

2007 Florida Building Code, Building

The 2007 *Florida Building Code, Building* is based on the 2006 *International Building Code* with amendments where necessary for Florida's specific needs. The code incorporates all building construction-related regulations for public and private buildings in the State of Florida other than those specifically exempted by Section 553.73, Florida Statutes. It has been harmonized with the *Florida Fire Prevention Code*, which is developed and maintained by the Department of Financial Services, Office of the State Fire Marshal, to establish unified and consistent standards. The 1998 Florida Legislature amended Chapter 553, Florida Statutes, Building Construction Standards, to create a single state building code that is enforced by local governments. As of March 1, 2002, the *Florida Building Codes* supercede all local building codes. The *Florida Building Codes* are developed and maintained by the Florida Building Commission. It is updated every three years and may be amended annually to incorporate interpretations and clarifications.

Scope

The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

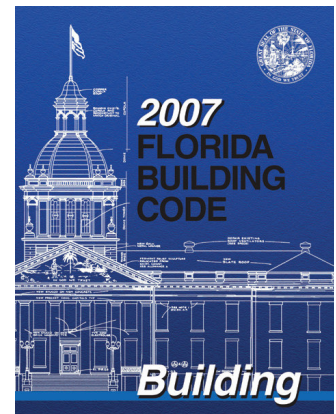
Content

This document provides an overview of the significant changes to the 2007 *Florida Building Code, Building* from the 2004 edition. This document is intended to be a comparative analysis of the significant differences between the 2004 and 2007 *Florida Building Code, Building*. The table is divided into three specific categories. The left column of the table contains the section and specific requirement from the 2004 *Florida Building Code, Building*. The next column contains the corresponding section and specific requirements from the 2007 *Florida Building Code, Building*. The right column provides an analysis, as applicable, of the significance of the change.

This overview book is categorized according to the following building code issues:

- General Code Issues
- Fire Protection
- Means of Egress
- Structural

The Overview is not designed to be used without the aide of the representative code books, as all the details pertaining to a specific section may or may not be provided. This comparison will, however, provide an easy means for identifying significant differences in between the two codes, as well as enabling the user to locate issue specific provisions in the 2007 *Florida Building Code, Building* by means of a numbered section cross reference.



Topic: General Code Requirements

Chapter 1 Administration

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
105.1 109.3	105.1 109.3	Required permits and inspections	<p>Section 105.1 has been revised to required a permit for erecting, installing, enlarging, altering, repairing, removing, converting or replacing "impact-resistant coverings".</p> <p>Under the required inspection of Section 109.3, the listed inspections for Building Framing Inspection (Item 2) has been revised to include verifying that rough opening dimensions are within tolerances. A new item (Item 9) has been added that requires inspections for impact-resistant coverings.</p>
-	110.4	Certificate of completion	A new section has been added that defines a "certificate of completion" that is intended to allow connection to utility systems prior to issuance of a certificate of occupancy.

Chapter 3 Use and Occupancy Classification

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
302.1.1	508.2 508.2.1	Incidental uses and occupancy classifications	Mixed occupancy related provisions, including incidental use areas, accessory occupancies, separated uses and nonseparated uses have been relocated to Chapter 5. The provisions of Chapter 3 now only address the classification of occupancies which was the original intent of this chapter. New language has been added that clarifies that incidental use areas are to be in accordance with Section 508.2 or are to be considered a mixed occupancy.
-	508.2.3	Protection of incidental use areas	A new section has been added that clarifies that where an automatic fire-extinguishing system or automatic sprinkler system is provided for protection of the incidental use area per Table 508.2, only the incidental use areas have to be equipped with such a system.
302.3.1	508.3.2 508.3.2.1 508.3.2.2 508.3.2.3	Nonseparated uses	The requirements specified for nonseparated uses have been reorganized but the technical requirements are basically the same. However, the provisions were revised to require most restrictive requirements of Chapter 9 and Section 403 as applicable to the entire building instead of just the nonseparated uses.
Table 302.3.2	Table 508.3.3	Required separation of occupancies	The occupancy separation table has been significantly revised. Group H occupancies require separation from each other and all other occupancies. Groups B, F-1, M, and S-1 require no separation from each other but are required to be separated from other occupancies. Groups A, E, and D require no separation from each other but are required to be separated from other occupancies except for fully sprinklered Groups F-2, F-3 and S-2.

