#### **CHAPTER 3**

### USE AND OCCUPANCY CLASSIFICATION

#### 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 m<sup>2</sup>) 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 are not considered separate occupancies.

**303.2 Assembly Group 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

**303.3 Assembly Group A-2.** 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.** 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.** 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.** Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures

**Bleachers** 

Grandstands

Stadiums

Q: Is a building or facility used for the showing, auctioning and selling of nonhazardous merchandise classified as a Group A - Assembly Occupancy?

**A:** Yes. Any building or facility, or any room or space within a building or facility, used for the gathering of a prescribed number of people for amusement or recreation meets the definition for a Group A occupancy. The use of a room or facility where people assemble for the purpose of conducting an auction is classified as a Group A-3 - Assembly Occupancy.

**Q:** What characteristics of an assembly occupancy serve to make Group A-2 nightclubs an appropriate occupancy classification?

**A:** The common factor in nightclub life losses has been high occupant densities. However, a large occupant load, by itself, does not provide the sole basis to distinguish between the level of hazard associated with a Group A-2 occupancy and any other assembly or educational occupancy.

The unique hazard level results from the presence of the following attributes of a nightclub-type occupancy:

- 1. Lighting levels
- 2. Entertainment type
- 3. Operation hours
- 4. Seating characteristics, including table sizes
- 5. Dance area
- 6. Service facilities

The low lighting level, loud sound and associated activity, late hours, dense seating with ill-defined aisles and beverage service have all combined to delay fire recognition, confuse the appropriate response, increase egress time and contribute to extensive life losses.

#### 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 *Inter*-

*national 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*.

**Exceptions:** The following shall not be classified as Group H, but shall be classified as the occupancy that they most nearly resemble.

- 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*.
- Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *International Fire Code*.
- 3. 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 712, or both.
- 5. 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.
- 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 *International Mechanical Code*.
- 10. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.

#### REFERENCED SECTIONS:

[F] TABLE 307.1(1)

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARDa, j, m, n, p
(Remainder of Table and Footnotes not shown for clarity)

	A	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>	
MATERIAL			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at N.T.P.)	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible liquid <sup>c, i</sup>	II IIIA IIIB	H-2 or H-3 H-2 or H-3 N/A	N/A	120 <sup>d, e</sup> 330 <sup>d, e</sup> 13,200 <sup>e, f</sup>	N/A	N/A	120 <sup>d</sup> 330 <sup>d</sup> 13,200 <sup>f</sup>	N/A	N/A	30 <sup>d</sup> 80 <sup>d</sup> 3,300 <sup>f</sup>

i. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 603.3.2 of the International Fire Code.

- 11. 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*.
- 12. 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.
- 13. 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*.

# INTERNATIONAL FIRE CODE CHAPTER 6 BUILDING SERVICE AND SYSTEMS

- **603.3 Fuel oil storage systems.** Fuel oil storage systems shall be installed in accordance with this code. Fuel oil piping systems shall be installed in accordance with the *International Mechanical Code*.
- **603.3.1** Fuel oil storage in outside, above-ground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31.
- **603.3.2 Fuel oil storage inside buildings.** Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 or Chapter 34.
- **603.3.2.1 Quantity limits.** One or more fuel oil storage tanks containing Class II or III *combustible liquid* shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L).

**Exception:** The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11 356 L) of Class II or III liquid for storage in protected aboveground tanks complying with Section 3404.2.9.6, when all of the following conditions are met:

- 1. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;
- 2. The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks; and
- 3. The tanks shall be located in a room protected by an *automatic sprinkler system* complying with Section 903.3.1.1.
- **603.3.2.3 Applicability of maximum allowable quantity and control area requirements.** The quantity of *combustible liquid* stored in tanks complying with Section 603.3.2 shall not be counted towards the maximum allowable quantity set forth

in Table 2703.1.1(1), and such tanks shall not be required to be located in a *control area*.

**603.3.2.4 Installation.** Tanks and piping systems shall be installed and separated from other uses in accordance with Section 915 and Chapter 13 both of the *International Mechanical Code*, as applicable.

