CHAPTER 3

USE AND OCCUPANCY CLASSIFICATION

User note: Code change proposals to sections preceded by the designation [F] will be considered by the International *Fire Code Development Committee during the 2016 (Group B) Code Development Cycle. See explanation on page iv.*

SECTION 301 GENERAL

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

SECTION 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 in this section. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

- 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, R-3 and R-4.
- 9. Storage (see Section 311): Groups S-1 and S-2.
- 10. Utility and Miscellaneous (see Section 312): Group U.

SECTION 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, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation.

303.1.1 Small buildings and tenant spaces. A building or tenant space used for assembly purposes with an *occupant load* of less than 50 persons shall be classified as a Group B occupancy.

303.1.2 Small assembly spaces. The following rooms and spaces shall not be classified as Assembly occupancies:

- 1. A room or space used for assembly purposes with an *occupant load* of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.
- 2. A room or space used for assembly purposes that is less than 750 square feet (70 m²) in area and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy.

303.1.4 Accessory to places of religious worship. Accessory religious educational rooms and religious auditoriums with *occupant loads* of less than 100 per room or space are not considered separate occupancies.

303.2 Assembly Group A-1. Group A-1 occupancy includes 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

303.3 Assembly Group A-2. Group A-2 occupancy includes assembly uses intended for food and/or drink consumption including, but not limited to:

Banquet halls Casinos (gaming areas) Nightclubs Restaurants, cafeterias and similar dining facilities (including associated commercial kitchens) Taverns and bars

303.4 Assembly Group A-3. Group A-3 occupancy includes 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 Community halls Courtrooms Dance halls (not including food or drink consumption) Exhibition halls Funeral parlors Gymnasiums (without spectator seating) Indoor swimming pools (without spectator seating) Indoor tennis courts (without spectator seating) Lecture halls Libraries Museums Places of religious worship Pool and billiard parlors Waiting areas in transportation terminals

303.5 Assembly Group A-4. Group A-4 occupancy includes 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

303.6 Assembly Group A-5. Group A-5 occupancy includes assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures Bleachers Grandstands Stadiums

SECTION 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 or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers Ambulatory care facilities Animal hospitals, kennels and pounds Banks Barber and beauty shops Car wash Civic administration Clinic, outpatient Dry cleaning and laundries: pick-up and delivery stations and self-service Educational occupancies for students above the 12th grade Electronic data processing Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities not more than 2,500 square feet (232 m^2) in area. Laboratories: testing and research

Motor vehicle showrooms Post offices Print shops Professional services (architects, attorneys, dentists, physicians, engineers, etc.)

Radio and television stations

Telephone exchanges

Training and skill development not in a school or

academic program (this shall include, but not be limited to, tutoring centers, martial arts studios, gymnastics and similar uses regardless of the ages served, and where not classified as a Group A occupancy).

304.2 Definitions. The following terms are defined in Chapter 2:

AMBULATORY CARE FACILITY.

CLINIC, OUTPATIENT.

SECTION 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 six or more persons at any one time for educational purposes through the 12th grade.

305.1.1 Accessory to places of religious worship. Religious educational rooms and religious auditoriums, which are accessory to *places of religious worship* in accordance with Section 303.1.4 and have *occupant loads* of less than 100 per room or space, shall be classified as Group A-3 occupancies.

305.2 Day Care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than eight children older than $2^{1}/_{2}$ years of age, shall be classified as a Group E occupancy.

305.2.1 Within places of religious worship. Rooms and spaces within *places of religious worship* providing such day care during religious functions shall be classified as part of the primary occupancy.

305.2.2 Eight or fewer children. A facility having eight or fewer children receiving such day care shall be classified as part of the primary occupancy.

305.2.3 Eight or fewer children in a dwelling unit. A facility such as the above within a *dwelling unit* and having eight or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

SECTION 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 or processing operations that are not classified as a Group H hazardous or Group S storage occupancy.