**TABLE 508.3.3
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)**

OCCUPANCY	A ^c , E, D		I		R ^d		F-2, F-3, S-2 ^{e,d} , U ^d		B ^b , F-1, M ^b , S-1		H-1		H-2		H-3, H-4, H-5	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A ^c , E ^c , D	N	N	1	2	1	2	N	1	1	2	NP	NP	3	4	2	3 ^a
I	—	—	N	N	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
R ^d	—	—	—	—	N	N	1	2	1	2	NP	NP	3	NP	2	NP
F-2, F-3, S-2 ^{e,d} , U ^d	—	—	—	—	—	—	N	N	1	2	NP	NP	3	4	2	3 ^a
B ^b , F-1, M ^b , S-1	—	—	—	—	—	—	—	—	N	N	NP	NP	2	3	1	2 ^a
H-1	—	—	—	—	—	—	—	—	—	—	N	NP	NP	NP	NP	NP
H-2	—	—	—	—	—	—	—	—	—	—	—	—	N	NP	1	NP
H-3, H-4, H-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N	NP

For SI: 1 square foot = 0.0929 m².

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

N = No separation requirement.

NP = Not permitted.

a. For Group H-5 occupancies, see Section 903.2.4.2.

b. Occupancy separation need not be provided for storage areas within Groups B and M if the:

1. Area is less than 10 percent of the floor area;
2. Area is equipped with an automatic fire-extinguishing system and is less than 3,000 square feet; or
3. Area is less than 1,000 square feet.

c. Areas used only for private or pleasure vehicles shall be allowed to reduce separation by 1 hour.

d. See Section 406.1.4.

e. Commercial kitchens need not be separated from the restaurant seating areas that they serve.

Chapter 3 Use and Occupancy Classification

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
302.1.1	508.2 508.2.1	Incidental uses and occupancy classifications	Mixed occupancy related provisions, including incidental use areas, accessory occupancies, separated uses and nonseparated uses have been relocated to Chapter 5. The provisions of Chapter 3 now only address the classification of occupancies which was the original intent of this chapter. New language has been added that clarifies that incidental use areas are to be in accordance with Section 508.2 or are to be considered a mixed occupancy.
310.1	310.1	Residential Group R	The criteria for Group R-2 have been revised to permit congregate living facilities with 16 or fewer occupants to comply with the provisions for Group R-3. The Group R-2 provisions have been reformatted. The criteria for Group R-3 have been revised to include congregate living facilities with less than 16 occupants. A new definition for congregate living facilities has been added to read: CONGREGATE LIVING FACILITIES. A building or part thereof that contains sleeping units where residents share bathroom and/or kitchen facilities.

Chapter 5 General Building Heights and Areas

2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
Table 503	Table 503	Allowable Height and Building Areas	<p>Group H-5 permitted one additional story for Type I construction (4 stories max for Type IA and 3 stories max for Type IB).</p> <p>New footnote identifies general exceptions to Table 503 throughout this chapter.</p> <p>New note d refers to Section 415.5 for limitations on Groups H-2 and H-3.</p>
504.2	504.2	Allowable height, automatic sprinkler system increase	Exceptions 1 and 2 revised to clarify that the reference is to "fire areas" with an occupancy in the groups specified.
506.1	506.1	Area modifications, general	Area increase calculations for frontage and sprinklers have been simplified by eliminating the need to multiply and divide by 100.
506.2	506.2	Frontage increase	
506.3	506.3	Automatic sprinkler system increase	

$$A_a = \left\{ A_t + [A_t \times I_f] + [A_t \times I_s] \right\} \quad \text{(Equation 5-1)}$$

$$I_f = [F / P - 0.25] W / 30 \quad \text{(Equation 5-2)}$$

Table 503	Table 503	Allowable Height and Building Areas	<p>Group H-5 permitted one additional story for Type I construction (4 stories max for Type IA and 3 stories max for Type IB).</p> <p>New footnote identifies general exceptions to Table 503 throughout this chapter.</p> <p>New note d refers to Section 415.5 for limitations on Groups H-2 and H-3.</p>
506.2.1	506.2.1	Width limits	Language regarding the calculation of W has been modified to clarify that the W/30 limitation is applied for each segment of frontage, rather than after the weighted average is calculated. Provisions relating to the value of W/30 up to 2.0 has also been revised for clarity.

