a chimney, flue or gasvent.

e--Equipment requiring mechanical draft shall have an interlock to shut off fuel supply when the venting system is inoperative.

f--Where a gasvent is permitted, a permanent sign stating the type of heating equipment which may be connected to the gasvent shall be provided and located where the gasvent passes through the wall or ceiling.

C 504-2.9 Safety Devices

a--Equipment capable of developing hazardous pressures or temperatures shall be provided with means to ((relieve)) safely <u>control</u> such pressures and temperatures.

((c--Fuel burning space heaters located in bathrooms or toilet rooms less than 100 square feet in area, in sleeping rooms, or in buildings of group C6.2 or C6.3 occupancies shall be provided with controls to cut off the fuel supply upon the failure or interruption of the flame or ignition.))

((d)) c--No Change.

((C 504-2.12 Temporary Heat During Construction))

((Equipment using solid or liquid fuel and furnishing temporary heat during construction, except fully portable equipment, shall be provided with a smoke pipe, chimney or flue to convey the products of combustion to the exterior without creating a nuisance.))

C 504-((2.13)) 2.12

Heating Equipment in Hazardous Spaces

a--Heating equipment in locations exposed to flammable dust, stock, vapors or explosives shall furnish heat by means of hot water, steam, or electrical coil approved for use in hazardous areas, except as otherwise permitted in sections ((C 504-2.15)) C 504-2.14 and ((C 504-2.16)) C 504-2.15. Controls shall be provided to limit the temperature of such water, steam, or electrical coil to 215° F.

C 504-((2.14))

2.13 ((Heating of Assembly Spaces)) Warm Air Heating

a--Warm air heating systems ((for assembly spaces)) shall ((have safety controls conforming)) conform to the requirements ((for safety controls)) for ventilating systems as set forth in section ((C 508-3.5)) C 508-3.

- C 504-((2.15))
 - 2.14 Heating of Aircraft Hangars, Garages and Gasoline Service Stations

a--Fuel burning equipment for aircraft hangars, garages and gasoline service stations shall be located in heater rooms as set forth in section ((C 402-4.8d)) <u>C 402-4.9e</u>, except that ((equipment burning gas or liquid fuel is)) <u>suspended-type</u> unit heaters shall be permitted in stories at or above grade where elevated ((so as not to be exposed to possible accumulation of flammable gases and so as not to be subject to physical damage from vehicles.)) in accordance with generally accepted standards. Floormounted heating equipment having a rated gross capacity of less than 250, <u>000Btu per hour shall be permitted in garages without repair facilities</u> and in spaces opening directly into such garage, in stories at or above grade provided they are installed on a noncombustible platform not less than 18 inches above the floor.

- C 504-((2.16))
 - 2.15 Ovens No change.
- C 504-2.16 Unit Heaters

Suspended and floor mounted fuel-burning unit heaters shall not be located in concealed spaces, shall serve only the space in which they are located, and shall be protected against physical damage.

C 505-2 Draft

a--No change.

b--Gas-fired equipment operating on natural draft and connected to a chimney, flue or gasvent, shall be provided with a draft hood, except that draft hoods are not permitted on incinerators.

> TABLE C 505-5. --LOCATION OF OUTLETS Minimum distance in feet

	Distance from other construction	((Flue gas normally at temperature:)) ((exceeding 600° F.)) Incinerator flues	<u>Type of Outlet</u> ((not exceeding 600 ⁰ F.)) <u>other flues</u>	Gasvent
	Horizontal distance to windows of other exterior opening where the ((bottom)) <u>openable portion</u> ((of exterior opening)) is at a higher level and less than 30 feet above the flue outlet	or of such or ve	20 <u>1</u> /	15
	((Vertical)) Minimum vertical di ((between the top of the outlet and)) above the highest point on the roof where the flue passes through	1 10	3((1)) <u>2</u> /	2 <u>3</u> /
	Vertical distance ((of outlet)) above ((unprotected combustible) construction where the horizonta distance to :((such combustible)) the construction is:)) al	·	
	Within 10 feet	((10 ²))	((3)) <u>2</u>	2 <u>3</u>
	((Over 10 feet and within 15	5 feet((3))	((2))	
	Within 20 feet	····· <u>2</u>		
	((Vertical distance of outlet at construction where the horizonta distance to the construction is less than 10 feet))	1	((2))	((2))
<u>1</u> /	Outlets of incinerator flues and a rated gross capacity exceeding above the top of windows or othe horizontal distance of 50 feet.	g 1,000,000 Btu	per hour, shall be	carried

