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OCCUPANCY AND CLASSIFICATION

By Lee C. DeVito

ost areas have adopted the International Building Code for managing construction of buildings. The international building code classifies buildings into ten primary categories, and some of the categories have subcategories. By categorizing buildings, rational criteria can be established to provide protection for fire hazards and life safety protection. Additionally, in some of the larger buildings there may be multiple occupancies using the building, and, therefore, the building is categorized as mixed use occupancy.

Where campuses will utilize most of these categories, we have described what each category is and how it is typically applied to campus buildings. Most of the material has been taken from the International Building Code, 2009 edition.

The ten categories and sub-categories are:

- 1. Assembly Group A-1, A-2, A-3, A-4, and A-5
- 2. Business Group B
- 3. Educational Group E
- 4. Factory and Industrial Group F-1 and F-2
- 5. High Hazard Group H-1, H-2, H-3, H-4 and H-5
- 6. Institutional Group I-1, I-2, I-3, and I-4
- 7. Mercantile Group M
- 8. Residential Group R-1, R-2, R-3, and R-4
- 9. Storage Group S1 and S-2
- 10. Utility and Miscellaneous Group U

Assembly - Group A

An 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 religions functions; recreation,





food or drink consumption or awaiting transportation. It is broken into five sub-groups:

- A-1 Assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures. On a typical campus they would include theaters and concert halls.
- A-2 Assembly uses intended for food and/or drink consumption. On a typical campus this would include cafeterias and restaurants.
- A-3 Assembly used intended for worship, recreation or amusement and other assembly uses not classified elsewhere. On a typical campus this would include museums and galleries, exhibition halls, bowling alleys, chapels, libraries, and indoor swimming pools and tennis courts that are without spectator seating areas.
- A-4 Assembly used intended for viewing of indoor sporting events and activities with spectator seating. On a typical campus this would include hockey/skating rinks, swimming pools, and basketball arenas.
- A-5 Assembly uses intended for participation in or viewing outdoor activities. On a typical campus this would include grandstands and stadiums.

Business - Group B

A Business Group B occupancy includes the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. On a typical campus most of the buildings will be classified as a business occupancy, which includes classroom buildings, laboratories, and medical outpatient clinics.

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. This would include a day care facility with five or more children over the age of 2 ½ years. On a typical campus there may be day care facilities that would be classified as a Group E, but you would typically not find an education building for grades under the 12th grade.

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 operation that are not classified as a Group H hazardous or Group S storage occupancy. It is very unlikely that a typical campus will have any Group F occupancies.

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" based on allowable quantities. There are five sub-groups of Group H, but it is very unlikely that a typical campus will have any Group H occupancies. However, hazardous chemicals have critical handling requirements, therefore they need an in-depth review before they are handled or stored.

Institutional - Group I

Institutional Group I occupancy includes, among other, 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 harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposed or in which the liberty of the occupants is restricted. It is broken into four sub-groups:

- I-1 This group includes buildings that house more than 16 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. These would be typical of convalescent facilities and group homes, which are unlikely to be part of a typical campus.
- I-2 This occupancy shall include buildings that are used for medical, surgical, psychiatric, nursing or custodial car for persons who are not capable of self-preservation. This group includes hospitals, which may exist on some campuses.





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I-3 This occupancy shall include buildings that are inhabited by more than five persons who are under restraint or security, such as correctional centers and jails. These are not expected to be on a typical campus.

I-4 These occupancies include adult day care and child care facilities. A child care facility for children under 2½ years is common on campuses.

Mercantile - Group M

Mercantile Group M occupancy includes, among others, the use of a building or structure, or portion thereof, for the display and sale of merchandise and involves stocks of goods, wares or merchandise incidental to such purposed and accessible to the public. This represents facilities such as retail stores. These may appear on a typical campus.

Residential - Group R

Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I. It is broken into four sub-groups:

- R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature. These are motels and hotels, which exist on some campuses.
- R-2 Residential occupancies containing sleeping

units or more than two dwelling units where the occupants are permanent in nature. Apartments, dormitories, and fraternities and sororities are classified in this occupancy group and they are found on a typical campus.

- R-3 These are typically single family homes which exist on campuses.
- R-4 Residential occupancies that are used for residential care or assisted living facilities. These are not typically found on college campuses.

Storage - Group S

Storage Group S occupancy includes, among others, the use of a building or structure, or portion thereof, for storage that is not classified as a hazardous occupancy. There are two sub-groups that classify the storage of products by their hazard of moderate or low. Some campuses may have storage occupancies for supplies used on the campus.

Utility and Miscellaneous - Group U

Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy. These buildings include agricultural buildings, sheds, barns, and greenhouses. These do exist on some campuses.

ABOUT THIS ARTICLE ...

The Center for Campus Fire Safety has responded to frequent requests asking how to describe the "occupancy" of a building and what that particular classification means. Therefore, this article has been prepared to help those that are new to understanding how buildings are categorized by occupancy.

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