

2006 International Building Code (IBC)

Modifications are required to text and tables in seven major headings in Chapters 5 and 7 of the 2006 IBC to amend the model code to require minimum 2-hr non-combustible construction.

Step 1. Modify Table 503 as follows:

TABLE 503
ALLOWABLE HEIGHT AND BUILDING AREAS
 Height limitations shown as stories and feet above grade plane.
 Area limitations as determined by the definition of "Area, building", per floor.

		TYPE OF CONSTRUCTION									
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V		
		A	B	A	B	A	B	HT	A	B	
Group	Hgt (S)	Hgt (ft)	UL	160	65	55	65	55	65	50	40
I-1	S		UL	9	4	3	4 NP	3 NP	4 NP	3 NP	2 NP
	A		UL	55,000	19,000	10,000	46,500 NP	40,000 NP	48,000 NP	40,500 NP	4,500 NP
R-1	S		UL	11	4	4	4 NP	4 NP	4 NP	3 NP	2 NP
	A		UL	UL	24,000	16,000	24,000 NP	16,000 NP	20,500 NP	12,000 NP	7,000 NP
R-2	S		UL	11	4	4	4 NP	4 NP	4 NP	3 NP	2 NP
	A		UL	UL	24,000	16,000	24,000 NP	16,000 NP	20,500 NP	12,000 NP	7,000 NP

Step 2. Delete Section 509.5 which reads:

~~**509.5 Group R-2 buildings of Type IIIA construction.** The height limitation for buildings of Type IIIA construction in Group R-2 shall be increased to six stories and 75 feet (22860 mm) where the first floor construction above the basement has a fire-resistance rating of not less than 3 hours and the floor area is subdivided by 2-hour fire-resistance-rated fire walls into areas of not more than 3,000 square feet (279m²).~~

Step 3. Modify Section 704.11, Exception 5 as follows:

704.11 Parapets. Parapets shall be provided on exterior walls of buildings.

Exceptions: (No change to Exceptions 1 to 4)

5. In Groups R-2 and R-3 where the entire building is provided with a Class C roof covering, the exterior wall shall be permitted to terminate at the underside of the roof sheathing or deck in Type III, IV and V construction, provided:

- 5.1. The roof sheathing or deck is constructed of approved noncombustible materials or of fire-retardant-treated wood for a distance of 4 feet (1220 mm); or
- 5.2. The roof is protected with 0.625-inch (16 mm) Type X gypsum board directly beneath the underside of the roof sheathing or deck, supported by a minimum of nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members for a minimum distance of 4 feet (1220 mm).

Step 4. Modify Section 706.3 as follows:

706.3 Fire-resistance rating. The fire-resistance rating of the walls and floor assemblies shall comply with this section.

706.3.1 Shaft enclosures. The fire-resistance rating of the fire barrier separating building areas from a shaft shall comply with Section 707.4.

706.3.2 Exit enclosures. The fire-resistance rating of the fire barrier separating building areas from an exit shall comply with Section 1020.1.

706.3.3 Exit passageway. The fire-resistance rating of the separation between building areas and an exit passageway shall comply with Section 1021.1.

706.3.4 Horizontal exit. The fire-resistance rating of the separation between building areas connected by a horizontal exit shall comply with Section 1022.1.

706.3.5 Atriums. The fire-resistance rating of the fire barrier separating atriums shall comply with Section 404.5.

706.3.6 Incidental use areas. The fire barrier separating incidental use areas shall have a fire-resistance rating of not less than that indicated in Table 508.1.

706.3.7 Control Areas. Fire barriers separating control areas shall have a fire resistance rating of not less than that required in Section 414.2.3.

706.3.8 Separation of mixed occupancies. Where the provisions of Section 508.3.2 are applicable, the fire barrier separating mixed occupancies shall have a fire-resistance rating of not less than that indicated in Section 508.3.2 based on the occupancies being separated.