TABLE C 505-5 (continued)

- ((1)) 2/ Where ((roofs are readily accessible to occupants,)) a roof can be reached by a stairway, minimum distance shall be 8 feet.
 - <u>3</u>/ <u>Reduced heights are permitted for gasvents not less than 8 feet from a vertical wall when tested for adequate performance in conformity with generally accepted standards.</u>

C 506 INCINERATORS AND REFUSE CHUTES

C 506-1 General Requirements

b--((Flue-fed incinerators)) Incinerators shall be equipped with means for burning auxiliary fuel in sufficient quantity to assure complete combustion of refuse.

f--Every incinerator shall be connected to a suitable noncombustible chimney, smokestack, or flue. Flue-fed incinerators are **not** permitted.

g--((Incinerator flues)) Chutes ((used also)) for dropping refuse shall be vertical, of noncombustible construction, and shall have a smooth finish on the inside ((,and shall have connections to incinerators arranged)) to provide free passage of refuse without clogging.

C 506-2 Service Openings

b--Service openings shall be equipped with metal, self-closing charging devices of fire-resistive construction as set forth in section ((C 402-4.10j)) <u>C 402-4.11g</u>. ((An incinerator flue used also for dropping refuse shall have charging devices constructed so that openings to the flue are closed while the charging devices are in the open position.)) No part of the charging devices shall project into a refuse chute ((or incinerator flue)).

C 507-1 General Requirements

k--Metal roofs, veneers. and siding on buildings shall be made electrically continuous and shall be grounded as recommended in generally accepted standards.

C 507-2.2 Emergency Lighting and Power

a--Emergency lighting, ((and emergency power)) as set forth in paragraph ((e)) <u>b</u> of this section shall be provided ((for the following occupancy groups:)) <u>in buildings and spaces as indicated in table C 507</u>. ((Group C2, three stories or more in height, having more than 5,000 square feet of floor area on any story, and in belowgrade sales spaces exceeding 2,500 square feet in floor area in buildings of any height. Group C3, when distance of travel to exit is more than 100 feet.)) ((Group C5.1, C5.2, C5.3 and C5.5, in spaces intended for occupancy by two hundred persons or more in one room or enclosure.)) ((Group C6, where there are operating or delivery rooms, or one hundred sleeping rooms or more, or bedridden patients above the first story.)) ((b--Buildings of group C5.4 occupancy used only for religious purposes are not required to be provided with emergency lighting and power.))

b--Emergency lighting shall be adequate to illuminate, under emergency conditions, assembly space, occupied space, public space, exits, elevators, escalators, and spaces containing equipment required to be furnished with emergency power as set forth in paragraph d of this section.

((c--Emergency lighting shall consist of that lighting necessary to illuminate adequately exits, hospital operating and delivery rooms, and public space.)) ((d)) \underline{c} - No Change

((e)) <u>d</u>--Emergency power shall be ((available)) <u>provided</u> for required emergency mechanical ventilation equipment, fire pumps supplying sprinkler systems, industrial processes where current interruption would cause hazards, hospital operating room, mechanical breathing equipment, ((and)) fire protection signal systems, public adress systems used as a means of warning or direction in emergencies ((.)) and heating equipment in group C6.2 and C6.3 occupancies which require emergency lighting.

TABLE C 507---LOCATIONS WHERE EMERGENCY LIGHTING IS REQUIRED

A		Tarahéan
1	Oc c upancy	Location
1	Cl	Buildings 10 or more stories
U	C2	Buildings three stories or more in height, having more than 5000 square feet of floor area on any story
n		Enclosed malls and passageways
11		
đ	C3, C4	In unsprinklered buildings where distance of travel is more than 100 feet
e		
r		In sprinklered buildings where distance of travel is more than
l		200 feet
i	C5.1, C5.2, C5.3, C5.5	In spaces intended for occupancy by two hundred persons or more in
n		one room or enclosure
е	c5.4	In spaces used for other than religious purposes by 200 persons
đ		or more in one room or enclosure
	c6	Where there are operating or de- livery rooms, or one hundred sleep- ing rooms or more, or bedridden pa- tients above the first story
	Cl to C6.3	Windowless buildings or below-grade spaces exceeding 2500 square feet
		Passenger elevators

C 507-2.2 (continued)

((f)) e--Emergency lighting and power shall be furnished through an independent electrical wiring system supplied from a main source, and from an auxiliary source. ((, except that where electric service is obtained from a reliable underground network distribution system, the auxiliary source shall not be required.))

