CHAPTER 3
USE AND OCCUPANCY CLASSIFICATION

SECTION BC 301
GENERAL

301.1 Scope. The provisions of this chapter shall control the classification of all buildings and structures, and spaces therein, as to use and occupancy.

SECTION BC 302
CLASSIFICATION

302.1 General. Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed below. Structures with multiple uses shall be classified according to Section 302.3. Where a structure, or portion thereof, is proposed for a purpose which is not specifically provided for in this code, such structure, or portion thereof shall be classified in the group which the occupancy most nearly resembles, according to the fire safety and relative hazard involved, and as approved by the commissioner.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5

2. Business (see Section 304): Group B

3. Educational (see Section 305): Group E

4. Factory and Industrial (see Section 306): Groups F-1 and F-2

5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5

6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4

7. Mercantile (see Section 309): Group M

8. Residential (see Section 310): Groups R-1, R-2 and R-3

9. Storage (see Section 311): Groups S-1 and S-2

10. Utility and Miscellaneous (see Section 312): Group U

For a listing of Occupancy Group Classifications that corresponds with uses listed in the Zoning Resolution, refer to department rules.

302.1.1 Incidental use areas. Spaces that are listed in Table 302.1.1 and are incidental to the main occupancy shall be considered incidental use areas. Such spaces shall be separated

or protected, or both, from adjoining occupancies in accordance with Table 302.1.1, or the building shall be classified as a mixed occupancy and comply with Section 302.3. Areas that are incidental to the main occupancy shall be classified in accordance with the main occupancy of the portion of the building in which the incidental use area is located.

Exception: Incidental use areas within and serving a dwelling unit are not required to comply with this section.

TABLE 302.1.1
INCIDENTAL USE AREAS

ROOM OR AREA	SEPARATION[a]
Furnace room where any piece of equipment is over 400,000 Btu per hour input	2 hour; or 1 hour and provide automatic fire-extinguishing system
Furnace room where any piece of equipment is 400,000 Btu per hour input or less, except in R-3 occupancy	1 hour or provide automatic sprinkler system
Rooms with any boiler over 15 psi and 10 horsepower	2 hour; or 1 hour and provide automatic fire-extinguishing system
Rooms with any boiler 15 psi or less and 10 horsepower or less, except in R-3 occupancy	1 hour or provide automatic sprinkler system
Mechanical and/or electrical equipment room, except in R-3 occupancy	1 hour or provide automatic sprinkler system
Refrigerant machinery rooms	1 hour or provide automatic sprinkler system
Parking garage (Section 406.2)	2 hours; or 1 hour and provide automatic fire-extinguishing system
Hydrogen cut-off rooms	2-hour fire barriers and floor/ceiling assemblies in all occupancy groups.
Incinerator rooms	2 hours and automatic sprinkler system
Paint shops, not classified as Group H, located in occupancies other than Group F	2 hours; or 1 hour and provide automatic fire-extinguishing system
Laboratories and vocational shops, not classified as Group H, located in Group E or I-2 occupancies	2 hour; or 1 hour and provide automatic fire-extinguishing system
Laundry rooms over 100 square feet, except within dwelling units	1 hour or provide automatic fire-extinguishing system
Storage rooms over 100 square feet, except in R-3 occupancy	1 hour or provide automatic fire-extinguishing system
Group I-3 cells equipped with padded surfaces	1 hour
Group I-2 waste and linen collection rooms	1 hour
Waste and linen collection rooms over 100 square feet	1 hour or provide automatic fire-extinguishing system
Stationary lead-acid battery systems having a liquid capacity of more than 100 gallons used for facility emergency power or uninterrupted power supplies	2-hour fire barriers and floor/ceiling assemblies in all occupancy groups
Rooms utilizing the electrical installation standards for "information technology rooms" as per Section 645.1 of the *New York City Electrical Code*	As may be required by the *New York City Electrical Code*

For SI: 1 square foot = 0.0929 m2, 1 pound per square inch = 6.9 kPa,
1 British thermal unit = 0.293 watts, 1 horsepower = 746 watts,
1 gallon = 3.785 L.

a. Where an automatic fire-extinguishing system is provided, it need only be provided in the incidental use room or area.

302.1.1.1 Separation. Where Table 302.1.1 requires a fire-resistance-rated separation, the incidental use area shall be separated from the remainder of the building with a fire barrier. Where Table 302.1.1 permits an automatic fire-extinguishing system without a fire barrier, the incidental use area shall be separated by construction capable of resisting the passage of smoke. The partitions shall extend from the floor to the underside of the fire-resistance-rated floor/ceiling assembly or fire-resistance rated roof/ceiling assembly or to the underside of the floor or roof deck above. Doors shall be self-closing or automatic-closing upon detection of smoke. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80.

302.2 Accessory use areas. A room or a space of a different occupancy classification than the main occupancy that is subordinate and secondary to the main occupancy and necessary for the main occupancy to properly function shall be considered an accessory use area.

302.2.1 Separation. All accessory use areas shall be separated from the main occupancy by a fire barrier in accordance with Section 302.3.

Exceptions: The following accessory use spaces do not require a fire barrier from the principal occupancy:

1. Group A spaces with floor area equal to or less than 750 square feet (69.7 m^2) and accessory to any other occupancy.

2. Group A spaces that are accessory to Group E occupancies.

3. Group A religious educational rooms and religious auditoriums with occupant loads of less than 100.

4. Group B, E, F, I, M, R, S, and U spaces that are accessory to another occupancy and where the accessory use area occupies a floor area not more than 10 percent of the area of the story in which it is located and does not exceed the tabular values in Table 503 for the allowable height or area for such use.

5. Groups B and M storage areas complying with footnote b of Table 302.3.2.

TABLE 302.3.2
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)[a]

USE	A-1	A-2	A-3	A-4	A-5	B[b]	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M[b]	R-1	R-2	R-3, R-4	S-1	S-2[c]	U
A-1	—	2	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-2[d]	—	—	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-3	—	—	—	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-4	—	—	—	—	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-5	—	—	—	—	—	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
B[b]	—	—	—	—	—	—	2	3	2	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
E	—	—	—	—	—	—	—	3	2	NP	4	3	2	3	2	2	2	2	2	2	2	2	3	2	1
F-1	—	—	—	—	—	—	—	—	3	NP	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3
F-2	—	—	—	—	—	—	—	—	—	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
H-1	—	—	—	—	—	—	—	—	—	—	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
H-2	—	—	—	—	—	—	—	—	—	—	—	1	2	2	4	4	4	4	2	4	4	4	2	2	1
H-3	—	—	—	—	—	—	—	—	—	—	—	—	1	1	4	3	3	3	1	3	3	3	1	1	1
H-4	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	4	4	4	1	4	4	4	1	1	1
H-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	4	3	1	4	4	4	1	1	3
I-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	2	2	4	3	2
I-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	2	3	2	1
I-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	3	2	1
I-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	3	2	1
M[b]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	3	2	1
R-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	3	2	1
R-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	2	1
R-3, R-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2[d]	1[d]
S-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
S-2[c]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For SI: 1 square foot = 0.0929 m^2.
NP = Not Permitted.

a. See Section 302.3.2 for reductions permitted.

b. Occupancy separation need not be provided for storage areas with Groups B and M if any of the following conditions apply:

1. The storage area is less than 10 percent of the floor area of the story; and less than 3000 square feet (278.7 m^2).

2. The storage area is provided with an automatic fire-extinguishing system and is less than 3,000 square feet (278.7 m^2); or

3. The storage area is less than 1,000 square feet (92.9 m^2).

c. See exception to Section 302.3.2.

d. See Section 406.1.4

e. Commercial kitchens need not be separated from the restaurant seating areas that they serve**,** provided:

1. The cooking equipment is vented directly to the outdoors; and

2. A draft curtain of noncombustible materials, at least 24 inches (610 mm) down from the ceiling, is provided to separate the cooking facilities from the restaurant seating areas; and

3. Sprinkler heads constructed in accordance with the provisions of this code are provided in the kitchen side of the curtain, within 24 inches (610 mm) of the curtain opening, and any other openings including doors between the kitchen and the seating areas, and spaced not more than 48 inches (1210 mm) on center for each opening that is more than 60 inches (1524 mm) wide.

