Transition to the 2004 Florida Codes

Update Overview

Florida Building Code, Building

The Florida Building Code, Building is based on the 2003 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 Code supercedes all local building codes which 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

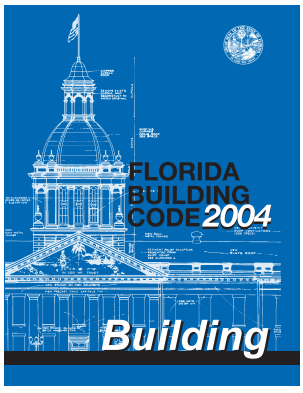
The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Content

This document provides an overview of the significant changes to the Florida Building Code, Building through the update to the 2004 edition. This document is intended to be a comparative analysis of the significant differences between the 2001 and 2004 Florida Building Code, Building. The table is divided into three specific categories. The left two columns of the table contains the section and specific requirement from the 2001 Florida Building Code, Building. The next two columns contain the corresponding section and specific requirements from the 2004 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 2004 Florida Building Code, Building by means of a numbered section cross reference.

Topic: General Code Issues Chapter 3 Use and Occupancy Classification				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
-		**302.1.1 Table 302.1.1**	Spaces incidental to the main occupancy required to be separated or protected in accordance with Table 302.1.1. Alternately, the building can be classified as mixed occupancy.	No similar provision in the 2001 FBC.
303	Buildings with more than one occupancy to be classified as mixed occupancy and occupancies have to be separated in accordance with Table 704.1. Exception for other than Group H, permits the building to be considered a single occupancy when entire building conforms to most restrictive height, area, and type of construction; fire protection requirements; and sprinkler, standpipe and alarm system requirements.	**302.3.1**	Nonseparated uses. No occupancy separation required when most restrictive type of construction based on height and area limitations for each use applied to entire building; and most restrictive applicable provisions of Section 403 and Chapter 9 apply to the entire building.	Similar requirements. Table 302.3.2 is much more comprehensive than Table 704.1. Section 302.3.2 in the 2004 FBC limits the building area in each story with separated uses such that the ratio of floor area of each use divided by the allowable floor area for each use does not exceed one.
		302.3.2	Separated uses. Each portion of the building individually classified as to use and separated with fire barriers or horizontal assemblies complying with Table 302.3.2.	
304	Assembly occupancies: Group A-1 Large Group A-2 Small	**303**	Assembly Group A: A-1 A-2 A-3 A-4 A-5	Assembly occupancies in the 2003 FBC are based on the “use” (density/concentration of people) not the occupant load. Permits spaces used for assembly purposes by less than 50 persons and accessory to the primary use to be included as part of that major occupancy. The 2004 FBC defines 5 Assembly subgroups, whereas the 2001 FBC specifies only two, A-1 Large and A-2 Small, based on occupant load. The 2004 FBC subclassifications A-1, A-2 and A-3 are similar to the 2001 FBC A-1 and A-2. The 2004 FBC limits A-1 to assembly for performing arts or motion pictures, A-2 to assembly intended for food and/or drink consumption and A-3 to assembly for worship. The 2004 FBC A-4 is for indoor sporting events and A-5 is for outdoor activities. The 2004 FBC includes bowling alleys and libraries in A-3, where the 2001 FBC classifies them as Group B.

Chapter 3 Use and Occupancy Classification				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
-		**312**	Group U Aircraft hangar, accessory to a one- or two-family residence Barns Carports Fences more than 6' high Grain silos, accessory to a residential occupancy Greenhouses Livestock shelters Private garages Retaining walls Sheds Stables Tanks Towers	No similar occupancy group in the 2001 FBC.
Chapter 5 General Building Heights and Areas				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
-		**505.5**	Provisions for not including industrial platforms as portion of floor below.	No similar requirements in the 2001 FBC.
503.2.4	Basement doesn't count as a story provided basement height in relation to floor surface above is within certain dimensions.	**502.1** **503.1.1**	Basement doesn't count as a story provided basement height in relation to floor surface above is within certain dimensions.	Similar requirements. 2001 FBC uses less than 7 feet as basis. 2004 FBC uses more than 6 feet as basis.
		506.1.1	Single basement not counted total allowable area provided basement does not exceed area for one-story building.	
-		**504.2**	Height increases for sprinkler systems. Maximum height increased by 20 feet and 1 story for buildings with sprinkler system in accordance with 903.1.1 (NFPA 13). For Group R, maximum height increase by 20 feet and 1 story, not to exceed 60 feet or 3 stores, for buildings with sprinkler system in accordance with 903.1.2 (NFPA 13R). Exceptions for certain occupancies and construction types.	Similar requirements. Sprinkler system height increases are include in Table 500 of the 2001 FBC. The 2001 FBC does not permit height increases for NFPA 13R sprinkler systems.