((g--Where a single source of electricity is permitted, the connection for the emergency lighting and power shall be taken on the supply side of the main service disconnect and shall be sufficiently separated from the main service protective device to minimize the possibility of simultaneous interruption of supply.))

((h)) <u>f</u>--((Where an auxiliary source is required, means)) Means shall be provided for automatically transferring the emergency lighting and power supply from the main source to the auxiliary source within 15 seconds in the event of failure of the main source.

- ((i)) <u>g</u>--No change.
- C 508-1.4 Refrigerants

b--Refrigerants that are highly flammable or toxic ((in nature)) shall not be used in buildings of group Cl, C2, C5, or C6 occupancies.

e--Systems containing refrigerants exceeding the limits stated in paragraph c of this section shall be of the indirect type using chilled water or nontoxic, nonflammable brine as the cooling medium, and equipment containing the refrigerant shall be located in a machinery room <u>conforming</u> to the requirements set forth in sections C 508-1.6a, b, and c.

<u>f--Systems containing refrigerants that are flammable or toxic shall be</u> located in a machinery room conforming to the requirements set forth in section C 508-1.6b, c, and d.

C 508-1.6 Machinery Room

a--Machinery room for refrigeration equipment using refrigerants that are nonflammable and nontoxic shall contain ((No apparatus to produce an open flame shall be installed in any required refrigeration machinery room)) no fuel burning equipment unless such ((flame)) equipment is provided with a suitable hood and flue ((equipment that is)) capable of effectively removing the products of combustion to the outer air.

c--Refrigeration machinery rooms ((shall be in conformity with the requirements set forth in section C 402-4.5c, and)) shall have no openings that will permit the passage of escaping refrigerant to other parts of the building. Machinery rooms shall be provided with ventilation in accordance with generally accepted standards.

C 508-1.6 Machinery Room

d--Machinery rooms for refrigeration equipment using refrigerants that are flammable and toxic shall contain no fuel burning equipment, and shall conform to the requirements set forth in sections C 212-ln and C 402-4.6d. Motor control for ((machinery room)) refrigeration and ventilating equipment in such a machinery room shall be located outside the room.

C 508-3.1 General Requirements

b--Systems designed for exhaust ventilation of kitchens, kitchenettes, toilets,garages, ((interior passageways or)) ventilated vestibules ((separating)) for garages and heater rooms,((from buildings,)) and spaces where the exhaust may be toxic or irritating in nature, shall each ((be independent of other systems)) discharge independently to the exterior. ((, except that such systems may be interconnected at a fan located on the roof which serves as a common means of exhaust.))

c--Stairways, ((passageways,)) exits, ((shafts,)) hoistways, ((or)) attics and shafts other than those used exclusively for ventilating purposes, shall not be used as a plenum chamber ((.)) , except that corridors may be used to supply air to toilet rooms and sink closets in any occupancy. In buildings of Cl, C3.1 and C4.1 occupancy not more than two stories in height, corridors may serve as a plenum chamber for adjoining occupied spaces provided air openings are equipped with fire dampers, and safety controls are provided as set forth in section C 508-3.5b.

d--Ducts shall be ((severely)) securely fastened in place, and shall be firestopped as set forth in section C 402-5.

f--Ducts and other air handling equipment shall be of noncombustible material. Material having a flame-spread rating of not over 25 without evidence of continued progressive combustion and a smoke developed rating of not over 50, may be used in accordance with the requirements of generally accepted standards except as set forth in sections C 509e and j.

i--Ducts passing through fire walls shall be equipped with fire dampers as set forth in section ((C 402-4.10g.)) <u>C 402-4.11d</u>. Ducts passing through other fire separations shall be protected as set forth in section ((C 402-4.10g,)) <u>C 402-4.11d</u>, or be provided with other means to prevent the spread of heat, smoke or flame.