302.3 Mixed occupancies. Where a building is occupied by two or more uses not included in the same occupancy classification, the building or portion thereof shall comply with Section 302.3.1 or 302.3.2 or a combination of these sections.

Exceptions:

1. Occupancies separated in accordance with Section 508.

2. Areas of Group H-2, H-3, H-4 or H-5 occupancies shall be separated from any other occupancy in accordance with Section 302.3.2.

3. Where required by Table 415.3.2, areas of Group H-1, H-2 or H-3 occupancy shall be located in a separate and detached building or structure.

4. Accessory use areas in accordance with Section 302.2.

5. Incidental use areas in accordance with Section 302.1.1.

302.3.1 Nonseparated occupancies. Each portion of the building shall be individually classified as to occupancy.

The required type of construction for the entire building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

All other code requirements shall apply to each portion of the building based on the occupancy of that space except that the most restrictive applicable provisions of Section 403 and Chapter 9 shall apply to these nonseparated occupancies. Fire separations are not required between occupancies, except as required by other provisions.

302.3.2 Separated occupancies. Each portion of the building shall be individually classified as to occupancy and shall be completely separated from adjacent areas by vertical or horizontal fire barriers having a fire-resistance rating determined in accordance with Table 302.3.2 for occupancies being separated. Where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the fire-resistance ratings in Table 302.3.2 are permitted to be reduced by 1 hour, but in no case shall be less than that required for floor construction according to the type of construction, or less than 1 hour, whichever is higher. However, fire barriers separating Group H and I-2 occupancies shall not be permitted any reductions in fire-resistance ratings.

Each fire area shall comply with this code based on the occupancy of that space. Each fire area shall comply with the height limitations based on the occupancy of that space and

the type of construction classification. In each story, the building area shall be such that the sum of the ratios of the floor area of each occupancy divided by the allowable area for each occupancy shall not exceed one.

302.4 Spaces used for different purposes. A room or space that is intended to be occupied at different times for different purposes shall comply with all the requirements that are applicable to each of the purposes for which the room or space will be occupied.

302.5 Separation of different tenancies. Spaces or dwelling units occupied by different tenants shall be separated by fire barriers having at least 1-hour fire resistance rating.

Exceptions:

1. Non-residential spaces occupied by different tenants located in buildings that are sprinklered throughout.

2. Tenant spaces in covered mall buildings complying with Section 402.

SECTION BC 303
ASSEMBLY GROUP A

303.1 Assembly Group A. Assembly Group A occupancy includes, among others, the use of a building or structure or a portion thereof, excluding a dwelling unit, for the gathering together of any number of persons for purposes such as civic, social or religious functions, recreation, food or drink consumption, awaiting transportation, or similar group activities; or when occupied by 75 persons or more for educational or instructional purposes.

Exceptions:

1. A room or space used for assembly purposes by fewer than 75 persons and accessory to another occupancy shall be included as a part of that occupancy

2. A building or non-accessory tenant space used for assembly purposes by fewer than 75 persons shall be considered a Group B occupancy.

Assembly occupancies shall include the following:

A-1 Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:

Motion picture theaters
Symphony and concert halls
Television and radio studios admitting an audience
Theaters

A-2 Assembly uses intended for food and/or drink consumption including, but not limited to:

- Banquet halls
- Cabarets
- Cafeterias, except as provided for in A-3
- Dance halls
- Night clubs
- Restaurants
- Taverns and bars

A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

- Amusement arcades
- Art galleries
- Bowling alleys
- Cafeterias for children up to and including the 12th grade
- Classrooms and instructional rooms with 75 persons or more; such rooms with fewer than 75 persons shall be classified as Group B or E
- Community halls
- Courtrooms
- Custodial care facilities with 75 or more persons, providing care to persons over the age of 2, where no more than four occupants are incapable of responding to an emergency situation without physical assistance from staff
- Dance studio or instruction (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Houses of worship
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Museums
- Waiting areas in transportation terminals
- Pool and billiard parlors
- School auditoriums

A-4 Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

A-5 Assembly uses intended for participation in or viewing outdoor activities including, but

not limited to:
Amusement park structures
Bleachers
Grandstands
Stadiums

303.2 Certificate of Operation. A Certificate of Operation shall be required, as per Section 28-117.1, for the following places of assembly:

1. Indoor places of assembly used or intended for use by 75 persons or more, including open spaces at 20 feet (6096 mm) or more above or below grade, such as roofs or roof terraces.

2. Outdoor places of assembly used and intended for use by 200 persons or more.

SECTION BC 304
BUSINESS GROUP B

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional, service-type transactions, or for conducting public or civic services, including the incidental storage of records and accounts and the incidental storage of limited quantities of stocks of goods for office use or purposes. Business Group B occupancies shall include, but not be limited to, the following:

Airport traffic control towers
Animal hospitals, kennels and pounds
Banks
Barber and beauty shops
Civic administration offices
Clinic—outpatient, including group medical centers, and neighborhood family care centers
Custodial care facilities with fewer than 75 persons, providing care to persons over the age of 2, where no more than four occupants are incapable of responding to an emergency situation without physical assistance from staff
Dry cleaning and laundries; pick-up and delivery stations and self-service
Educational occupancies above the 12th grade, where not classified in Group A. Such occupancy may be used occasionally for educational purposes offered to children through the 12th grade
Electronic data processing
Laboratories; non-production testing and research, as per Section 419
Libraries when not classified in Group E
Motor vehicle showrooms
Offices
Post offices
Photocopying and printing shops using electronic printing equipment

Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
Radio and television stations not admitting an audience
Telephone exchanges

SECTION BC 305
EDUCATIONAL GROUP E

305.1 Educational Group E. Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by five or more persons at any one time for educational purposes offered to children through the 12th grade and where no more than two children are under the age of 2, including but not limited to, the following:

Academies
Day care facilities where no more than two children are under the age of 2
Libraries accessory to Group E occupancies
Schools

Exceptions:

1. Classrooms and instructional rooms with 75 or more persons shall be classified as Group A-3.

2. Day care services provided within a dwelling unit as described in Section 310.

3. Custodial care facilities with up to 30 children under the age of 2 are permitted to be classified as Group E when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior.

305.2 Reserved.

SECTION BC 306
FACTORY GROUP F

306.1 Factory Industrial Group F. Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair, cleaning, laundering or processing operations that are not classified as a Group H hazardous occupancy.

306.2 Factory Industrial F-1 Moderate-Hazard Occupancy. Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Aircraft

Aircraft repairs
Automobiles and other motor vehicles, manufacturing
Automobiles and other motor vehicles, repairs
Bakeries
Beverages; alcoholic
Boats
Boat repairs
Brooms or brushes
Canvas or similar fabric
Carpets and rugs
Carpets and rugs, cleaning, using or storing solvents having a flash point between 100°F (38°C) and 138.2°F (59°C) (Tag. Closed-cup)
Clothing
Disinfectants
Dry cleaning and dyeing using or storing solvents having a flash point between 100°F (38°C) and 138.2°F (59°C) (Tag. Closed-cup)
Electric generation plants
Engines (including rebuilding)
Food processing, except meat slaughtering or preparation of fish for packing
Furniture
Hemp products
Jute products
Laboratories; for production (moderate-hazard), that may involve the synthesis or storage of materials that constitute a physical or health hazard in quantities below those found in Tables 307.7(1) and 307.7(2)
Leather products
Metals; finishing, plating, grinding, sharpening, polishing, cleaning, rustproofing, heat treatment, or similar processes
Millwork (sash & door)
Motion pictures filming (without spectators)
Musical instruments
Optical goods
Paper mills or products
Photographic film
Plastic products
Printing or publishing
Recreational vehicles
Refuse incineration
Shoes
Soaps and detergents
Textiles
Tobacco
Trailers
Upholstering