**Exception:** Protected above-ground tanks complying with Section 3404.2.9.6 shall not be required to be separated from surrounding areas.

**603.3.2.5 Tanks in basements.** Tanks in *basements* shall be located not more than two stories below grade plane.

**603.3.3 Underground storage of fuel oil.** The storage of fuel oil in underground storage tanks shall comply with NFPA 31.

# INTERNATIONAL FIRE CODE CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

**5701.2 Nonapplicability.** This chapter shall not apply to liquids as otherwise provided in other laws or regulations or chapters of this code, including:

Items 1 through 3 not shown.

4. Storage and use of fuel oil in tanks and containers connected to oil-burning equipment. Such storage and use shall be in accordance with Section 603. For abandonment of fuel oil tanks, this chapter applies.

Items 5 through 10 not shown.

**Q:** Where multiple buildings are located on a single lot, one of the detached buildings is dedicated to and contains a diesel-powered fire sprinkler pump provided to service the multiple associated buildings on the lot. The detached building containing the diesel-powered fire sprinkler pump is designed as a single fire area. The diesel-powered fire sprinkler pump is connected by a piping system to the diesel fuel stored within the building containing the fire sprinkler pump. The quantity of diesel fuel stored in the dedicated fire sprinkler pump building does not exceed the quantity of hazardous material allowed in Table 307.1(1) for a fire area. Is the building required to be classified High-Hazard Group H occupancy, and therefore subject to the provisions of the International Building Code and the International Fire Code for the storage of hazardous materials?

**A:** No. A detached building dedicated to and housing a diesel-engine-powered fire sprinkler pump, and the amount of diesel fuel stored within the building not exceeding the quantity allowed in Table 307.1(1) for a single fire area, would not be classified as a Group H occupancy. Footnote i with Table 307.1(1) of the *International Building Code* and Table 5003.1.1(1) of the *International Fire Code* applies to the storage of fuel connected to a piping system for fuel-oil-fired equipment within the build-

ing, which includes diesel engines. The provisions of the footnote are further confirmed in Section 5701.2, Item 4, and Section 603.3.2 of the *International Fire Code*.

## SECTION 308 INSTITUTIONAL GROUP I

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 16 persons who reside on a 24 hour basis in a supervised environment and receive *custodial care*. The persons receiving care are capable of self preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Convalescent facilities
Group homes
Halfway houses
Residential board and custodial care facilities
Social rehabilitation facilities

**308.3.1 Five or fewer persons receiving care.** A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

**308.3.2** Six to 16 persons receiving care. A facility such as above, housing not fewer than six and not more than 16 persons receiving such care, shall be classified as Group R-4.

Q: Is the Group I-1 classification appropriately applied to a building housing more than 16 occupants and resembling a multiple-family dwelling, but wherein:

- The building occupants are aged but not infirm; and
- Special emergency call switches monitored by health center staff are located in each dwelling unit?

A: No. Age, by itself, is not sufficient criterion for a Group I-1 occupancy classification. Group I-1 is only appropriate when occupants have a diminished mental capacity and must live in a supervised environment. The Group I-1 classification is intended to apply to conditions where occupants are physically capable of responding to an emergency situation without personal assistance but may not be mentally capable of an independent response. Emergency call switches in each dwelling unit are a convenience and do not necessarily indicate infirmity of the occupants.

Q: If a building classified and approved as a Group I-1 occupancy begins to house more than five occupants with physical or mental ailments rendering them physically incapable of responding to an emergency situation

without personal assistance, would this building have to be reclassified as Group I-2?

**A:** Yes. According to Section 308.3, a Group I-1 occupancy is intended to reflect the safety requirements appropriate for occupants that are physically capable of responding to an emergency situation without assistance.

A building with more than five occupants not possessing such capability represents a significantly different hazard, which is reflected in the code requirements that are applicable to Group I-2.

The introduction of more than five occupants, without the described response capability, into a building of a Group I-1 classification would represent a change in occupancy and would then be regulated in accordance with Section 3408.1. In both cases, the building would either have to be reclassified as Group I-2 or be restricted to individuals possessing the described response capability.