1--Ducts shall not be located between fire-protective material and structural members which are individually encased by such material, ((is designed to protect,)) except that ducts are permitted in the concealed space between a continuous ceiling ((of fire-resistive construction)) and beams or joists protected by such ceiling, ((in conformity with section C 402-3d,)) provided that where they pass through fire separations, fire dampers are installed.

C 508-3.3 Ventilation Requirements

((d--Cooking equipment in kitchens serving restaurants or public dining rooms shall be provided with mechanical exhaust systems as set forth in section C 509e, and such systems shall be designed and constructed with openings of size to permit easy inspection and cleaning.))

((e)) <u>d</u> - (No Change)

((f))<u>e</u> - (No Change)

((g)) <u>f</u> - (No Change)

((h))<u>g</u> - (No Change)

TABLE C 508-3.3h.

---MEANS FOR OBTAINING REQUIRED VENTILATION

(See table C 508-3.3i for quantity requirements)

Required ventilation obtained by means of --Ducts connected to wind-Openings and gravity- Mechanical operated ventilating to the Classification of space¹ outer air ventilators equipment All occupancy groups: Ν (No Change) Ν Ν Group C3.2: (No Change) 0 0 0 Group C3.3 С С С (No Change) h h h Group C4: Above-grade (Garage)) garage areas exceeding 5000 square feet, ((located а а а below grade)) below-grade garage areas n exceeding 1000 square feet, and airn n craft hangars..... g g g Group C5: (No Change) е е e Group C6: (No Change) Group C6.2: (No Change)

TABLE C 508-3.3i.

All occupancy groups:

--- MINIMUM VENTILATION REQUIREMENTS

Space¹

4 Amount of Ventilation-

(No change in this column except as shown)

(No Change) Group C1: (No Change) Group C2: Shops, stores display rooms, showrooms, salesrooms and enclosed malls Group C3: (No Change) Group C3.2: (No Change) Group C3.3: (No Change) Group C4: Above-grade ((Garage)) garage areas exceeding 5000 square feet, and aircraft hangars ((:))..... <u>4 air changes per hour</u> ((above-grade))..... ((⁴ air changes per hour)) ((below-grade))..... ((6 air changes per hour)) Below-grade garage areas exceeding 1000 square feet..... <u>6 air changes per hour</u> Group C4.3: (No Change) Group C5: (No Change) Group C6: (No Change) Group C6.2: Morgues, bed pan rooms, sterilizer rooms, laundries, serving pantries, and utility rooms for patients.... 6 air changes per hour Operating rooms or rooms where anaesthetic gases are used²..... 8 air changes per hour Storage rooms for anaesthetic gases ((2)) $\underline{8}$ air changes per hour Group C6.3: (No Change) Footnotes 1, 2, 3 - (No Change)

4 For quality controlled air the amount of the exterior air in the circulating air snall conform to the requirements of section C 508-3.Im. 82.

C 508-3.5 Safety Controls

c--Where a ventilating system is installed in a building that contains a fire alarm, fire-and smoke- detecting or sprinkler system, there shall be provided a control that will automatically stope the ventilating fans when any such fire protection equipment is activated.

d--Every system for ventilating an assembly space shall be provided with an emergency switch conveniently located and with a durable sign giving instructions for shutting down the system in case of fire \underline{or} smoke.

C 508-4 Emergency Ventilation

a--Buildings more than 150 feet in height and buildings without adequate means for natural ventilation shall be provided with ((ventilating equipment)) emergency ventilation designed and installed to operate without recirculation of air in the event of fire. ((. Such equipment shall)), to exhaust smoke and heat from exits to the exterior, and ((shall)) to simultaneously transmit an alarm signal audible to the occupants, or to an approved central station.