Chapter 5 General Building Heights and Areas

2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
-	506.4.1	Maximum building area, mixed occupancies	New provision addresses the application of Section 506.4 (maximum total building area) when mixed occupancies are separated in accordance with 508.3.3. Limits the maximum total building area such that the sum of the ratios for each such area on all floors as calculated according to Section 508.3.3.2 does not exceed 2 for two-story buildings and 3 for buildings three stories and higher.

Example:

Fully-sprinklered Type IIB Building
No frontage increase

Determine if the building complies with the Maximum Building Area assuming the occupancies are separated in accordance with Section 508.3.3.2.

R-1 36,000 ft ²	A-2 9000 ft ²
A-2 17,000 ft ²	R-1 28,000 ft ²
R-1 45,000 ft ²	
R-1 31,000 ft ²	M 14,000 ft ²

Allowable Area Per Occupancy (Table 503 with a 200% sprinkler increase)

A-2: 9,500 + 9,500(2) = 28,500 ft²
 R-1: 16,000 + 16,000(2) = 48,000 ft²
 M: 12,500 + 12,500(2) = 37,500

Sum of the ratios of actual area divided by the allowable area for each occupancy on all floors

$$\frac{31,000}{48,000} + \frac{14,000}{37,500} + \frac{45,000}{48,000} + \frac{17,000}{28,500} + \frac{28,000}{48,000} + \frac{36,000}{48,000} + \frac{9,000}{28,500} = 4.20 \geq 3.0$$

Therefore, the building **does not** comply with Section 506.4.1.
 Possible solutions include upgrading the construction type and/or reducing the proposed areas.

Chapter 5 General Building Heights and Areas

2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
508.2	509.2	Group S-2 enclosed or open parking garage with Group A, B, M, R or S above	<p>This section has been modified to now include open parking garages as well as enclosed and permits Group S above as well as other occupancies stated.</p> <p>Condition 3 has been modified to allow multiple Group A uses above the horizontal assembly providing separation from the parking garage and permits Group S above.</p> <p>Condition 4 has been modified to recognize the applicability of open parking garages to this section. Exception 1 is modified to allow multiple Group A uses below the horizontal assembly providing separation from the parking garage.</p> <p>Condition 5 has been modified to clarify that the building height is limited to the building occupancy resulting in the smaller allowable height as measured from grade.</p>
-	509.8	Group B or M with Group S-2 opening parking garage above	This is a new section added to the 2007 code that provides prescriptive alternatives to the general provisions for offices and/or retail stores on the first floor of open parking structures.

Chapter 6 Types of Construction

2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
603.1 Item 1	603.1 Item 1	Allowable materials for Type I and II construction - Item 1	Revised section to remove reference to Table 601 and relocated text from Item 3 of Note C in Table 601 as an exception to Item 1.3 in this section. Exception now states: 'In buildings of Type I construction exceeding two stories in height, fire-retardant-treated wood is not permitted in roof construction when the vertical distance from the upper floor to the roof is less than 20 feet.'
-	Table 602.4	Wood member size	A new table is provided in the 2007 code that provides a simple relationship of glued-laminated lumber to solid sawn lumber for use in Type IV Construction.

TABLE 602.4
WOOD MEMBER SIZE

MINIMUM NOMINAL SOLID SAWN SIZE		MINIMUM GLUED-LAMINATED NET SIZE	
Width, inch	Depth, inch	Width, inch	Depth, inch
8	8	6 ³ / ₄	8 ¹ / ₄
6	10	5	10 ¹ / ₂
6	8	5	8 ¹ / ₄
6	6	5	6
4	6	3	6 ⁷ / ₈

For SI: 1 inch = 25.4 mm.

