

The IBC provides regulations on the design of the building based on these inherent conditions and hazards. It regulates the types of materials used in the construction of the building. It regulates the size and height of the building based on the use and the type of materials used in the construction. The exit, or means of egress, system in the building is designed based on the hazards in the building. Fire protection systems are also based on the use of the building.

BASIC OCCUPANCIES

As noted in the introductory paragraph, there are ten different basic *occupancies* in the IBC. Many of those occupancies are then divided into separate subcategories (Table 3-1). The majority of the subcategories are generally listed from the most hazardous use to the least hazardous within the major occupancy classification. For example, a Group F-1 occupancy housing a moderate-hazard factory has more potential hazards than a Group F-2 occupancy that contains a low-hazard factory. It can be noted though that a Group I-1 occupancy is not the most hazardous occupancy in the Institution category. To assist in determining the classification of a building, many of the sections outlining the occupancies have a list of examples. Many buildings have multiple occupancies in them. When this happens, each individual area must be classified into the appropriate occupancy classification. Chapter 6 discusses how these multiple occupancy buildings are addressed. [Ref. 302]

TABLE 3-1 Occupancy classifications

Occupancy group	Description
A-1	Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures
A-2	Assembly uses intended for food and/or drink consumption
A-3	Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A
A-4	Assembly uses intended for viewing of indoor sporting events and activities with spectator seating
A-5	Assembly uses intended for participation in or viewing outdoor activities
B	The use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts.
E	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 and child care facilities.
F-1	Factory industrial uses which are not classified as Factory Industrial F-2 Low Hazard
F-2	Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard
H-1	Buildings and structures containing materials that pose a detonation hazard
H-2	Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning
H-3	Buildings and structures containing materials that readily support combustion or that pose a physical hazard
H-4	Buildings and structures which contain materials that are health hazards
H-5	Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used.

(continues)

TABLE 3-1 Occupancy classifications (continued)

Occupancy group	Description
I-1	Buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care.
I-2	Buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation..
I-3	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.
I-4	Buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for.
M	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.
R-1	Residential occupancies containing sleeping units where the occupants are primarily transient in nature
R-2	Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature
<i>Home</i> R-3	Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4, or I
R-4	Buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care.
S-1	Buildings occupied for storage uses that are not classified as Group S-2
S-2	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.
U	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.

**FIGURE 3-1** A community center is an example of an Assembly occupancy.

Assembly occupancies

When a building is used by a large number of people for the purpose of assembling, it is classified as a Group A occupancy. People tend to panic when a fire or some other type of dangerous event occurs. When there are a large number of people in the building and these events occur, it is very important to protect them and provide a safe and efficient way for them to get out of the building. Assembly occupancies include movie theaters, restaurants, nightclubs, places of worship, community and recreation centers, sports arenas and stadiums (Figure 3-1). **[Ref. 303]**

Many buildings have rooms for small-assembly uses such as conference rooms and small break rooms. If the room or space is less than 750 square feet in area or it has an occupant load less than fifty and it is accessory to a different occupancy, the room is classified as a Group B occupancy or as part of the main occupancy. Buildings or tenant spaces such as small restaurants with an occupant load less than fifty are also classified as Group B occupancies. **[Ref. 303.1]**