Wood; distillation
Woodworking (cabinet) using no more than 2 quarts (1.9 L) per day or storing no more than 20 gallons (75.7 L) of paint, varnish, lacquer or shellac

306.3 Factory Industrial F-2 Low-Hazard Occupancy. Factory industrial uses that involve the cleaning, laundering, fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

Appliances
Athletic equipment
Automobile laundries
Automobile wrecking establishments
Beverages; bottling works
Beverages; non-alcoholic
Bicycles
Brick and masonry
Business machines
Cameras and photo equipment
Carpets and rugs, cleaning, using or storing solvents having a flash point above 138.2°F (59°C) (Tag. closed-cup)
Ceramic products
Construction and agricultural machinery
Dry cleaning and dyeing using or storing solvents having a flash point above 138.2°F (59°C) (Tag. closed-cup)
Electronics
Food processing; meat slaughtering or preparation of fish for packing
Foundries
Glass products
Gypsum
Ice
Laboratories; for production (low-hazard), that may involve the synthesis or storage of materials that constitute a physical or health hazard in quantities below those found in Tables 307.7(1) and 307.7(2)
Laundries
Machinery
Metal products (fabrication and assembly), not including flammable metals and alloys listed in Section 307
Plastic products; non-flammable
Printing; incidental to primary use, area not exceeding 2,000 square feet (185.8 m^2)
Television filming (without spectators)

306.4 Location restrictions. Locations of spaces classified in Factory Group F may be restricted within a building containing a Group R occupancy pursuant to Section 508.8

SECTION BC 307
HIGH-HAZARD GROUP H

307.1 High-Hazard Group H. High-Hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those found in Tables 307.7(1) and 307.7(2) (see also definition of "Control area").

Exception: Laboratories for non-production testing, research, experimental, instructional or educational purposes, in compliance with Section 419.

307.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

AEROSOL. A product that is dispensed from an aerosol container by a propellant.

Aerosol products shall be classified by means of the calculation of their chemical heats of combustion and shall be designated Level 1, 2 or 3.

Level 1 aerosol products. Those with a total chemical heat of combustion that is greater than 0 and less than or equal to 8,600 British thermal units per pound (Btu/lb) (20 kJ/g).

Level 2 aerosol products. Those with a total chemical heat of combustion that is greater than 8,600 Btu/lb (20 kJ/g), but less than or equal to 13,000 Btu/lb (30 kJ/g).

Level 3 aerosol products. Those with a total chemical heat combustion that is greater than 13,000 Btu/lb (30 kJ/g).

BARRICADE. A structure or other artificial or natural barrier constructed in connection with the storage, handling and use of explosives that provides a shield from the impact of such explosion. A straight line from the top of any sidewall of a building containing explosives to the eave line of any magazine or other building or to a point 12 feet (3658 mm) above the center of a railway or highway shall pass through such barrier.

Artificial barricade. An artificial mound or revetment, including a barrier constructed of sandbags, with a minimum thickness of 3 feet (914 mm).

Natural barricade. Terrain or other natural features of the ground.

BOILING POINT. The temperature at which the vapor pressure of a liquid equals the atmospheric pressure of 14.7 pounds per square inch (psi) (101 kPa) gage or 760 mm of mercury. Where an accurate boiling point is unavailable for the material in question, or for mixtures which do not have a constant boiling point, for the purposes of this classification, the

20-percent evaporated point of a distillation performed in accordance with ASTM D 86 shall be used as the boiling point of the liquid.

CLOSED SYSTEM. The use of a solid or liquid hazardous material involving a closed vessel or system that remains closed during normal operations where vapors emitted by the product are not liberated outside of the vessel or system and the product is not exposed to the atmosphere during normal operations; and all uses of compressed gases. Examples of closed systems for solids and liquids include product conveyed through a piping system into a closed vessel, system or piece of equipment.

COMBUSTIBLE DUST. Finely divided solid material that is 420 microns or less in diameter, will pass through a U.S. standard No. 40 sieve and, when dispersed in air in insufficient concentrations, can be ignited by a flame, spark or other source of ignition.

COMBUSTIBLE FIBERS. Readily ignitable and free-burning fibers, such as cocoa fiber, cotton, excelsior, hay, hemp, henequen, istle, jute, kapok, oakum, sisal, Spanish moss, straw, tow, wastepaper or other natural or synthetic fibers that possess such qualities.

Exception: Moss used for medicinal purposes.

COMBUSTIBLE LIQUID. For the purposes of transportation, a combustible liquid as defined by the United States Department of Transportation. For all other purposes, a liquid, other than a compressed gas or cryogenic fluid, having a closed cup flash point at or above 100°F (38°C classified as follows:

Class II. Liquids having a closed cup flash point at or above 100°F (38°C) and below 140°F (60°C).

Class IIIA. Liquids having a closed cup flash point at or above 140°F (60°C) and below 200°F (93°C).

Class IIIB. Liquids having a closed cup flash point at or above 200°F (93°C).

COMPRESSED GAS. A material, or mixture of materials which is a gas at 68°F (20°C) or less at 14.7 psia (101 kPa) of pressure; and has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa) that is either liquefied, nonliquefied or in solution at that temperature and pressure, except those gases which have no other health- or physical-hazard properties are not considered to be compressed until the pressure in the packaging exceeds 41 psia (28 kPa) at 68°F (20°C). Compressed gases shall be classified as follows:

Nonliquefied compressed gases. Gases, other than those in solution, which are in a packaging under the charged pressure and are entirely gaseous at a temperature of 68°F (20°C).

Liquefied compressed gases. Gases that, in a packaging under the charged pressure, are partially liquid at a temperature of 68°F (20°C).

Compressed gases in solution. Nonliquefied gases that are dissolved in a solvent.

Compressed gas mixtures. A mixture of two or more compressed gases contained in a single packaging, the hazard properties of which are represented by the properties of the mixture as a whole.

CONTROL AREA. Spaces within a building that are enclosed and bounded by exterior walls, fire walls, fire barriers and roofs, or a combination thereof, where quantities of hazardous materials not exceeding the maximum allowable quantities per control area are stored, handled, or used, including any dispensing.

CORROSIVE MATERIAL. A material that causes full thickness destruction of human skin at the site of contact within specified periods of time when tested by methods described in DOTn 49 CFR § 173.136 and 173.137. Liquid that has a severe corrosion rate on steel or aluminum based on the criteria in DOTn 49 CFR § 173.173(c)(2) is also a corrosive material.

CRYOGENIC FLUID. A liquid having a boiling point lower than -150°F (-101°C) at 14.7 pounds per square inch absolute (psia) (an absolute pressure of 101 kPa).

DEFLAGRATION. An exothermic reaction, such as the extremely rapid oxidation of a flammable dust or vapor in air, in which the reaction progresses through the unburned material at a rate less than the velocity of sound. A deflagration can have an explosive effect.

DETACHED BUILDING. A separate single-story building, without a basement or crawl space, used for the storage or use of hazardous materials and located at an approved distance from other buildings and structures.

DETONATION. An exothermic reaction characterized by the presence of a shock wave in the material which establishes and maintains the reaction. The reaction zone progresses through the material at a rate greater than the velocity of sound. The principal heating mechanism is one of shock compression. Detonations have an explosive effect.

DISPENSING. The pouring or transferring of any material from a container, tank or similar vessel, whereby dusts, fumes, mists, vapors, or gases are liberated to the atmosphere.

EXPLOSIVE. Any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, igniters and display fireworks, 1.3G (Class B, Special).

The term “explosive” includes any material determined to be within the scope of 18 USC Chapter 40, as amended, and also includes any material classified as an explosive other than consumer fireworks, 1.4G (Class C, Common) by the hazardous materials regulations of DOTn 49 CFR.

High explosive. Explosive material, such as dynamite, which can be caused to detonate by means of a No. 8 test blasting cap when unconfined.

Low explosive. Explosive material that will burn or deflagrate when ignited. It is characterized by a rate of reaction that is less than the speed of sound. Examples of low explosives include, but are not limited to, black powder; safety fuse; igniters; igniter cord; fuse lighters; fireworks, 1.3G (Class B, Special) and propellants, 1.3C.