706.3.9 Single occupancy fire areas. The fire barrier separating a single occupancy into different fire areas shall have a fire-resistance rating of not less than that indicated in Table 706.3.9.

706.3.10 Separation of dwelling units and sleeping units. The fire-resistance rating of the separation between individual dwelling units and sleeping units, and between dwelling units and sleeping units and other spaces in the building shall comply with Table 706.3.9.

Step 5. Modify Sections 708.1, 708.3 and 708.4 as follows:

708.1 General. The following wall assemblies shall comply with this section.

- ~~1. Walls separating dwelling units in the same building.~~
- ~~2. Walls separating sleeping units in occupancies in Group R-1, hotel occupancies, R-2 and I-1.~~
- ~~3~~ **1.** Walls separating tenant spaces in covered mall buildings as required by Section 402.7.2.
- ~~4~~ **2.** Corridor walls as required by Section 1017.1.
- ~~5-3.~~ **3.** Elevator lobby separation as required by Section 707.14.1
- ~~6-4.~~ **4.** Residential aircraft hangars.

708.3 Fire-resistance rating. Fire partitions shall have a fire-resistance rating of not less than 1 hour.

Exceptions:

- ~~1. Corridor walls as permitted by Table 1017.1.~~
- ~~2. Dwelling unit and sleeping unit separations in buildings of Types IIB, IIIB and VB construction shall have fire-resistance ratings of not less than 1/2 hour in buildings equipped throughout with an automatic sprinkler system in accordance with Section rated corridor as required by Section 903.3.1.1~~

708.4 Continuity. Fire partitions shall extend from the top of the floor assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. If the partitions are not continuous to the sheathing, deck or slab, and where constructed of combustible construction, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 717.2 and 717.3 at the partition line. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for tenant and ~~sleeping unit separation walls and~~ corridor walls in buildings of Types IIB, IIIB, and VB construction.

Step 6. Modify Section 711.3 as follows:

711.3 Fire-resistance rating. The fire-resistance rating of floor and roof assemblies shall not be less than that required by the building type of construction. Where the floor assembly separates mixed occupancies, the assembly shall have a fire-resistance rating of not less than that required by Section 508.3.2 based on the occupancies separated. Where the floor assembly separates a single occupancy into different fire areas, the assembly shall have a fire-resistance rating of not less than that required by Section 706.3.9. Floor assemblies separating dwelling units in the same building or sleeping units in occupancies in Group R-1, hotel occupancies, R-2 and I-1 shall ~~be a minimum of 1-hour~~ have a fire-resistance-rated construction as required in Section 706.3.10.

~~**Exception:** Dwelling unit and sleeping unit separations in buildings of Types IIB, IIIB, and VB construction shall have fire-resistance ratings of not less than 1/2 hour in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.~~

Step 7. Modify Sections 717.3.2 and 717.4.2 as follows:

717.3.2 Groups R-1, R-2, R-3 and R-4. Draftstopping shall be provided in floor/ceiling spaces ~~in Group R-1 buildings, in Group R-2 buildings with three or more dwelling units, in Group R-3 buildings with two dwelling units and in Group R-4 buildings.~~ Draftstopping shall be located above and in line with the dwelling unit and sleeping unit separations.

Exceptions:

1. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are also installed in the combustible concealed spaces.

~~**717.4.2 Groups R-1 and R-2.** Draftstopping shall be provided in attics, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more dwelling units and in all Group R-1 buildings. Draftstopping shall be installed above, and in line with, sleeping unit and dwelling unit separation walls that do not extend to the underside of the roof sheathing above.~~

Exceptions:

1. ~~Where corridor walls provide a sleeping or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.~~
2. ~~Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.~~
3. ~~In occupancies in Group R-2 that do not exceed four stories in height, the attic space shall be subdivided by draftstops into areas not exceeding 3,000 square feet (279 m²) or above every two dwelling units, whichever is smaller.~~

~~4. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are also installed in the combustible concealed spaces.~~