

**CHAPTER 16
STRUCTURAL DESIGN**

**SECTION 1604.5
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1604.5 Occupancy category.

Each building and structure shall be assigned an occupancy category in accordance with Table 1604.5.

**TABLE 1604.5
OCCUPANCY CATEGORY OF BUILDINGS AND OTHER STRUCTURES**

OCCUPANCY CATEGORY	NATURE OF OCCUPANCY
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: <ul style="list-style-type: none"> • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities.
II	Buildings and other structures except those listed in Occupancy Categories I, III and IV
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: <ul style="list-style-type: none"> • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing elementary school, secondary school or day care facilities with an occupant load greater than 250. • Buildings and other structures containing adult education facilities, such as colleges and universities, with an occupant load greater than 500. • Group I-2 occupancies with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities. • Group I-3 occupancies. • Any other occupancy with an occupant load greater than 5,000^a. • Power-generating stations, water treatment facilities for potable water, waste water treatment facilities and other public utility facilities not included in Occupancy Category IV. • Buildings and other structures not included in Occupancy Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released.
IV	Buildings and other structures designated as essential facilities, including but not limited to: <ul style="list-style-type: none"> • Group I-2 occupancies having surgery or emergency treatment facilities. • Fire, rescue, ambulance and police stations and emergency vehicle garages. • Designated earthquake, hurricane or other emergency shelters. • Designated emergency preparedness, communications and operations centers and other facilities required for emergency response. • Power-generating stations and other public utility facilities required as emergency backup facilities for Occupancy Category IV structures. • Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.1(2). • Aviation control towers, air traffic control centers and emergency aircraft hangars. • Buildings and other structures having critical national defense functions. • Water storage facilities and pump structures required to maintain water pressure for fire suppression.

a. For purposes of occupant load calculation, occupancies required by Table 1004.1.1 to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.

1604.5.1 Multiple occupancies.

Where a building or structure is occupied by two or more occupancies not included in the same occupancy category, it shall be assigned the classification of the highest occupancy category corresponding to the various occupancies. Where buildings or structures have two or more portions that are structurally separated, each portion shall be separately classified. Where a separated portion of a building or structure provides required access to, required egress from or shares life safety components with another portion having a higher occupancy category, both portions shall be assigned to the higher occupancy category.



Q: A Sheriff's office occupies two adjoining separate buildings. Even though functions of the Sheriff are provided in both buildings, essential functions in the event of extreme environmental conditions such as flood, wind, snow, and earthquake are located in one building that will be classified as Occupancy Category IV. The adjoining building will contain functions that have been identified as nonessential in the Sheriff's Emergency Operation Plan. The buildings do not share required access to, required egress from, or life safety components.

Can the "occupancy category" of one building be classified as an essential facility (Category IV) and the adjoining separate building be classified as a different "occupancy category"?

A: Yes. Section 1604.5 of the *International Building Code* allows separate structures to be classified separately provided the buildings do not share required access to, required egress from, or life safety components. The "occupancy category" in this section is not the same as the "use and occupancy classification" found in Chapter 3. Even though the "use and occupancy classification" of both buildings may be the same based on Chapter 3, the nature of the occupancy found in Table 1604.5 determines the appropriate "occupancy category" used to determine the structural requirements.