Chapter 14 Exterior Walls			
2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
-	1405.12.2	Window sills	A new section has been added that requires the lowest part of the clear opening of a window to be 24 inches above the finished floor surface where the opening of the sill portion of an operable window is located more than 72 inches above finished grade or other surface below. A new exception permits the use of window guards complying with ASTM F 2006 or F 2090 in lieu of the 24 inch minimum height.
Chapter 31 Special Construction			
2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
3104.11	-	Ventilation of enclosed walkways and tunneled walkways	The installation of smoke and heat vents is no longer required for enclosed and tunneled walkways.
Chapter 33 Safeguards During Construction			
2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
3310.1	3310.1	Stairways required	This section has been revised to require temporary lighted stairways for heights greater than "one story," for new construction and existing building for correlation with the <i>Florida Fire Prevention Code</i> . The previous threshold of 50 feet or "four stories" for new construction has been deleted. During construction, the stairways are required to be enclosed where the building exterior walls are in place."
-	3310.3	Stairway floor number signs	A new section has been added that requires temporary stairway floor number signs in accordance with Section 1020.1.6

Topic: Fire Protection

Chapter 7 Fire-Resistance-Rated Construction

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
702.1	702.1	Definitions: Fire Barrier and Horizontal Assembly	The definition of fire barrier has been revised to limit its application only to vertical assemblies such as walls. A new definition of horizontal assembly was added that applies to fire-resistance-rated floor or roof assemblies. The new definition provides a distinction between vertical and horizontal assemblies.
Table 704.8	Table 704.8	Maximum area of exterior wall openings	Footnote i allows unlimited unprotected openings where exterior bearing walls, exterior nonbearing walls, and the structural frame are not required to be fire-resistance rated. The 2007 code clarifies this exception is applicable where Tables 601 or 602 do not require a fire-resistance rating. If some other section of the code required these walls to be fire-resistance rated for some other reason, Table 704.8 would not apply as long as Tables 601 or 602 do not require the wall to be fire-resistance rated.
706.7	706.7	Openings in fire barriers	The maximum permitted area of any single opening in a fire barrier has been increased from 120 ft ² to 156 ft ² . A new exception has been added that exempts fire windows in atriums from the maximum aggregate width limit of 25% of the length of the wall.
707.14.1	707.14.1	Elevator lobby	The 2004 code required an elevator lobby where elevators open into a fire-resistance rated corridor. That provision has been deleted from the 2007 code and elevator lobbies are now required at each floor where an elevator shaft connects more than three stories. Numerous revisions were made to the exceptions for elevator lobbies.
-	707.14.2	Enclosed elevator lobby pressurization	A new section has been added that permits elevator hoistway pressurization in lieu of enclosed elevator lobbies. New Exception 6 to Section 707.14.1 recognizes this option.
708.1	708.1	Fire partitions	A new exception excludes walls separating individual tenants in min-warehouse/self-storage buildings from complying with the fire partition requirements provided an automatic sprinkler system is installed.
717.3.1	717.3.1	Draftstopping materials	Permitted materials for use as draftstopping has been expanded to include 1-inch nominal lumber, cement fiberboard, batts or blankets of mineral wool or glass fiber.

Chapter 8 Interior Finishes

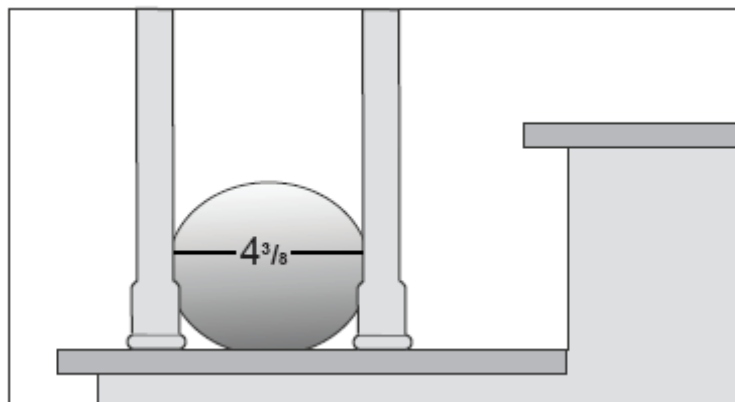
2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
801.1.2	801.1.2	Decorative materials and trim, scoping requirements	The use of the term "flame resistance" of materials has been revised to "flame propagation performance criteria of NFPA 701" for consistency with terminology in NFPA 701.