C 509 CONVEYING AND REMOVAL SYSTEMS FOR STOCK, DUST, OR VAPORS

e--Equipment producing flammable stock, dust or vapors ((, and cooking equipment in kitchens serving public dining rooms)) shall be provided with mechanical exhaust systems which are not connected with any other exhaust system. Such systems shall be provided with ((fire extinguishing equipment or filters)) <u>noncombustible ducts in</u> <u>accordance with generally accepted standards, and with devices to</u> prevent the entry of flammable materials into ducts, and shall be designed and installed so that in the event of fire within the system the danger of spread to other parts of the building will be minimized. ((, except that in group C3 occupancy, systems producing flammable stock, dust or vapors that operate in an inert gas, automatically controlled, shall not require fire-extinguishing equipment.)) Systems carrying materials which may form explosive mixtures shall be designed and installed to withstand or relieve explosion pressures.

h--Equipment for collecting or storing of flammable stock, dust, or vapors shall be located outside buildings and at a safe distance from combustible construction and building openings, except that such equipment may be installed inside buildings in separate rooms conforming to the requirements for heater rooms in garages as set forth in section ((C 402-4.8d)) C 402-4.9e.

<u>j--Cooking equipment in kitchens serving restaurants or public</u> dining rooms shall be provided with mechanical exhaust systems which are not connected with any other exhaust system. Such systems shall conform to generally accepted standards, and shall be constructed with metal ducts, with openings of size to permit easy inspection and cleaning, with equipment or filters to prevent the entry of flammable materials into ducts, and designed and installed so that in the event of fire within the system the danger of spread to other parts of the building will be minimized. Where such exhaust systems have hoods with a total area exceeding 3 square feet, they shall also be provided with fixed-pipe fire extinguishing systems that are manually and automatically controlled.

C 510-6 Equipment Using Flammable Liquids Inside Buildings

a--Occupied spaces wherein flammable liquids create vapors in concentration greater than one fourth the lower limit of combustibility, shall be provided with fire protection equipment, and shall be ventilated in conformity with sections C 508 and C 509. Heating of such spaces shall conform to the requirements of section ((C 504-2.13)) <u>C 504-2.12</u>; electrical equipment shall conform to the requirements of section C 507-1.

C 511-1 General Requirements

Fire protection equipment shall be provided as set forth in section ((C 405)) C 406, and such required equipment shall be in conformity with the requirements set forth in this section.

C 511-2.1 General Requirements

d--Fire alarm systems required in group C6.2 and C6.3 occupancies shall activate a visible signal on the premises and simultaneously transmit a signal to the local fire department or approved central station. The visible signal shall be installed in an approved location and shall be provided with a durable sign, conspicuously located, directing procedure in the event of fire. Activation of audible alarm signals in the building shall be by authorized persons only.

e ((d)) No change.

<u>f</u> ((e)) No change.

g((f)) No change.

TABLE C 511-2.2d.--MAXIMUM DISTANCE OF TRAVELTO MANUAL FIRE ALARM BOXDistance in feet

			((For other than type 1 Construction))		
Occupancy of fire hazard classification	((For type 1 construction))	With sprinkler system	Without sprinkler system		
Group C6 or high					
hazard	((150))	150	100		
Others	((300))	300	200		

C 511-2.4 Electrical Requirements

a-Fire alarm systems shall be supplied with electrical energy from a main source and, in case of failure of the main source, from an auxiliary source. ((, except that where electric service of three-, four-, or five-wire type is obtained from a reliable underground network distribution system, the auxiliary source shall not be required. Where a single source of electricity is permitted, the connection for the fire alarm system shall be taken on the supply side of the main service disconnect.))

C 511-3 Fire- and Smoke-Detecting Systems

C 511-3.1 General Requirements

a--Fire- and smoke-detecting systems shall conform to the requirements of section C 501, and shall be designed and installed so as to detect ((a)) fire and smoke in its initial stage, ((or to detect a rapid or excessive rise of temperature,)) and automatically to actuate an alarm.

b--The component parts of a fire- and smoke-detecting system shall be designed, made and assembled for fire- and smokedetecting purposes, and shall be reasonable free from false alarm possibilities. In spaces which may contain smoke, dust or products of conbustion and cause false alarms, heat detectors are permitted in lieu of smoke detectors.

c--Fire- and smoke-detecting systems shall be provided with ((fire-detecting)) devices arranged to transmit an alarm signal to sounding devices located throughout the building.

C 511-3.2 Fire- and Smoke-Detecting Devices

Fire- and smoke-detecting devices shall be located so that they are protected from damage and will operate without delay.