306.2 Moderate-hazard factory industrial, Group F-1. Factory industrial uses that 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 (manufacturing, not to include repair) Appliances Athletic equipment Automobiles and other motor vehicles **Bakeries** Beverages: over 16-percent alcohol content Bicycles **Boats** Brooms or brushes **Business** machines Cameras and photo equipment Canvas or similar fabric Carpets and rugs (includes cleaning) Clothing Construction and agricultural machinery Disinfectants Dry cleaning and dyeing Electric generation plants Electronics Engines (including rebuilding) Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities more than 2,500 square feet (232 m²) in area. Furniture Hemp products Jute products Laundries Leather products Machinery Metals Millwork (sash and door) Motion pictures and television 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)

306.3 Low-hazard factory industrial, Group F-2. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials that 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:

Beverages: up to and including 16-percent alcohol content

Brick and masonry Ceramic products Foundries Glass products Gypsum Ice Metal products (fabrication and assembly)

SECTION 307 HIGH-HAZARD GROUP H

[F] 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 allowed in *control areas* complying with Section 414, based on the maximum allowable quantity limits for *control areas* set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *International Fire Code*. Hazardous materials stored, or used on top of roofs or canopies, shall be classified as outdoor storage or use and shall comply with the *International Fire Code*.

[F] 307.1.1 Uses other than Group H. An occupancy that stores, uses or handles hazardous materials as described in one or more of the following items shall not be classified as Group H, but shall be classified as the occupancy that it most nearly resembles.

- 1. 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 *International Fire Code*.
- 2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *International Fire Code*.
- Closed piping system containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.
- 4. 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 barriers* constructed in accordance with Section 707 or 1-hour *horizontal assemblies* constructed in accordance with Section 711, or both.
- Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).
- 6. Liquor stores and distributors without bulk storage.
- 7. Refrigeration systems.

- 8. The storage or utilization of materials for agricultural purposes on the premises.
- 9. Stationary batteries utilized for facility emergency power, uninterruptable power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and *ventilation* is provided in accordance with the *International Mechanical Code*.
- 10. Corrosive personal or household products in their original packaging used in retail display.
- 11. Commonly used corrosive building materials.
- 12. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the *International Fire Code*.
- 13. 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 414.2.5.
- 14. 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 *International Fire Code*.

[F] 307.1.2 Hazardous materials. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the *International Fire Code*.

[F] 307.2 Definitions. The following terms are defined in Chapter 2:

AEROSOL

Level 1 aerosol products.

Level 2 aerosol products.

Level 3 aerosol products.

AEROSOL CONTAINER.

BALED COTTON.

BALED COTTON, DENSELY PACKED.

BARRICADE.

Artificial barricade. Natural barricade. BOILING POINT. CLOSED SYSTEM. COMBUSTIBLE DUST. COMBUSTIBLE FIBERS. COMBUSTIBLE LIQUID. Class II. Class IIIA.

Class IIIB.

COMPRESSED GAS. **CONTROL AREA.** CORROSIVE. **CRYOGENIC FLUID.** DAY BOX. DEFLAGRATION. **DETONATION. DISPENSING.** EXPLOSION. EXPLOSIVE. High explosive. Low explosive. Mass-detonating explosives. UN/DOTn Class 1 explosives. **Division 1.1. Division 1.2. Division 1.3. Division 1.4. Division 1.5. Division 1.6.** FIREWORKS. Fireworks, 1.3G. Fireworks, 1.4G. FLAMMABLE GAS. FLAMMABLE LIQUEFIED GAS. FLAMMABLE LIQUID. Class IA. Class IB. Class IC. FLAMMABLE MATERIAL. FLAMMABLE SOLID. FLASH POINT. HANDLING. HAZARDOUS MATERIALS. HEALTH HAZARD. HIGHLY TOXIC. **INCOMPATIBLE MATERIALS.** INERT GAS. **OPEN SYSTEM. OPERATING BUILDING. ORGANIC PEROXIDE.** Class L

Class II. Class III.