UN/DOTn Class 1 explosives. The former classification system used by DOTn included the terms “high” and “low” explosives as defined herein. The following terms further define explosives under the current system applied by DOTn for all explosive materials defined as hazard Class 1 materials. Compatibility group letters are used in concert with the division to specify further limitations on each division noted (i.e., the letter G identifies the material as a pyrotechnic substance or article containing a pyrotechnic substance and similar materials).

Division 1.1. Explosives that have a mass explosion hazard. A mass explosion is one which affects almost the entire load instantaneously.

Division 1.2. Explosives that have a projection hazard but not a mass explosion hazard.

Division 1.3. Explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.

Division 1.4. Explosives that pose a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.

Division 1.5. Very insensitive explosives. This division is comprised of substances that have a mass explosion hazard, but that are so insensitive there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.

Division 1.6. Extremely insensitive articles which do not have a mass explosion hazard. This division is comprised of articles that contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

FIREWORKS. Any composition or device for the purpose of producing a visible or audible effect for entertainment purposes by combustion, deflagration or detonation that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein.

FIREWORKS, 1.3G. (Formerly Class B, Special Fireworks.) Large fireworks devices, which are explosive materials, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as fireworks, 49 CFR pt. 172 by the DOTn.

FIREWORKS, 1.4G. (Formerly Class C, Common Fireworks.) Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for fireworks, 49 CFR pt. 172, and the U.S. Consumer Product Safety Commission (CPSC) as set forth in 16 CFR pts. 1500 and 1507, are not explosive materials for the purpose of this code.

FLAMMABLE GAS. A material which is a gas at 68°F (20°C) or less at 14.7 pounds per square inch absolute (psia) (101 kPa) of pressure (a material that has a boiling point of 68°F (20°C) or less at 14.7 psia (101 kPa)) which:

1. Is ignitable at 14.7 psia (101 kPa) when in a mixture of 13 percent or less by volume with air; or

2. Has a flammable range at 14.7 psia (101 kPa) with air of at least 12 percent, regardless of the lower limit.

The limits specified shall be determined at 14.7 psia (101 kPa) of pressure and a temperature of 68°F (20°C) in accordance with ASTM E 681.

FLAMMABLE LIQUEFIED GAS. A liquefied compressed gas which, under a charged pressure, is partially liquid at a temperature of 68°F (20°C) and which is flammable.

FLAMMABLE LIQUID. For the purposes of transportation, a combustible liquid as defined by the United States Department of Transportation. For all other purposes, a liquid, other than a compressed gas or cryogenic fluid, having a closed cup flash point below 100°F (38°C) classified as follows:

Class IA. Liquids having a flash point below 73°F (23°C) and a boiling point below 100°F (38°C).

Class IB. Liquids having a flash point below 73°F (23°C) and a boiling point at or above 100°F (38°C).

Class IC. Liquids having a flash point at or above 73°F (23°C) and below 100°F (38°C)

FLAMMABLE MATERIAL. A material capable of being readily ignited from common sources of heat or at a temperature of 600°F (316°C) or less.

FLAMMABLE SOLID. A solid, other than a blasting agent or explosive, that is capable of causing fire through friction, absorption or moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which has an ignition temperature below 212°F (100°C) or which burns so vigorously and persistently when ignited as to create a serious hazard. A chemical shall be considered a flammable solid as determined in accordance with the test method of 16 CFR pt. 1500.44, if it ignites and burns with a self-sustained flame at a rate greater than 0.1 inch (2.5 mm) per second along its major axis. This shall include flammable metals, which are flammable pure metals or their flammable alloys.

FLASH POINT. The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion. The flash point of a liquid shall be determined by appropriate test procedure and apparatus as specified in ASTM D 56, ASTM D 93 or ASTM D 3278.

HANDLING. The movement of a material in its container, the removal of the material from its container, or any other action or process that may affect the material, other than its storage or use.

HAZARDOUS MATERIALS. Those chemicals or substances that are physical hazards or health hazards as defined and classified in this section and the *New York City Fire Code*, whether the materials are in usable or waste condition.

HEALTH HAZARD. A classification of a chemical for which there is statistically significant evidence that acute or chronic health effects are capable of occurring in exposed persons. The term "health hazard" includes chemicals that are toxic or highly toxic, and corrosive.

HIGHLY TOXIC MATERIAL. A material that is lethal at the following doses or concentrations:

1. A chemical that has a median lethal dose (LD50) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each**;** or

2. A chemical that has a median lethal dose (LD50) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death

occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each**;** or

3. A chemical that has a median lethal concentration (LC50) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

INCOMPATIBLE MATERIALS. Materials that, if mixed or combined, could explode, generate heat, gases or other byproducts, or react in such a way hazardous to life or property.

OPEN SYSTEM. The use of a solid or liquid hazardous material involving a vessel or system that is continuously open to the atmosphere during normal operations and where vapors are liberated, or the product is exposed to the atmosphere during normal operations. Examples of open systems for solids and liquids include dispensing from or into open beakers or containers, dip tank and plating tank operations.

ORGANIC PEROXIDE. An organic compound having a double oxygen or peroxy (-O-O-) in its chemical structure. Organic peroxides can pose an explosion hazard (detonation or deflagration), can be shock sensitive, or can be susceptible to decomposition into various unstable compounds over an extended period of time and are classified as follows based upon their hazardous properties:

Class I. Organic peroxides that are capable of deflagration but not detonation.

Class II. Organic peroxides that burn very rapidly and that pose a moderate reactivity hazard.

Class III. Organic peroxides that burn rapidly and that pose a moderate reactivity hazard.

Class IV. Organic peroxides that burn in the same manner as ordinary combustibles and that pose a minimal reactivity hazard.

Class V. Organic peroxides that burn with less intensity than ordinary combustibles or do not sustain combustion and that pose no reactivity hazard.

Unclassified detonable. Organic peroxides that are capable of detonation and pose an extremely high explosion hazard through rapid explosive decomposition.

OXIDIZER. A material that readily yields oxygen or other oxidizing gas, such as bromine, chlorine and fluorine, or that readily reacts to promote or initiate combustion of combustible materials classified as follows:

Class 1. An oxidizer whose primary hazard is that it slightly increases the burning rate but which does not cause spontaneous ignition when it comes in contact with combustible materials.

Class 2. An oxidizer that will cause a moderate increase in the burning rate or that causes spontaneous ignition of combustible materials with which it comes in contact.

Class 3. An oxidizer that will cause a severe increase in the burning rate of combustible materials with which it comes in contact or that will undergo vigorous self-sustained decomposition due to contamination or exposure to heat.

Class 4. An oxidizer that can undergo an explosive reaction due to contamination or exposure to thermal or physical shock. Additionally, the oxidizer will enhance the burning rate and can cause spontaneous ignition of combustibles.

OXIDIZING GAS. A gas that can support and accelerate combustion of other materials.

PHYSICAL HAZARD. A chemical for which there is evidence that it is a combustible liquid, compressed gas, cryogenic, explosive, flammable gas, flammable liquid, flammable solid, organic peroxide, oxidizer, pyrophoric or unstable (reactive) or water-reactive material.

PYROPHORIC MATERIAL. A material with an autoignition temperature in air, at or below a temperature of 130°F (54°C).

PYROTECHNIC COMPOSITION. A chemical mixture that produces visible light displays or sounds through a self-propagating, heat-releasing chemical reaction which is initiated by ignition.

STANDARD CUBIC FEET (SCF). Cubic feet of gas at normal temperature and pressure (NTP).

TOXIC MATERIAL. A chemical that is lethal at the following doses or concentrations:

1. A chemical that has a median lethal dose (LD50) of more than 50 milligrams per kilogram, but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each**;** or

2. A chemical that has a median lethal dose (LD50) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2 and 3 kilograms each**;** or

3. A chemical that has a median lethal concentration (LC50) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more

than 2 milligrams per liter but not more than 20 milligrams per liter of mist, fume or dust, when administered by continuous inhalation for 1 hour (or less if death occurs within 1 hour) to albino rats weighing between 200 and 300 grams each.