C 511-3.3 Manually Operated Fire Alarm Box

Fire- and smoke-detecting systems shall be equipped with at least one manual fire alarm box located in a natural path of escape from fire to provide an auxiliary means of actuating the alarm system. Where practicable, such box shall be located on the grade story near the main exit.

C 511-3.4 Miscellaneous Requirements

In addition to the regulations set forth herein for fire- and <u>smoke-detecting systems</u>, such systems shall also conform to the applicable requirements of sections C 511-2.1, C 511-2.3, C 511-2.4, and C 511-2.5.

C 511-4.3 Sprinkler Heads

f--Luminous ceilings located above or below sprinkler heads shall be installed in conformity with sections ((C 403-3k)) <u>C 403-3h</u> and ((C 403-31)) <u>C 403-3i</u>.

C 511-4.5 Sprinkler Alarm

((b--A sprinkler system installed in lieu of a required fire alarm system shall be equipped with automatic means of sounding an alarm audible throughout the building when there is a flow of water through any sprinkler head, and shall be equipped with at least one manual fire alarm box located in a natural path of escape from fire to provide an auxiliary means for actuating the alarm system.))

((d)) <u>c</u>--((Sprinklers required for the protection of exits, public halls, and stairways, and any sprinkler installation containing more than ten heads, shall be provided)) <u>A required</u> <u>sprinkler system shall be equipped</u> with a local alarm, except as otherwise provided in paragraph a of this section. Local alarm shall function so that the flow of water from the system equal to or greater than that from a single sprinkler head will result in the sounding of an audible alarm signal on the premises.

 $((e)) \underline{d}$ --No change.

C 511-4.8 Special Sprinkler Installation Supplied from the Domestic Water System

((b--Special sprinkler installation shall be permitted only in buildings of group Cl, C3.1 and C4.1 occupancy.))

<u>b</u> ((c)) - No change.

c ((d)) - No change.

<u>d--Special sprinkler installation containing more than ten heads</u> <u>shall be equipped with an automatic local alarm to function as set</u> forth in section C 511-4.5c.

⁽⁽ c)) <u>b</u>--No change.

C 511-5.3 Hose Stations

b--Outlets for hose connections shall be provided ((Hose and equipment)) for first-aid ((or)) and heavy stream fire protection ((where provided)) and shall be arranged so as to permit quick and easy use. ((handling by occupants or trained personnel.))

Where required by authority having jurisdiction and in buildings of group C3, C4, C5.5, C6.2 and C6.3 occupancy, first-aid hose and connection for heavy stream protection shall be provided.

d--<u>Heavy hose connection shall be located in a stairway.</u> ((Where first-)) <u>First-aid fire hose connection or hose</u> ((is located so as not to be conspicuous to the occupants, it)) shall be located in <u>a public corridor</u>. ((spaces which are accessible and unlocked at all times.)) A durable sign, conspicuously located, shall be provided directing attention to the location of such ((fire)) hose stations.

C 511-5.6 Controls

b--In buildings of group C3.3 and C4.3 occupancy, water tanks supplying standpipe systems shall be provided with alarms as required for sprinkler systems in section ((C 511-4.5e)) <u>C 511-4.5d</u>.

C 511-9 Automatic Operation of Doors and Vents

a--Doors and vents requiring smoke detectors for automatic operation shall have magnetic holds released by smoke or other products of combustion, by interruption of electrical power, and by activation of other automatic fire protection equipment. Smoke detectors for door and vent release shall be required to sound an alarm in buildings that are provided with sounding devices.

b--Smoke or heat vents conforming to the requirements of generally accepted standards shall be provided as set forth in section C 406-8b. shall be arranged for manual and automatic release, and shall be actuated by a smoke detector as set forth in paragraph a of this section, or by a fusible link.

C 512-2.1 Hoistway

a--Elevators and dumbwaiters shall be installed in enclosed hoistways construction of noncombustible materials having fireresistance ratings as set forth in table C 202-2 ((for outside exposure)), except for hoistway enclosures of elevators and dumbwaiters which are entirely within one story or which pierce no solid floors and serve two or more open galleries, or the sidewalk elevators having a travel of not more than one story below the grade level.

e--Hoistways of elevators and dumbwaiters shall be provided with natural means for venting smoke and hot gases to the outer air in the event of fire. Such ventilating openings shall conform to the requirements set forth in section ((C 402-4.6)) C 402-4.7.

i--Elevator and dumbwaiter hoistway landing openings shall be provided with opening protectives having fire-resistance ratings as set forth in section ((C 402-4.10.)) C 402-4.11.