**Q:** If so, is Group I-2 the appropriate classification? The description of Group I-2 states physical, but not mental, limitations.

**A:** Yes. A Group I-2 occupancy classification would be appropriate because it is intended to include occupancy with six or more individuals having physical limitations. Group I-1 reflects the occupant's ability to respond physically to an emergency. Mentally unstable occupants who are unable to respond physically without assistance would be included in the scope of the Group I-2 description. Section 308.4 includes psychiatric care and mental hospitals within the scope of a Group I-2 classification.

**308.4 Group I-2.** This occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of self-preservation*. This group shall include, but not be limited to, the following:

Foster care facilities Detoxification facilities Hospitals Nursing homes Psychiatric hospitals

**308.4.1 Five or fewer persons receiving care.** A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *International Residential Code*.

**Q:** If an existing Group R-4 facility that provides accommodations for 10 persons is expanded to accommodate an additional six persons who are not capable of responding to an emergency without physical assistance, must the occupancy classification of the existing facility be changed from a Group R-4 to Group I-2?

A: Yes. A facility that accommodates more than five occupants who are not capable of self-preservation is classified as a Group I-2 occupancy. A Group R-4 facility is permitted to accommodate a maximum of 16 persons, but all of the occupants in a Group R-4 occupancy must be capable of self-preservation. The enlarged facility has an increased occupant load which includes occupants who are not capable of self-preservation; therefore, the entire occupant load must be assumed to be persons with the most restrictive capability.

The existing Group R-4 facility may be expanded and retain the Group R-4 occupancy classification, but the expanded portion of the existing facility that accommodates the six additional occupants who are not capable of self-preservation must comply with all the technical provisions for a Group I-2 occupancy. Because the existing portion of the facility is a Group R-4 occupancy and the expanded portion of the facility is a Group I-2 occupancy, the entire facility must comply with the provisions for mixed occupancies.

**308.5 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:

Correctional centers Detention centers Jails Prerelease centers Prisons Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated in Sections 308.5.1 through 308.5.5 (see Section 408.1).

**Q:** Do Sections 308.5 and 408.2 require a room or building that is not used for sleeping purposes in a penal facility to be classified as a Group I-3 occupancy if some of the occupants are controlled for security reasons?

**A:** No. The five occupancy conditions listed in Sections 308.5.1 through 308.5.5 are specific to "sleeping areas," "activity spaces" and other "occupied areas within the smoke compartments." However, penal facilities are often a complex that does not necessarily have a Group I-3 classification in each building but still requires high levels of security throughout the structure. Section 408.2 specifically acknowledges that a mixed use condition may exist in penal facilities. The code requires that each portion of a building be classified according to its occupancy as long as the applicable provisions for mixed occupan-

cies are met and the required means of egress is provided.

Section 1008.1.9.5, Exception 1, provides for maintaining inmate confinement at all other times. Buildings in a penal facility where the movements of occupants must be controlled for security reasons and that are primarily residential in usage must be classified as Group I-3. Other buildings within the complex must be classified according to their actual nonresidential uses, such as recreational, business, educational or industrial. Section 1008.1.9.5, Exception 1, only permits locked means of egress doors for security reasons for other buildings within a penal facility. Chapter 3 and Section 408.2 must be used to classify properly nonresidential buildings according to their occupancy versus whether the means of egress doors are locked in accordance with Section 1008.1.9.5, Exception 1.

## SECTION 309 MERCANTILE GROUP M

**309.1 Mercantile Group M.** Mercantile Group M occupancy includes, among others, the use of a building or structure 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

Q: Is a Group M occupancy the appropriate classification for a building in which auction sales or other highly concentrated occupant load sales activities are conducted?

**A:** Yes. Section 309.1 describes mercantile buildings as those occupied for display and sales purposes involving stocks of goods, wares or merchandise that is incidental to such purposes, as well as accessible to the public. Although buildings housing auction sales do not sell goods by conventional retail methods, the merchandise is available for viewing prior to sale in areas accessible to the general public. Therefore, these types of buildings must comply with the criteria for a Group M occupancy. The presence of highly concentrated occupant loads does not, in itself, mandate an assembly use classification.