Class IV.	WATER-REACTIVE MATERIAL.
Class V.	Class 3.
Unclassified detonable.	Class 2.
OXIDIZER.	Class 1.
Class 4.	[F] 307.3 High-hazard Group H-1. Buildings and structures
Class 3.	containing materials that pose a detonation hazard shall be classified as Group H-1. Such materials shall include, but not
Class 2.	be limited to, the following:
Class 1.	Detonable pyrophoric materials
OXIDIZING GAS.	Explosives:
PHYSICAL HAZARD.	Division 1.1
PYROPHORIC.	Division 1.2
PYROTECHNIC COMPOSITION.	Division 1.3
TOXIC.	Division 1.4
UNSTABLE (REACTIVE) MATERIAL.	Division 1.5
Class 4.	Division 1.6
Class 3.	Organic peroxides, unclassified detonable
Class 2.	Oxidizers, Class 4
Class 1.	Unstable (reactive) materials, Class 3 detonable and Class 4

TABLE 307.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD^{a, j, m, n, p}

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE ^b			USE-CLOSED SYSTEMS ^b			USE-OPEN SYSTEMS [▶]	
			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)
Combustible dust	NA	H-2	See Note q	NA	NA	See Note q	NA	NA	See Note q	NA
Combustible fiber ^q	Loose Baled ^o	H-3	(100) (1,000)	NA	NA	(100) (1,000)	NA	NA	(20) (200)	NA
Combustible liquid ^{e, i}	II IIIA IIIB	H-2 or H-3 H-2 or H-3 NA	NA	120 ^{d, e} 330 ^{d, e} 13,200 ^{e, f}	NA	NA	120^{d} 330^{d} $13,200^{f}$	NA	NA	30 ^d 80 ^d 3,300 ^f
Consumer fireworks	1.4G	H-3	125 ^{e, 1}	NA	NA	NA	NA	NA	NA	NA
Cryogenic flammable	NA	H-2	NA	45 ^d	NA	NA	45 ^d	NA	NA	10 ^d
Cryogenic inert	NA	NA	NA	NA	NL	NA	NA	NL	NA	NA
Cryogenic oxidizing	NA	H-3	NA	45 ^d	NA	NA	45 ^d	NA	NA	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 or H-2 H-3 H-3 H-1 H-1	1 ^{c, g} 1 ^{e, g} 5 ^{e, g} 50 ^{e, g} 125 ^{d, e, 1} 1 ^{e, g} 1 ^{c, g}	$(1)^{e, g} \\ (1)^{e, g} \\ (5)^{e, g} \\ (50)^{e, g} \\ NA \\ (1)^{e, g} \\ NA$	NA	0.25 ^g 0.25 ^g 1 ^g 50 ^g NA 0.25 ^g NA	(0.25) ^g (0.25) ^g (1) ^g (50) ^g NA (0.25) ^g NA	NA	0.25 ^g 0.25 ^g 1 ^g NA NA 0.25 ^g NA	(0.25) ^g (0.25) ^g (1) ^g NA NA (0.25) ^g NA
Flammable gas	Gaseous Liquefied	H-2	NA	NA (150) ^{d, e}	1,000 ^{d, e} NA	NA	NA (150) ^{d, e}	1,000 ^{d, e} NA	NA	NA
Flammable liquid ^c	IA IB and IC	H-2 or H-3	NA	30 ^{d, e} 120 ^{d, e}	NA	NA	30 ^d 120 ^d	NA	NA	10 ^d 30 ^d
Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	NA	120 ^{d, e, h}	NA	NA	120 ^{d, h}	NA	NA	30 ^{d, h}

(continued)