Chapter 8 Interior Finishes			
2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
803.6	803.6	Textiles	New language specifically refers to carpet as a textile. The entire section has been reformatted to permit compliance with Section 803.6.1, 803.6.2, or 803.6.3. The use of the Method A test protocol has been deleted. New pass/fail criteria for the Method B test protocol limits the smoke released to not exceed 1000 m ² .
805.1	805.1	Decorative materials and trim	The use of the term "flame resistance" of materials has been revised to "flame propagation performance criteria of NFPA 701" for consistency with terminology in NFPA 701. New criteria specific to fixed or movable walls and partitions, paneling, wall pads and crash pads, has been added and requires them to be considered interior finish if they cover more than 10% of the wall or ceiling area. In Group B and M occupancies, fabric partions suspended from ceiling and not support by the floor are required to meet NFPA 701 or be noncombustible.
Chapter 9 Fire Protection Systems			
2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
903.2.1.2	903.2.1.2	Group A-2 sprinkler systems	The fire area occupant load threshold for when sprinklers are required in Group A-2 has been lowered from 300 to 100.
905.3.1	905.3.1	Standpipes and building height	A new exceptions (Exception 5) was added to clarify the measurement of the lowest fire department vehicle access in relation to recessed loading docks and topography.
909.4.6	909.4.7	Smoke control systems	Section revised by placing additional limit of 1.5 times the calculated egress time for continued operation of smoke control systems after detection of the fire event, in addition to the 20 minute limit.
909.20.5	909.20.5	Stair pressurization alternative	The stair pressurization alternative, the minimum pressurization required has been lowered from 0.15 inch of water column to 0.5 inch of water column.
-	912	Fire department connections	New provisions for fire department connections have been added to the 2007 code that addresses installation, location, access, signage and protection of such connections.

Topic: Means of Egress

Chapter 10 Means of Egress

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
1003.3.2	1003.3.2	Freestanding objects	This section has been revised to reduce the permitted overhand of any object on a post or pylon from 12 inches to 4 inches.
1004.2	1004.2	Increased occupant load	Section 1004.2 permits the occupant load to be increased from the number established by Table 1004.1.1 provided the occupant load doesn't exceed the prescribed threshold. In the 2007 code, the prescribed threshold has been changed from one occupant per 5 square feet to 1 occupant per 7 square feet.
1008.1.2	1008.1.2	Door swing	Two new exceptions have been added that permits doors to not be side-hinged in critical or intensive care patient rooms within suits of health care facilities, and doors serving a bathroom within an individual sleeping unit in Group R-1.
1008.1.9	1008.1.9	Panic and fire exit hardware	The occupant load limit for Groups A and E when panic or fire exit hardware is required has been lowered from 100 to 50. Panic or fire exit hardware is now required on exit access doors from electrical rooms with equipment rated 120 amperes or more and over 6 feet wide that contain overcurrent devices, switching devices, or control devices.
1009.11	1012	Handrails	The provisions that regulate the construction and location of handrails has been relocated from the section pertaining to stairs, to new Section 1012 that applies to handrails for stairs and for ramps.
1012.3	1013.3	Opening limitations	A new exception has been added regarding opening limits for guardrails. Where rails are attached directly to reads, the opening limitation is permitted to increased to not allow a sphere of 4.375 inches in diameter to pass through.



