

## Study Session

# 2

## 2009 IBC Chapter 3 and Section 508 Use and Occupancy Classification

**OBJECTIVE:** To gain an understanding of how an occupancy is classified based on its intended use and how a building with mixed uses is addressed.

**REFERENCE:** Chapter 3 and Section 508, 2009 *International Building Code*

- KEY POINTS:**
- What are the 10 general occupancy groups?
  - How is a space that is intended to be occupied at different times for different purposes to be addressed?
  - How is an occupancy that is not specifically described to be classified?
  - Which types of activities are considered assembly uses? What is their general classification?
  - How are small assembly uses classified where accessory to a different occupancy?
  - What is the classification for restaurants and cafes? Theaters? Places of religious worship, conference rooms and libraries? Arenas? Grandstands?
  - What is the primary use classified as Group B?
  - Group E occupancies describe educational uses for individuals of what age group?
  - Which types of day care are considered Group E occupancies?
  - Manufacturing operations fall into what occupancy group? How do the two divisions of factory-use differ from each other?
  - What type of operations or materials cause a use to be considered Group H?
  - How does the amount of hazardous materials affect the occupancy classification?
  - Which occupancies address physical hazards? Health hazards? Semiconductor fabrication facilities?
  - Which characteristics are typical of a Group I occupancy?
  - In which institutional occupancies are the occupants considered incapable of self-preservation?
  - For which types of institutional uses may the *International Residential Code* be utilized?
  - What general type of building is considered a Group M occupancy?
  - How are residential occupancies classified?
  - What is the key difference between a Group R-1 and Group R-2 occupancy?

- KEY POINTS:**
- (Cont'd)**
- What is a congregate living facility? How should such a facility be classified?
  - When is a residential use permitted to be constructed under the provisions of the *International Residential Code*?
  - What do storage occupancy classifications have in common with those of manufacturing uses?
  - How is a vehicle repair garage classified? An aircraft hangar?
  - What is the classification of an enclosed parking garage? An open parking garage?
  - What is a utility occupancy? How does its classification differ from that of other occupancies?
  - Which three options are available for addressing multiple occupancies within a building?
  - What is an accessory occupancy? What benefit is derived from such a designation?
  - What is an incidental accessory occupancy? How must such an area be separated from the remainder of the building? When is sprinkler protection required?
  - What is the concept of the nonseparated occupancy provisions? What conditions apply to buildings with nonseparated occupancies?
  - What is the basis for separated occupancies? How are the minimum required fire-resistive separations determined?
  - How is the fire-resistance rating for an occupancy separation determined? How does the presence of an automatic sprinkler system affect the required rating?

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**Topic:** Occupancy Groups  
**Reference:** IBC 302.1

**Category:** Occupancy Classification  
**Subject:** Classification

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**Code Text:** *Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed. Where a structure is proposed for a purpose which is not specifically provided for in the IBC, such structure shall be classified in the group which the occupancy most nearly resembles, according to the fire safety and relative hazard involved.*

**Discussion and Commentary:** The perils contemplated by the occupancy groupings are divided into two general categories: those related to people and those related to content. People-related hazards include the number and density of the occupants, their age and mobility, and their awareness of surrounding conditions. Content-related hazards include the storage and use of hazardous materials, as well as the presence of large quantities of combustible materials.

<b>A</b> ssembly	<b>B</b> usiness
<b>E</b> ducational	<b>F</b> actory
<b>H</b> azardous	<b>I</b> nstitutional
<b>M</b> ercantile	<b>R</b> esidential
<b>S</b> torage	<b>U</b> tility

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Proper occupancy classification is critical in making appropriate code determinations throughout a project. In the classification process, the building official must use judgment in the determination of the potential hazards of an affected occupancy.