MATERIAL	CLASS	GROUP WHEN	STORAGE			USE-CL	OSED SYS	USE-OPEN SYSTEMS ^b		
		THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	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)
Flammable solid	NA	H-3	125 ^{d, e}	NA	NA	125 ^d	NA	NA	25 ^d	NA
Inert gas	Gaseous Liquefied	NA NA	NA NA	NA NA	NL NL	NA NA	NA NA	NL NL	NA NA	NA NA
Organic peroxide	UD I II III IV V	H-1 H-2 H-3 H-3 NA NA	1 ^{e, g} 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	NA	0.25 ^g 1 ^d 50 ^d 125 ^d NL NL	(0.25) ^g (1) ^d (50) ^d (125) ^d NL NL	NA	0.25 ^g 1 ^d 10 ^d 25 ^d NL NL	(0.25) ^g (1) ^d (10) ^d (25) ^d NL NL
Oxidizer	$\begin{array}{c} 4\\ 3^k\\ 2\\ 1\end{array}$	H-1 H-2 or H-3 H-3 NA	$1^{g} \\ 10^{d, e} \\ 250^{d, e} \\ 4,000^{e, f}$	$(1)^{e, g}$ $(10)^{d, e}$ $(250)^{d, e}$ $(4,000)^{e, f}$	NA	0.25^{g} 2^{d} 250^{d} $4,000^{f}$	$\begin{array}{c} (0.25)^{\rm g} \\ (2)^{\rm d} \\ (250)^{\rm d} \\ (4,000)^{\rm f} \end{array}$	NA	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	NA	NA (150) ^{d, e}	1,500 ^{d, e} NA	NA	NA (150) ^{d, e}	1,500 ^{d, e} NA	NA	NA
Pyrophoric	NA	H-2	4 ^{e, g}	(4) ^{e, g}	50 ^{e, g}	1^{g}	(1) ^g	10 ^{e, g}	0	0
Unstable (reactive)	4 3 2 1	H-1 H-1 or H-2 H-3 NA	1 ^{e, g} 5 ^{d, e} 50 ^{d, e} NL	$(1)^{e, g}$ (5) ^{d, e} (50) ^{d, e} NL	10 ^{e, g} 50 ^{d, e} 750 ^{d, e} NL	0.25 ^g 1 ^d 50 ^d NL	$(0.25)^{g}$ (1) ^d (50) ^d NL	2 ^{e, g} 10 ^{d, e} 750 ^{d, e} NL	0.25 ^g 1 ^d 10 ^d NL	(0.25) ^g (1) ^d (10) ^d NL
Water reactive	3 2 1	H-2 H-3 NA	5 ^{d, e} 50 ^{d, e} NL	(5) ^{d, e} (50) ^{d, e} NL	NA	5 ^d 50 ^d NL	(5) ^d (50) ^d NL	NA	1 ^d 10 ^d NL	(1) ^d (10) ^d NL

TABLE 307.1(1)—continued MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD^{a, j, m, n, p}

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

NL = Not Limited; NA = Not Applicable; UD = Unclassified Detonable.

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

- b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
- c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited provided the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs or consumer 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 shall be increased 100 percent in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
- e. Maximum allowable quantities shall be increased 100 percent when stored in approved storage cabinets, day boxes, gas cabinets, gas rooms or exhausted enclosures or in *listed* safety cans in accordance with Section 5003.9.10 of the *International Fire Code*. Where Note d also applies, the increase for both notes shall be applied accumulatively.
- f. Quantities shall not be limited in a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- g. Allowed 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. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 603.3.2 of the International 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 when the storage containers and the manner of storage are approved.
- 1. Net weight of the pyrotechnic composition of the fireworks. Where the net weight of the pyrotechnic composition of the fireworks is not known, 25 percent of the gross weight of the fireworks, including packaging, shall be used.

m. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2 of the International Fire Code.

- n. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 414.2.5, see Tables 414.2.5(1) and 414.2.5(2).
- o. Densely packed baled cotton that complies with the packing requirements of ISO 8115 shall not be included in this material class.
- p. The following shall not be included in determining the maximum allowable quantities:
- 1. Liquid or gaseous fuel in fuel tanks on vehicles.
 - 2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with the International Fire Code.
 - 3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code*.
 - 4. Liquid fuels in piping systems and fixed appliances regulated by the International Mechanical Code.
 - 5. Alcohol-based hand rubs classified as Class I or II liquids in dispensers that are installed in accordance with Sections 5705.5 and 5705.5.1 of the *International Fire Code*. The location of the alcohol-based hand rub (ABHR) dispensers shall be provided in the construction documents.
- q. Where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.