Chapter 10 Means of Egress

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
1013.2	1014.2	Egress through intervening spaces	<p>New language permits a means of egress to pass through a stockroom in a Group M occupancy with limitations. Criteria for using a stockroom as a means of egress includes:</p> <ol style="list-style-type: none"> 1. Stock is of same hazard classification as found in the main retail area 2. No more than 50% of exit access is through the stockroom 3. Stockroom is not lockable from the egress side 4. Required demarcated aisle minimum 44 inches wide from retail area to the exit without obstructions.
1013.2.1	1014.2.1	Egress through tenant spaces	<p>A new exception has been added that permits egress through adjoining tenant spaces where such tenant spaces occupy less than 10 percent of the area of the tenant space through which they pass. Additional stipulations include:</p> <ol style="list-style-type: none"> 1. Same or similar occupancy 2. Discernable path of egress travel is provided 3. Not subject to locking from the egress side 4. Required means of egress serving the larger tenant space is not permitted to pass through the smaller space
1013.3	1014.3	Common path of egress travel	<p>Numerous revisions were made to the provisions for common path of egress travel primarily for consistency with the <i>Florida Fire Prevention Code</i>. Notable changes include:</p> <ol style="list-style-type: none"> 1. Groups F, M, and S occupancy are permitted a common path of travel of 100 feet provided the building is equipped with an automatic sprinkler system. Otherwise the common path of egress travel is 75 feet. 2. Group R-2 is permitted a common path of egress travel of 125 feet within the dwelling unit provided the building is provided with an automatic sprinkler system. 3. Where the occupant load in a tenant space of Group A occupancy exceeds 50, the common path of egress travel is limited to 20 feet. 4. Common path of egress travel in Group F and S is limited to 50 feet in unsprinklered buildings. 5. Common path of egress travel in Group S2 parking garages is limited to 50 feet. 6. Common path of egress travel in Group H occupancies is prohibited.
-	1014.4.2	Aisle accessways in Group M	<p>A new section has been added to provide requirements specific to aisle accessways in Group M occupancies. The minimum clear width of the accessway is required to be 30 inches and is measured perpendicular to the elements and merchandise within the merchandise pad. A new definition of "merchandise pad" has been added to assist in compliance with this new requirement. The common path of egress travel is limited to 30 feet from any point in the merchandise pad.</p> <p>This new section also assists with clarity regarding the distinction between aisles and aisle access way.</p>
Table 1014.1	Table 1015.1	Spaces with one means of egress	<p>Group D day care is limited to an occupant load of 10 for a single means of egress. Maximum occupant load for a single means of egress in Groups A, B, E, F, M, U, R-2, R-3 has been reduced from 50 to 49. Maximum occupant load for a single means of egress in Group S has been reduced from 30 to 29.</p>

**TABLE 1015.1
SPACES WITH ONE MEANS OF EGRESS**

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, D, E, F, M, U, R-2, R-3	49
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, R-1, R-4	10
S	29

a. Day care maximum occupant load is 10.

Topic: Structural

Chapter 15 Roof Assemblies and Rooftop Structures

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
-	1504.8	Gravel and stone on roofs in high wind areas	New section prohibits the use of gravel or stone on the roof of a building located in a hurricane-prone region. This provision will be revised in the glitch amendments to the 2007 <i>Florida Building Codes</i> .
1507.2.8	1507.2.8	Underlayment application	New language added that prohibits distortions in the underlayment so as not to interfere with the ability of the shingles to seal. The wind resistance of shingles will be affected if their ability to seal is compromised.
1521.21 HVHZ	1521.21 HVHV	Ventilation	A new exception has been added that permits the elimination of attic ventilation provided the attic space is designed to eliminate the venting by a Florida licensed engineer or registered architect.

Chapter 16 Structural Design

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
1604.5	1604.5	Occupancy category	Importance factors are no longer included in Table 1604.5. Buildings are now simply given an occupant category. Importance factors are determined from ASCE 7. Section revised to require that buildings be assigned an occupant category.