Exception: For purposes of this code, chlorine shall be classified as a highly toxic material.

UNSTABLE (REACTIVE) MATERIAL. A material, other than an explosive, which in the pure state or as commercially produced, will vigorously polymerize, decompose, condense or become self-reactive and undergo other violent chemical changes, including explosion, when exposed to heat, friction or shock, or in the absence of an inhibitor, or in the presence of contaminants, or in contact with incompatible materials. Unstable (reactive) materials are shall be classified as follows:

Class 1. Materials that in themselves are normally stable but which can become unstable at elevated temperatures and pressure.

Class 2. Materials that in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This class includes materials that can undergo chemical change with rapid release of energy at normal temperatures and pressures, and that can undergo violent chemical change at elevated temperatures and pressures.

Class 3. Materials that in themselves are capable of detonation or of explosive decomposition or explosive reaction but which require a strong initiating source or which must be heated under confinement before initiation. This class includes materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures.

Class 4. Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures. This class includes materials that are sensitive to mechanical or localized thermal shock at normal temperatures and pressures.

WATER-REACTIVE MATERIAL. A material that explodes; violently reacts; produces flammable, toxic or other hazardous gases; or evolves enough heat to cause self-ignition or ignition of nearby combustibles upon exposure to water or moisture. Water-reactive materials shall be classified as follows:

Class 1. Materials that may react with water with some release of energy, but not violently.

Class 2. Materials that may form potentially explosive mixtures with water.

Class 3. Materials that react explosively with water without requiring heat or confinement.

307.3 High-Hazard Group H-1. Buildings and structures which contain materials that present a detonation hazard shall be classified as Group H-1. Such materials shall include, but not be limited to, the following:

Explosives:

Division 1.1
Division 1.2
Division 1.3

Exception: Materials that are used and maintained in a form where either confinement or configuration will not elevate the hazard from a mass fire to mass explosion hazard shall be allowed in H-2 occupancies.

Division 1.4

Exception: Articles, including articles packaged for shipment, that are not regulated as an explosive under Bureau of Alcohol, Tobacco and Firearms regulations, or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles shall be allowed in H-3 occupancies.

Division 1.5
Division 1.6

Organic peroxides, unclassified detonable
Oxidizers, Class 4
Unstable (reactive) materials, Class 3 detonable and Class 4
Pyrophoric materials, detonable
Water-reactive materials, Class 2 and 3, detonable

No part of this section shall be construed to authorize the manufacture, storage, sale or use of explosives, including fireworks, if otherwise prohibited by the *New York City Fire Code* and unless in compliance with the requirements of the *New York City Fire Code*.

307.4 High-Hazard Group H-2. Buildings and structures which contain materials that present a deflagration hazard or a hazard from accelerated burning shall be classified as Group H-2. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids which are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 psi (103.4 kPa) gage.

Combustible dusts
Cryogenic fluids, flammable

Flammable gases
Organic peroxides, Class I
Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 psi (103.3 kPa) gage
Pyrophoric liquids, solids and gases, nondetonable
Unstable (reactive) materials, Class 3, nondetonable
Water-reactive materials, Class 3, nondetonable

No part of this section shall be construed to authorize an LPG-distribution facility if otherwise prohibited by the *New York City Fire Code*.

307.5 High-Hazard Group H-3. Buildings and structures that contain materials that readily support combustion or present a physical hazard shall be classified as Group H-3. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids which are used or stored in normally closed containers or systems pressurized at less than 15 psi (103 kPa) gage.
Combustible fibers
Cryogenic fluids, oxidizing
Flammable solids
Organic peroxides, Classes II and III
Oxidizers, Classes 1 and 2
Oxidizing gases
Unstable (reactive) materials, Class 2
Water-reactive materials, Class 2, nondetonable

307.6 High-Hazard Group H-4. Buildings and structures which contain materials that are health hazards shall be classified as Group H-4. Such materials shall include, but not be limited to, the following:

Corrosives
Highly toxic materials
Toxic materials

307.7 Group H-5 structures. Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.7(1) and 307.7(2). Such facilities and areas shall be designed and constructed in accordance with Section 415.9.

TABLE 307.7(1)
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD[a, j, m, n, q]

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE[b]			USE-CLOSED SYSTEMS[b]			USE-OPEN SYSTEMS[b]	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas SCF	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas SCF	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible liquid[c, i, r]	II IIA IIIB	H-2 or H-3 H-2 or H-3 N/A	N/A	120[d, e] 330[d, e] 13,200[e, f]	N/A	N/A	120[d] 330[d] 13,200[e, f]	N/A	N/A	30[d] 80[d] 3,300[f]
Combustible fiber	Loose Baled	H-3	(100) (1,000)	N/A	N/A	(100) (1,000)	N/A	N/A	(20) (200)	N/A
Cryogenics flammable	N/A	H-2	N/A	45[d]	N/A	N/A	45[d]	N/A	N/A	10[d]
Cryogenics, oxidizing	N/A	H-3	N/A	45[d]	N/A	N/A	45[d]	N/A	N/A	10[d]
Explosives	Division 1.1 Division 1.2 Division 1.3 Division 1.4 Division 1.4G Division 1.5 Division 1.6	H-1 H-1 H-1 or 2 H-3 H-3 H-1 H-1	1[e, g] 1[e, g] 5[e, g] 50[e, g] 125[d, e] 1[e, g] 1[d, e, g]	(1)[e, g] (1)[e, g] (5)[e, g] (50)[e, g] N/A (1)[e, g] N/A	N/A N/A N/A N/A N/A N/A N/A	0.25[g] 0.25[g] 1[g] 50[g] N/A 0.25[g] N/A	(0.25)[g] (0.25)[g] (1)[g] (50)[g] N/A (0.25)[g] N/A	N/A N/A N/A N/A N/A N/A N/A	0.25[g] 0.25[g] 1[g] N/A N/A 0.25[g] N/A	(0.25)[g] (0.25)[g] (1)[g] N/A N/A (0.25)[g] N/A
Flammable gas	Gaseous liquefied	H-2	N/A	N/A 30[d, e]	1,000[d, e] N/A	N/A	N/A 30[d, e]	1,000[d, e] N/A	N/A	N/A
Flammable liquid[c, k]	IA[o] IB and IC	H-2 or H-3	N/A	30[d, e] 120[d, e]	N/A	N/A	30[d] 120[d]	N/A	N/A	10[d] 30[d]
Combination flammable Liquid (IA[o], IB, IC)	N/A	H-2 or H-3	N/A	120[d, e, h]	N/A	N/A	120[d, h]	N/A	N/A	30[d, h]
Flammable solid Pigs, ingots, billets, heavy castings Light castings, light metallic products Scraps, shavings, powders, dusts	N/A	H-3	1,000[d, e] 125[d, e] 1[d, e]	N/A	N/A	1,000[d] 125[d] 1[d]	N/A	N/A	1,000[d] 125[d] 1[d]	N/A
Organic peroxide[p]	Unclassified Detonable I II III IV V	H-1 H-2 H-3 H-3 N/A N/A	1[e, f] 5[d, e] 50[d, e] 125[d, e] NL NL	(1)[e, g] (5)[d, e] (50)[d, e] (125)[d, e] NL NL	N/A N/A N/A N/A N/A N/A	0.25[g] 1[d] 50[d] 125[d] NL NL	(0.25)[g] (1) (50)[d] (125)[d] NL NL	N/A N/A N/A N/A N/A N/A	0.25[g] 1[d] 10[d] 25[d] NL NL	(0.25)[g] (1)[d] (10)[d] (25)[d] NL NL
Oxidizer	4 3[k] 2 1	H-1 H-2 H-3 H-3	1[e, g] 10[d, e] 250[d, e] 4,000[e, f]	(1)[e, g] (10)[d, e] (250)[d, e] (4,000)[e, f]	N/A N/A N/A N/A	0.25[g] 2[d] 250[d] 4,000[f]	(0.25)[g] (2)[d] (250)[d] (4,000)[f]	N/A N/A N/A N/A	0.25[g] 2[d] 50[d] 1,000[f]	(0.25)[g] (2)[d] (50)[d] (1,000)[f]
Oxidizing gas	Gaseous liquefied	H-3	N/A N/A	N/A 15[d, e]	1,500[d, e] N/A	N/A N/A	N/A 15[d, e]	1,500[d, e] N/A	N/A N/A	N/A N/A