- C 512-2.2 Machine Rooms
- (866.2b) a--Power dumbwaiter machinery installed outside the hoistway, and all elevator machinery, shall be enclosed in a room or roof structure. Machine rooms directly connected with the hoistway shall be of construction having fire-resistance ratings as set forth in section ((C 402-4.6m.)) C 402-4.71.
- <u>C 512-2.5</u> Elevator Controls

Buildings more than 150 feet in height shall have manually- and automatically-operated emergency controls for passenger elevators which shall be suitable for use by fire department of other authorized personnel. Such controls shall be capable of operating the car and car doors and prevent their operation by other means. The automatic emergency controls shall be activated by fire- and smokedetectors located in corridors near elevators and installed as recommended for elevators in the generally accepted standards. Such detectors shall not be required to sound an alarm except in buildings that are provided with sounding devices.

- C 512-3.1 Design and Construction
- (866.3a)

h--Escalators, including floor openings, shall be protected by enclosures or other means to retard the spread of fire from story to story. Enclosures shall be constructed in conformity with the requirements set forth in section ((C 402-4.6.)) <u>C 402-4.7</u>.

C 513-2 Conveyors

a--Conveyors for vertical transportation of material, operating through floor openings in buildings of moderate or high hazard classification, shall be enclosed in conformity with the requirements for elevators and dumbwaiters as set forth in section C 512-2.1. In lieu of this, floor openings shall be protected as set forth in sections C 402-4.7c and e.

APPENDIX

Classification of Buildings by Occupancy or Use

C1 - Business

This group includes, but is not limited to, the following: ((Civic administration)) Administration buildings Banks Buildings for ((Broadcasting)) broadcasting and telecasting((stations)) having a capacity of not more than 99 persons Computer and data processing buildings Indoor tennis courts designed for or intended to be used by not more than 99 persons, without seating for spectators Laboratories, other than chemical ((Libraries)) Library buildings having a capacity of not more than 99 persons Office buildings ((Parking lot offices)) Professional offices ((, incidental to other uses)) School administration buildings without classrooms ((Service facilities in connection with the primary occupancies and uses)) Telephone exchanges C2 - Mercantile This group includes, but is not limited to, the following: Auto sales rooms Display rooms Gasoline service stations without maintenance or repair facilities Markets and supermarkets ((Salesrooms)) ((Shops)) Stores, ((retail)) including paint stores without bulk handling facilities ((Stores, wholesale)) C3 - Industrial This group includes, but is not limited to, the following: Manufacturing plants of all kinds ((Assembly plants Mills Creameries Power plants Dry cleaning plants Processing plants Electric substations Pumping stations Electrolytic works Refineries Factories of all kinds Smoke houses Garages with repair facilities Tenant factories Gas plants Industrial and chemical laboratories Waterworks stations Loft buildings Work or repair shops))

APPENDIX

- U A C3.1 - Low Hazard
- L Ν

L

- Car wash facilities D
- Ε Dairy product processing
- R Dry cleaning plants using nonflammable solvents
- Electric substations L
- Electrolytic processing excluding those that generate flammable or toxic gases Ι
- Electronic assembly plants Ν
- Ε Foundries
- Masonry product manufacture D Waterpumping stations Wineries

C3.2 - Moderate Hazard

- A U Aircraft maintenance and repair facilities
- Bakeries \mathbf{L} Ν
- Chemical laboratories and manufacturers other than high hazard L D
 - Commercial laundries Ε
 - Dry cleaning plants using flammable solvents R
 - Metal-working shops requiring volatile or flammable liquids \mathbf{L}
 - Motor vehicle maintenance and repair shops Ι
 - Papermills and sawmills Ν
 - Ε Power generating plants
 - D Woodworking plants excluding furniture manufacture