Chapter 16 Structural Design

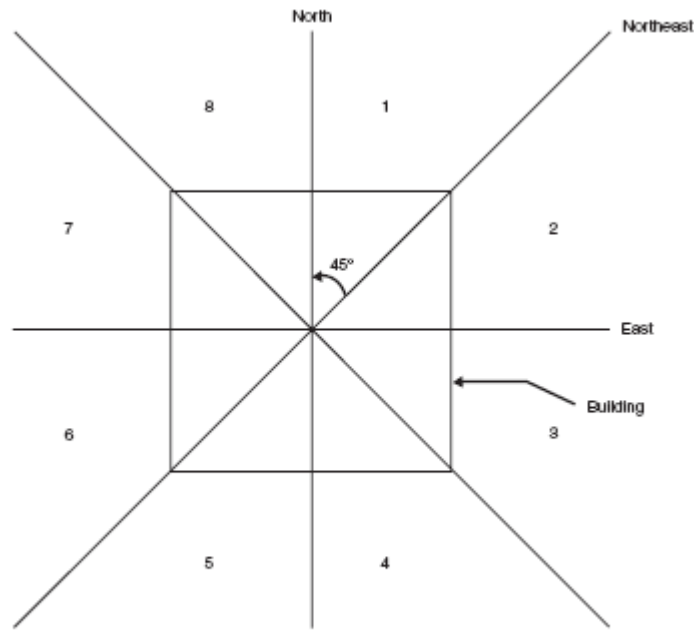
2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
-	1604.5.1	Multiple occupancies	New section addressing how to deal with buildings that have multiple occupancies not included in the same group. Requires the building to be assigned the classification having the highest occupancy category unless the occupancies are structurally separated. If the separated occupancies share life safety components, both are required to be assigned the higher category.
Table 1604.5	Table 1604.5	Occupancy category of buildings and other structures	Importance factors have been deleted from the table. Importance factors are now determined from ASCE 7. Criteria from Occupancy Category III has been revised to clarify the applicability of the "where more than 300 people congregate in one area." The language now states, "Covered structures whose primary occupancy is public assembly with an occupant load greater than 300." This clarifies that large commercial structures shouldn't be classified as Occupancy Category III, even if the occupant load exceeds 300, since this type of building is typically not used for public assembly.

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. • Screen enclosures.
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"> • Covered structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250. • Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities. • Health care facilities with an occupant load of 50 or more resident patients, but not having surgery or emergency treatment facilities. • Jails and detention facilities. • Any other occupancy with an occupant load greater than 5,000. • Power-generating stations, water treatment 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"> • Hospitals and other health care facilities having surgery or emergency treatment facilities. • Fire, rescue and police stations and emergency vehicle garages. • Designated hurricane or other emergency shelters. • Designated emergency preparedness, communication, and operation 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 treatment facilities required to maintain water pressure for fire suppression.

Chapter 16 Structural Design

2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
1609.4	1609.4	Exposure category	New exception permits the determination of an intermediate exposure in a transition zone when determined by a rational analysis. Definitions of exposure categories are relocated to Section 1609.4.3.
	1609.4.3	Exposure categories	<p>Exposure C has been revised to clarify the effect of open patches. Requires buildings in Exposure B-type terrain to be categorized as Exposure C where the building is within 100 feet horizontally in any direction of Exposure C-type terrain that extends more than 600 feet and width greater than 150 feet. Exposure C is required to extend downwind for a distance of 1500 feet. For buildings located within 600 feet of inland bodies of water with a fetch of 1 mile or more, roof sheathing uplift and roof-to-wall uplift loads are required to be increased by 20%.</p> <p>Exposure D has been revised to state "This exposure is not applicable in Florida."</p>
-	1609.4.1	Wind directions and sectors	New section requiring exposure categories to be determined for the two upwind sectors extending 45 degrees from either side of the wind direction. The exposure resulting in the highest wind loads is required to be used for that direction.



Wind Direction and Sectors

Chapter 16 Structural Design

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
-	1609.4.2	Surface roughness categories	<p>New section requiring the ground surface roughness to be determined within each 45 degree sector for the distance upwind as specified for each exposure category. Surface roughness is used to determine the exposure category for the site.</p> <p>Three surface roughnesses are identified:</p> <p>Surface Roughness B Surface Roughness C Surface Roughness D</p>
1609.5	-	Importance factor	Section deleted because requirements are covered in ASCE 7.
1609.6	-	Simplified provisions for low-rise buildings	Simplified wind load method for low-rise buildings has been deleted because the same method is covered in ASCE 7.