TABLE 307.7(1)—continued
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD[a, j, m, n, q]

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE[b]			USE-CLOSED SYSTEMS[b]			USE-OPEN SYSTEMS[b]	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)
Pyrophoric material[p] detonable	N/A	H-1	1[e, g]	(1)[e, g]	10[e, g]	0.25[g]	(0.25)[g]	2[e, g]	0	0
Pyrophoric material[p] nondetonable	N/A	H-2	4[e, g]	(4)[e, g]	50[e, g]	1[g]	(1)[g]	10[e, g]	0	0
Unstable (reactive)[p] detonable	4	H-1	1[e, g]	(1)[e, g]	10[d, g]	0.25[g]	(0.25)[g]	2[e, g]	0.25[g]	(0.25)[g]
	3	H-1	1[e, g]	(1)[e, g]	10[d, g]	0.25[g]	(0.25)[g]	2[e, g]	0.25[g]	(0.25)[g]
Unstable (reactive)[p] nondetonable	4	H-1	1[e, g]	(1)[e, g]	10[d, g]	0.25[g]	(0.25)[g]	2[e, g]	0.25[g]	(0.25)[g]
	3	H-1 or H-2	5[d, e]	(5)[d, e]	50[d, e]	1[d]	(1)	10[d, e]	1[d]	(1)[d]
	2	H-3	50[d, e]	(50)[d, e]	250[d, e]	50[d]	(50)[d]	250[d, e]	10[d]	(10)[d]
	1	N/A	NL	NL	750[d, e]	NL	N/L	NL	NL	NL
Water-reactive[p] detonable	3	H-1	1[e, g]	(1)[e, g]	N/A	0.25[g]	(0.25)[g]	N/A	0.25[g]	(0.25)[g]
	2	H-1	1[e, g]	(1)[e, g]	N/A	0.25[g]	(0.25)[g]	N/A	0.25[g]	(0.25)[g]
Water-reactive[p] nondetonable	3	H-2	5[d, e]	(5)[d, e]	N/A	5[d]	(5)[d]	N/A	1[d]	(1)[d]
	2	H-3	50[d, e]	(50)[d, e]	N/A	50[d]	(50)[d]	N/A	10[d]	(10)[d]
	1	N/A	NL	NL	N/A	NL	NL	N/A	NL	NL

For SI: 1 cubic foot = 0.023 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.
NL = Not Limited; N/A = Not Applicable; UD = Unclassified Detonable

a. For use of control areas, see Section 414.2.

b. The aggregate quantity in storage, handling, and use shall not exceed the quantity listed for storage.

c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs, consumer or industrial products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.

d. Maximum allowable quantities, except for liquefied petroleum gas, and flammable liquid motor fuel, may be increased 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e applies, the quantities increased shall be as set forth in both notes.

e. Quantities, except for liquefied petroleum gas, and flammable liquid motor fuel, may be increased 100 percent when stored in approved cabinets, gas cabinets, exhausted enclosures or safety cans as specified in the *New York City Fire Code*. Where Note d applies, the quantities increased shall be as set forth in both notes.

f. The permitted quantities shall not be limited in a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

g. Permitted only in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

h. Containing not more than the maximum allowable quantity per control area of Class IA, IB or IC flammable liquids.

i. Stationary fuel oil storage tanks shall comply with the *New York City Fire Code.*

j. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.

k. A maximum quantity of 200 pounds of solid or 20 gallons of liquid Class 3 oxidizers is allowed when such materials are necessary for maintenance purposes, operation or sanitation of equipment. Storage containers and the manner of storage shall be approved.

m. For gallons of liquids, divide the amount in pounds by 10 in accordance with the *New York City Fire Code*.

n. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with the *New York City Fire Code*.

o. For purposes of this table, gasoline and other flammable liquid motor fuels are classified as a Class IA flammable liquid.

p. Unclassified detonable organic peroxides , detonable pyrophoric materials, detonable unstable (reactive) materials, and detonable water-reactive materials (see the *New York City Fire Code*) are considered as explosives for purposes of storage.

q. The maximum allowable quantities shall be limited by Section 419 for chemical laboratories classified as Occupancy Group B and operating as non-production facilities for testing, research, experimental, instructional, or education purposes.

TABLE 307.7(2)
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A HEALTH HAZARD[a, b, c, j, k]

MATERIAL	STORAGE[d]			USE-CLOSED SYSTEMS[d]			USE-OPEN SYSTEMS[d]	
	Solid pounds[e, f]	Liquid gallons (pounds)[e, f]	Gas SCF[e]	Solid pounds[e]	Liquid gallons (pounds)[e]	Gas SCF[e]	Solid pounds[e]	Liquid gallons (pounds)[e]
Corrosive	5,000	500	810[f, g]	5,000	500	810[f, g]	1,000	100
Highly toxic	10	(10)[i]	20[h]	10	(10)[i]	20[h]	3	(3)[i]
Toxic	500	(500)[i]	810[f]	500	(500)[i]	810[f]	125	(125)[i]

For SI: 1 cubic foot = 0.028 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

a. For use of control areas, see Section 414.2.

b. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs, consumer or industrial products, and cosmetics, containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.

c. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with the *New York City Fire Code*.

d. The aggregate quantity in storage, handling, and use shall not exceed the quantity listed for storage.

e. Quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note f also applies, the increase for both notes shall be applied accumulatively.

f. Quantities may be increased 100 percent when stored in approved storage cabinets, gas cabinets or exhausted enclosures as specified in the *New York City Fire Code*. Where Note e applies, the quantities increased shall be as set forth in both notes.

g. A single container of anhydrous ammonia containing not more than 150 pounds in a single control area in a nonsprinklered building shall be considered a maximum allowable quantity. Two containers of anhydrous ammonia, each containing not more than 150 pounds, shall be considered a maximum allowable quantity provided the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

h. Allowed only when stored in approved exhausted gas cabinets or exhausted enclosures as specified in the *New York City Fire Code*.

i. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.

j. For gallons of liquids, divide the amount in pounds by 10 in accordance with the *New York City Fire Code*.

k. The maximum allowable quantities shall be limited by Section 419 for chemical laboratories classified as Occupancy Group B and operating asa non-production facilities for testing, research, experimental, instructional, or education purposes.

307.8 Multiple hazards. Buildings and structures containing a material or materials representing hazards that are classified in one or more of Groups H-1, H-2, H-3 and H-4 shall conform to the code requirements for each of the occupancies so classified.

307.9 Exceptions: The following shall not be classified in Group H, but shall be classified in the occupancy which they most nearly resemble. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the *New York City Fire Code*.

1. Buildings and structures that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.7(1) and 307.7(2) provided that such buildings are maintained in accordance with the *New York City Fire Code*.

2. Buildings utilizing control areas in accordance with Section 414.2 that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 307.7(1) and 307.7(2).

3. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the *New York City Fire Code*.

4. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *New York City Fire Code*.

5. Closed systems housing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.

6. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment listed by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire-resistance-rated fire barrier walls or horizontal assemblies or both.

7. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).

8. Liquor stores and distributors without bulk storage.

9. Refrigeration systems.

10. The storage or utilization of materials for agricultural purposes on the premises.

11. Stationary batteries utilized for facility emergency power, uninterrupted power supply or telecommunication facilities provided that the batteries are provided

with safety venting caps and ventilation is provided in accordance with the *New York City Mechanical Code*.

12. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.

13. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the *New York City Fire Code*.

14. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per control area in Group M or S occupancies complying with Section 414.2.4.

15. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the *New York City Fire Code*.

SECTION 308
INSTITUTIONAL GROUP I

308.1 Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people are cared for or live in a supervised environment, having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

308.1.1 Definitions. For definitions of terms related to Group I occupancy classification, see Section 310.2.

308.2 Group I-1. This occupancy shall include buildings, structures or parts thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of self-preservation and capable of responding to an emergency situation without physical assistance from staff. Such occupancy shall be subject to the New York State Multiple Dwelling Law. This group shall include, but not be limited to, the following:

Adult homes, where occupants are capable of self-preservation (see Section 308.2.1)
Alcohol and drug abuse rehabilitation centers
Assisted living facilities
Community Residences or Intermediate Care Facilities (see Section 308.2.2)
Congregate care facilities
Convalescent facilities

Enriched housing, where occupants are capable of self-preservation (see Section 308.2.1)
Halfway houses
Overnight child care facilities where all supervised occupants are under the age of 18, with no more than two children under the age of 2
Residential care facilities
Social rehabilitation facilities

308.2.1 Adult homes and enriched housing. Adult homes and enriched housing facilities operated pursuant to and meeting the additional construction requirements of Section 460 of the New York State Social Services Law and regulations of the New York State Department of Health offering care on a 24-hour basis to persons capable of self-preservation, in the same building, shall be classified as Group I-1.

Exception: Such a facility offering supervised care on a 24-hour basis for no more than 16 occupants capable of self preservation, in the same building, may be classified in Group R in accordance with Section 310.

308.2.2 Community Residences or Intermediate Care Facilities. Community Residences or Intermediate Care Facilities, operated pursuant to and meeting the additional construction requirements of the New York State Mental Hygiene Law and applicable regulations of the New York State Office of Mental Health and Office of Mental Retardation and Developmental Disabilities shall be classified as Group I-1.

Exceptions: Such facilities limited to 14 residents capable of self-preservation and three staff members per dwelling unit shall be classified as:

1. Group R-1, where such facility does not occupy more than two dwelling units in a residential building classified as R-1 of Type I or II construction, or one dwelling unit in any other type of construction, and occupied on a transient basis; or

2. Group R-2 where such facility does not occupy more than two dwelling units in a residential building classified R-2 of Type I or II construction, or one dwelling unit in any other type of construction, and occupied on a long-term basis; or

3. Group R-3 where the number of dwelling units in the building does not exceed two.

308.3 Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or personal care on a 24-hour basis or overnight of more than two children under the age of 2, or more than three persons who are not capable of self-preservation and not capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Adult homes, where occupants are not capable of self-preservation, operated pursuant to and meeting the additional construction requirements of Section 460 of the New York State Social Services Law and regulations of the New York State Department of Health

Community Residences or Intermediate Care Facilities, where occupants are not capable of self preservation, operated pursuant to and meeting the additional construction requirements of the New York State Mental Hygiene Law and applicable regulations of the New York State Office of Mental Health and Office of Mental Retardation and Developmental Disabilities

Enriched Housing, where occupants are not capable of self-preservation, operated pursuant to and meeting the additional construction requirements of Section 460 of the New York State Social Services Law and regulations of the New York State Department of Health

Hospitals

Nursing homes (both intermediate-care facilities and skilled nursing facilities)

Mental hospitals where patients are not under restraint

Detoxification facilities

Exception: Such a facility offering care on a 24-hour basis for 3 or fewer persons who are not capable of self preservation may occupy not more than one dwelling unit in a Group R occupancy.

308.4 Group I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

Mental hospitals where patients are under restraint

Prisons

Jails

Reformatories

Detention centers

Correctional centers

Prerelease centers

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Section 408.1.

308.5 Group I-4. This group shall include custodial care facilities providing care to more than two children under the age of 2, or to more than four persons over the age of 2 who are not capable of responding to an emergency situation without physical assistance from the staff. Such occupancy shall include, but not be limited to, adult custodial care facilities and day nurseries.

Exceptions:

1. Custodial care facility as described in Section 303.

2. Custodial care facility as described in Section 304.

3. Custodial care facility as described in Exception 3 of Section 305.1.

4. Such facility providing care within a dwelling unit as described in Section 310.

5. Such facility providing care to children under the age of 2 in houses of worship during religious functions.

SECTION BC 309
MERCANTILE GROUP M

309.1 Mercantile Group M. Mercantile Group M occupancy includes, among others, buildings and structures or a portion thereof, for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following:

Department stores
Drug stores
Markets
Motor fuel-dispensing facilities
Retail or wholesale stores
Sales rooms

309.2 Quantity of hazardous materials. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored or displayed in a single control area of a Group M occupancy shall not exceed the quantities in Table 414.2.4.

SECTION 310
RESIDENTIAL GROUP R

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for dwelling or sleeping purposes when not classified as Institutional Group I. Buildings containing 3 or more dwelling units shall be subject to the New York State Multiple Dwelling Law. Residential occupancies shall be classified as Groups R-1, R-2, or R-3.

310.1.1 Group R-1. This occupancy shall include:

1. Residential buildings or spaces occupied, as a rule, transiently, for a period less than one month, as the more or less temporary abode of individuals or families who are lodged with or without meals, including, but not limited to, the following:

   Class B multiple dwellings as defined in Section 27-2004 of the *New York City Housing Maintenance Code* and Section 4 of the New York State Multiple Dwelling Law

   Exception: Class B multiple dwellings classified in Group I-1.

   Club houses.
   Hotels (transient)
   Motels (transient)
   Rooming houses (boarding houses – transient)
   Settlement houses
   Vacation timeshares

2. College or school student dormitories, except for student apartments classified as an R-2 occupancy

3. Congregate living units owned and operated by a government agency or not-for-profit organization, where the number of occupants in the dwelling unit exceeds the limitations of a family as defined, including, but not limited to, the following:

   Adult homes or enriched housing with 16 or fewer occupants requiring supervised care within the same building on a 24-hour basis
   Fraternity and sorority houses
   Homeless shelters

310.1.2 Group R-2. This occupancy shall include buildings or portions thereof containing sleeping units or more than two dwelling units that are occupied, as a rule, for shelter and sleeping accommodation on a long-term basis for a month or more at a time. Such occupancy shall be subject to the New York State Multiple Dwelling Law. This group shall include, but not be limited to, the following:

Adult homes or enriched housing with 16 or fewer occupants requiring supervised care on a 24-hour basis in the same building, provided that the number of occupants per dwelling unit does not exceed the definition of a family
Apartment houses
Apartment hotels (nontransient)
Class A multiple dwellings as defined in Section 27-2004 of the *New York City Housing Maintenance Code* and Section 4 of the New York State Multiple Dwelling Law, including the following:

1. Dwelling units where the resident of the unit provides custodial care to no more than four persons on less than a 24-hour basis and not overnight.

2. Dwelling units where the resident of the unit provides child custodial care as a family day care home registered with the New York City Department of Health and Mental Hygiene in accordance with the New York State Social Services Law with no more than six children between the ages of 2 and 13, or with no more than five children if any are under the age of 2, receiving supervised care on less than a 24-hour basis and not overnight.

   Exception: Class A multiple dwellings classified in Group I-1.

Convents and monasteries with more than 20 occupants in the building
Student apartments

310.1.3 Group R-3. This occupancy shall include buildings or portions thereof containing no more than 2 dwelling units, occupied, as a rule, for shelter and sleeping accommodation on a long term basis for a month or more at a time, and are not classified in Group R-1, R-2 or I. This group shall include, but not be limited to, the following:

Convents and monasteries with fewer than 20 occupants in the building
Group homes
One- and two-family dwellings, including the following:

1. Dwelling units where the resident of the unit provides custodial care to no more than four persons on less than a 24-hour basis and not overnight.

2. Dwelling units where the resident of the unit provides child custodial care as a family day care home registered with the New York City Department of Health and Mental Hygiene in accordance with the New York State Social Services Law with no more than six children between the ages of 2 and 13, or with no more than five children if any are under the age of 2, receiving supervised care on less than a 24 hour basis and not overnight.