C3.3 - High Hazard

- U Celluloid, pyroxylin and nitrocellulose products Α
- Explosives and fireworks manufacturing and distributing L Ν
- Flammable dust L D
 - Ε Gasoline plants and plants for flammable gas
 - Oil refineries and oil cracking facilities R
 - Paint and varnish manufacture \mathbf{L}
 - Ι Rooms with high oxygen atmosphere including hospital operating rooms
 - Upholstering facilities Ν
 - Wood furniture manufacture Ε
 - D

C4 - Storage

This group includes, but is not limited to, the following:

((Aircraft hangars	Grain elevators
Bulk oil storage	Lumber yards
Coal pockets	Stock room
Cold storage	Store houses
Freight depots	Tank farm buildings
Garages without repair facilities	Transit sheds
Gasoline bulk stations	Truck and marine terminals
	Warehouses))

APPENDIX

<u>C4.1 - Low Hazard</u>

<u>Cold storage of food products</u> <u>Fire house without assembly space</u> <u>Passenger car storage without maintenance or repair facilities</u> <u>Storage of noncombustible materials</u>

<u>C4.2 - Moderate Hazard</u>

- Aircraft hangars
- U Book storage
- N Firehouse with assembly space
- D Furniture storage, wood
- E Garage with maintenance or repair facilities
- R Grain elevators
- L Lumber storage without facilities for producing chips or dust
- I Paper or cardboard storage, tightly packed
- N Stables or barns within fire limits
- E Truck or commercial garages
- D Warehouse and truck terminals

C4.3 - High Hazard

Buildings wherein flammable chips or dust are produced Gasoline bulk stations including handling facilities Storage of flammable medical gas or hydrogen Wholesale chemical storage

C5 - Assembly

This classification is subdivided into groups, according to the number of persons or the use of the building, as follows:

Group C5.1 for not more than six hundred persons. Group C5.2 for more than six hundred, but not more than fifteen hundred persons.

Group C5.3 for more than fifteen hundred persons.

The above groups, based on number of persons, include but are not limited to, the following:

Amusement park buildings ((of all kinds)) <u>to which the public has access</u> Armories Art galleries Assembly halls Auditoriums Bath houses Bowling alleys Club rooms Coliseums and stadiums Court rooms Dance halls Exhibition halls or buildings

APPENDIX

C5 - Assembly (continued) Grandstands Gymnasiums Indoor tennis courts with seating for spectators Lecture halls Libraries and broadcasting and telecasting stations having a capacity of more than 99 persons Lodge halls or rooms ((Mortuaries)) Mortuary chapels Motion picture theaters Museums Nightclubs Passenger stations and terminals of air, surface, underground and marine public transportation facilities Recreation centers, halls and piers Restaurants ((Shelters of all kinds)) Skating rinks Tents and similar shelters Theaters The following groups include, but are not limited to: Group C5.4 - churches, synagogues, mosques, and similar places of worship Group C5.5 - schools, colleges and similar places of education. C6 - Institutional This classification is subdivided into groups, according to the movement of the occupants, and includes, but is not limited to, the following: ((C6.1 Supervised Dormitories and quarters for employees and staff and for persons whose movements are not limited, domiciled under supervision.)) C6.1 - for persons whose movements are not limited and have a normal sense of perception, as follows: Outpatient clinics without domicilliary facilities Day-care centers for children 3 years of age or over C6.2 ((Restricted)) - for persons whose movements are limited because of illness, physical or mental handicap, (except ((convalescent,)) nursing and old-age homes regulated by the State Building Construction Code applicable to Multiple Dwellings). Examples are as follows: Child caring institutions with overnight sleeping facilities Clinics with sleeping rooms Day ((nurseries)) care centers for children under 3 years of age ((Homes for the ill and infirm)) Hospitals Infirmaries Sanitariums

APPENDIX

C6.3 Detained or Confined Detention homes Houses of correction Jails Mental hospitals Penitentiaries Police lockups Prisons Reformatories C7 - Miscellaneous This group includes, but is not limited to, the following: ((Aerieal antennas, towers and supports)) Boathouses Chimneys, free standing ((Display signs)) ((Dock, pier and wharf, roofed commercial space Farm buildings, within fire limits Greenhouses Mine and quarry change buildings Outbuildings Sheds Shops, accessory to institutional Storm enclosures Water tanks)) Roofed marine terminals Contractors' temporary buildings





2

to and the second

and a start the