Chapter 17 Structural Tests and Special Inspections

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
1714.5.2.1	1714.5.2.1	Testing and labeling, exterior window and door assemblies	<p>New language that limits the use of one design pressure rating per reference standard per permanent label.</p> <p>New language requiring exterior windows and glass doors to be labeled with a temporary supplemental label applied by the manufacturer. Specific criteria for information required on the label is provided. Permits the temporary supplemental label to be removed upon final approval by the building official.</p> <p>Requires the permanent label to be the default label in the event the temporary label is missing or no longer legible for final approval by the building official.</p>
1714.5.2.2	1714.5.2.2	Supplemental label	<p>Adds 101/I.S. 2/NAFS or AAMA/WDMA/CSA 101/I.S.2/A440 reference standard applicable to the use of a temporary supplemental label conforming to AAMA 203.</p> <p>Permits the use of comparative analysis for operable windows and glazed doors and fixed windows with specific criteria provided for performing the analysis.</p>
-	1714.5.3.4	Garage door labeling	<p>New section requiring garage doors to be labeled with an approved permanent label provided by the manufacturer.</p> <p>Specific criteria for information required on the label are provided.</p> <p>Requires installation instructions to be provided and available on the job site.</p>

Chapter 17 Structural Tests and Special Inspections

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
-	1714.8	Impact-resistant coverings, labeling	New section requiring impact-resistant coverings to be provided with a permanent label supplied by the manufacturer. Criteria for location of label and information required on the label is specified. Specific installation criteria is also provided.

Chapter 18 Foundations

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
-	1810.8	Micropiles	New provisions have been added for piles that are bore or grouted-in-place and are no more than 12 inches in diameter. Piles meeting these requirements are defined as micropiles. 1810.8 provides specific criteria related to the design, construction, materials, and installation of micropiles.

Chapter 19 Concrete

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
Chapter 19	Chapter 19	Concrete	The majority of the provisions of Section 1901 through 1907 addressing general requirements, definitions, specifications for testing and materials, concrete durability, concrete quality, mixing, and placement, formwork, embedded pipes, construction joints, and details of reinforcement have been deleted and/or significantly revised and replaced with the applicable references to ACI 318.
1926.5.5 (HVHZ)	1926.5.5 (HVHZ)	Exterior balcony slabs	Exterior balcony slabs are now required to be designed in accordance with ACI 318 in the HVHZ. The prescriptive requirements for protection of reinforcement have been deleted.

Chapter 21 Masonry

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
2101.2.2	2101.2.2	Strength design	New specifications are provided throughout Chapter 21 specific to autoclaved aerated concrete (AAC). This section references the provisions of Chapter 1 and Appendix A of ACI 530/ASCE 5/TMS 402 for strength design of AAC masonry.

Chapter 22 Steel

2004 FBCB Section	2007 FBCB Section	Requirement	Analysis
2205.1	2205.1	General, structural steel	The reference standard for the design, fabrication, and erection of structural steel has been updated to AISC 360-05 <i>Specification for Structural Steel Buildings</i> .
2211	2211	Cold-formed steel light-framed shear walls	Provisions for cold-formed steel light-framed shear walls have been deleted and replaced by a reference to AISI-Lateral which is the source document for the provisions in the code.

Chapter 23 Wood			
2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
2303.4	2303.4	Trusses	Provisions for metal-plate-connected wood trusses have been revised and reorganized for consistency with current design practice.
2304.12	2304.12	Long-term loading	The general prohibition, with exceptions, of supporting masonry or concrete by wood members has been deleted. Wood members are now permitted to support masonry or concrete provided the effects of long-term loading as specified in NDS have been checked. The exception that permitted wood members to support nonstructural masonry or concrete floors that are not more than 4 inches thick has been maintained.
2306.2	2306.2	Wind provisions for walls, wall stud bending stress increase	New language has been added that clarifies that to qualify for the wall stud bending stress increases specified in Table 2306.2.1, all panel joints have to occur and be attached over studs or blocking.
Chapter 24 Glass and Glazing			
2004 FBCB	2007 FBCB	Requirement	Analysis
Section	Section		
2406.1.2	-	Wired glass	The section allowing the use of polished wired glass in fire assemblies where located in hazardous areas has been deleted. Polished wired glass is no longer permitted in hazardous locations.
-	2409	Glass in elevator enclosures	A new section has been added that requires glass in elevator enclosures to be laminated glass conforming to ANSI Z97.1 or 16 CFR 1201.