310.2 Definitions. The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

APARTMENT. A dwelling unit providing permanent provisions for both sanitation and kitchen facilities, occupied or arranged to be occupied by not more than one family maintaining a common household.

APARTMENT, STUDENT. An apartment occupied or arranged to be occupied by students enrolled at a single accredited college or university and maintaining a common household pursuant to a lease, sublease, or occupancy agreement directly with such college or university.

BOARDER (ROOMER, LODGER). A person who pays a consideration for living within the household and does not occupy such space as an incident of employment.

CONGREGATE LIVING UNIT. A dwelling unit, comprised of one or more habitable rooms separated by non-rated partitions, occupied or arranged to be occupied by more than one family or by persons who are not maintaining a common household. Creation of or conversion to such unit shall be subject to Section 27-2077 of the *New York City Housing Maintenance Code*.

CUSTODIAL CARE FACILITY. A building or part thereof occupied by persons, on less than a 24-hour basis and not overnight, who because of age, disability or other reasons, receive personal care services by individuals other than parents or guardians, relatives by blood, marriage, domestic partnership, or adoption, in a place other than the home of the person cared for.

DWELLING. A building or structure which is occupied in whole or in part as the home, residence or sleeping place of one or more families.

DWELLING, MULTIPLE. A dwelling which is either rented, leased, let or hired out, to be occupied, or is occupied, as the residence or home of three or more families living independently of each other. A multiple dwelling does not include a building used for occupancies in Groups I-2, I-3 or I-4.

DWELLING, ONE-FAMILY. Any building or structure designed and occupied exclusively for residence purposes on a long-term basis for more than a month at a time by not more than one family. One-family dwellings shall also be deemed to include a dwelling located in a series of one-family dwellings each of which faces or is accessible to a legal street or public thoroughfare, provided that each such dwelling unit is equipped as a separate dwelling unit with all essential services, and also provided that each such unit is arranged so that it may be approved as a legal one-family dwelling.

DWELLING, TWO-FAMILY. Any building or structure designed and occupied exclusively for residence purposes on a long-term basis for more than a month at a time by not more than two families. Two-family dwellings shall also be deemed to include a dwelling located in a series of two-family dwellings each of which faces or is accessible to a legal street or public thoroughfare, provided that each such dwelling is equipped as a separate dwelling with all essential services, and also provided that each such dwelling is arranged so that it may be approved as a legal two-family dwelling.

DWELLING UNIT. A single unit consisting of one or more habitable rooms and occupied or arranged to be occupied as a unit separate from all other units within a dwelling.

FAMILY.

1. A single person occupying a dwelling unit and maintaining a common household with not more than two boarders, roomers or lodgers; or

2. Two or more persons related by blood, adoption, legal guardianship, marriage or domestic partnership; occupying a dwelling unit and maintaining a common household with not more than two boarders, roomers or lodgers; or

3. Not more than three unrelated persons occupying a dwelling unit and maintaining a common household; or

4. Not more than three unrelated persons occupying a dwelling unit in a congregate housing or shared living arrangement and maintaining a common household; or

5. Members of a group home; or

6. Foster children placed in accordance with provisions of the New York State Social Services Law, their foster parent(s), and other persons related to the foster parents by blood, marriage or domestic partnership; where all residents occupy and maintain a common household with not more than two boarders, roomers or lodgers; or

7. Up to seven unrelated students enrolled at a single accredited college or university occupying a student apartment and maintaining a common household pursuant to a lease, sublease, or occupancy agreement directly with such college or university, provided that:

    7.1. The entire structure in which the dwelling unit is located is fully sprinklered in accordance with Chapter 9; and

    7.2. Such occupancy does not exceed the maximums contained in Section 27-2075(a) of the *New York City Housing Maintenance Code*; and

    7.3. Prior to commencement of such occupancy, and on an annual basis thereafter such college or university has submitted a fire safety plan containing fire safety and evacuation procedures for such dwelling unit that is acceptable to the Fire Commissioner and in compliance with any rules promulgated by the Fire Commissioner; and

    7.4. The dwelling unit complies with additional occupancy and construction requirements as may be established by rule by the Housing Preservation and Development Commissioner.

A common household is deemed to exist if all household members have access to all parts of the dwelling unit. Lack of access to all parts of the dwelling unit establishes a rebuttable presumption that no common household exists.

GROUP HOME. A facility for the care and maintenance of not fewer than seven nor more than twelve children, supervised by the New York State Board of Social Welfare, and operated pursuant to and meeting any additional construction requirements of Section 374-c of the New York State Social Services Law and applicable regulations of the New York State Department of Social Services. Such a facility occupied by more than twelve children shall be classified as Group I-1.

PERSONAL CARE SERVICE. The care of residents who do not require chronic or convalescent medical or nursing care. Personal care involves responsibility for the safety of the resident while inside the building.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of self-preservation and are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living facilities, halfway houses, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse rehabilitation centers and convalescent facilities.

ROOMING HOUSE. A dwelling (i) which was originally erected as a single- or two-family private dwelling pursuant to the *New York City Building Code* in effect prior to December 6, 1968, (ii) which is a "Class B converted dwelling" as such term is defined in the *New York City Housing Maintenance Code*, and (iii) which has more than half of its habitable rooms as sleeping units. The creation of or conversion to a rooming house shall be limited by Section 27-2077 of the *New York City Housing Maintenance Code*.

SLEEPING UNIT. A dwelling unit, which may contain either toilet or kitchen facilities but not both. Any sleeping unit housing more than one family shall also be classified as a congregate living unit. The creation of or conversion to sleeping units shall be limited by Section 27-2077 of the *New York City Housing Maintenance Code*.

SECTION BC 311
STORAGE GROUPS

311.1 Storage Group S. Storage Group S occupancy includes, among others, the use of a building or structure, or a portion thereof, for storage, such as for warehouses, storage rooms, freight depots and distribution centers, when not classified as a hazardous occupancy.

311.2 Moderate-hazard storage, Group S-1. Buildings occupied for storing any flammable or combustible materials that are likely to permit the development and production of fire with moderate rapidity including, but not limited to, storage of the following:

Aerosols, Levels 2 and 3

Bags; cloth, burlap and paper
Bamboos and rattan
Baskets
Belting; canvas and leather
Books and paper in rolls or packs
Boots and shoes
Buttons, including cloth covered, pearl or bone
Cardboard and cardboard boxes
Clothing, woolen wearing apparel
Cordage
Furniture
Furs
Glues, mucilage, pastes and size
Grains
Horns and combs, other than celluloid
Leather
Linoleum
Lumber
Photo engravings
Resilient flooring
Silks
Soaps
Sugar
Tires, bulk storage of
Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

311.3 Low-hazard storage, Group S-2. Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic trim, such as knobs, handles or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

Asbestos
Beverages up to and including 12-percent alcohol in metal, glass or ceramic containers
Cement in bags
Chalk and crayons
Dairy products in nonwaxed coated paper containers
Dry cell batteries
Electrical coils
Electrical motors
Empty cans
Food products
Foods in noncombustible containers

Fresh fruits and vegetables in nonplastic trays or containers
Frozen foods
Glass
Glass bottles, empty or filled with noncombustible liquids
Gypsum board
Inert pigments
Ivory
Meats
Metal cabinets
Metal desks with plastic tops and trim
Metal parts
Metals
Mirrors
Oil-filled and other types of distribution transformers
Parking garages, open or enclosed
Porcelain and pottery
Stoves
Talc and soapstones
Washers and dryers

SECTION BC 312
UTILITY AND MISCELLANEOUS GROUP U

312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Carports
Fences more than 6 feet (1829 mm) high
Private garages as per Section 406.1
Retaining walls
Sheds or greenhouses accessory to Group R-3 occupancies, that are: freestanding, less than 120 square feet (11.15 m^2) in area, not permanently affixed to the ground, and used for household goods or items associated with the garden or lawn. Any other shed shall be classified as either S-1 or S-2.
Tanks
Towers