Chapter 5 General Building Heights and Areas				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
Table 500	Allowable heights and areas tabulated based on sprinklered and unsprinklered buildings for occupancy groups. Sprinklered areas are 2x unsprinklered areas for multi-story buildings and 3x unsprinklered areas for one-story buildings.	**Table 503 506.1**	Allowable heights and areas tabulated based on buildings for occupancy groups. Areas in Table 503 permitted to be increase for frontage and sprinklers per Equation 5-1.	Similar requirements. However, actual allowable areas differ significantly in some cases.
		506.3	Automatic sprinkler increases permitted for sprinklers in accordance with 903.1.1. Table 503 areas increased an additional 200% for multistory buildings and 300% for single-story buildings.	
503.3.2	Area increase for frontage permitted for buildings with open space of at least 30 feet. Equation provided for calculating frontage increase value. Open space to be streets, public spaces or separations from property line.	**506.2**	Area increase for frontage permitted for buildings with open space of at least 20 feet for 25% of perimeter. Frontage increase calculated in accordance with Equation 5-2. Frontage increase is a function of the ratio of W/30, where W must be at least 20 feet.	Similar requirements. Ratio of W/30 not included in 2001 FBC.
		506.2.1	W required to be at least 20 feet but can't exceed 30 feet. W can be calculated using weighted average when W varies along perimeter. Exceptions permits W to not exceed 60 for: 1. Unlimited area buildings. 2. The only provision prohibiting unlimited area is compliance with 60 foot open space.	
		506.2.2	Open space required to be on same lot or dedicated for public use and accessible from street or fire lane.	

Chapter 5 General Building Heights and Areas				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
-		506.4	Maximum aggregate area of building limited by multiplying the allowable area (as modified for sprinklers and frontage) by the number of stories up to a maximum of 3 stories. Exceptions unlimited area buildings and buildings with sprinkler system in accordance with 903.1.2 multipy by number stories up to a maximum of 4 stories.	No similar requirement in 2001 FBC.
503.4.4	Provisions for unlimited area of Group A-Large Assemblies without stage requiring proscenium opening protection or Group A-Small Assemblies with or without stage requiring proscenium opening protection.	-		No similar requirement in 2004 FBC.

Application of Section 506.4

Assuming Type II-B Construction and Sprinklers in accordance with Section 903.1.1, the allowable area per floor:

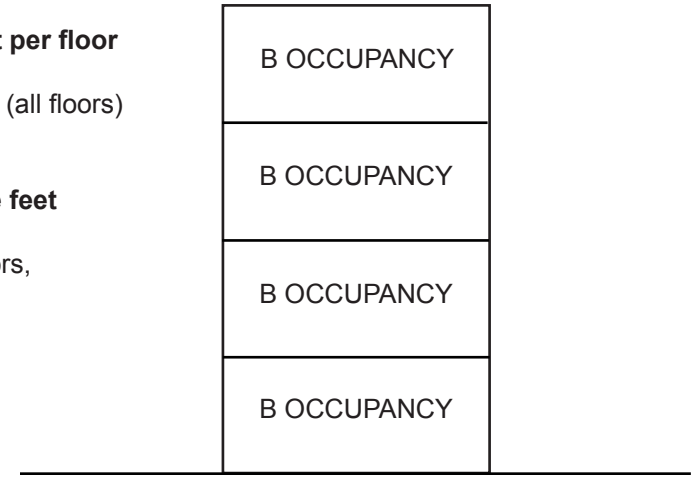
A_a = 23,000 + (23,000 x 200%)/100 = 69,000 square feet per floor

However, Section 506.4 limits the maximum building area (all floors) to three times the allowable area per floor (3 x A_a).

Maximum Building Area = 3 x 69,000 = 207,000 square feet

Therefore, if the area were equally distributed on all 5 floors, the allowable area per floor would be:

A_a = (207,000)/5 = 41,400 square feet per floor



Chapter 6 Types of Construction				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
601.2.1	Six general types of construction: Types I, II, III, IV (Unprotected and 1-hour Protected), V (Unprotected and 1-hour Protected), and VI (Unprotected and 1-hour Protected).	602.1	Five general types of construction: Types I (A and B), II (A and B), III (A and B), IV and V (A and B). Fire resistance ratings to as specified and Table 601 and Table 602.	Construction types are similar but are designated differently. Construction types are comparable as shown below:
601.2.2	Materials for construction types to be used as specified in Table 600.		2001 FBC Type I - Type II - Type III - Type IV 1-hour Prot. - Type IV Unprotected - Type V 1-hour Prot. - Type V Unprotected - Type VI 1-hour Prot. - Type VI Unprotected -	2004 FBC Type IA Type IB Type IV Type IIA Type IIB Type IIIA Type IIIB Type VA Type VB
-		602.1.1	Building only required to conform to details of the minimum type of construction based occupancy even if certain features conform to higher type of construction.	No similar requirement in 2001 FBC. However, this requirement is implied by the use of the term “minimum type of construction” as used in the 2001 FBC.
603	Type I construction - noncombustible with fire resistance ratings as specified in Table 600.	602.2	Types I and II construction (Type IA) - noncombustible with fire resistance ratings as specified in Table 601.	Similar requirements with different designations for construction types. See above.
604	Type II construction - noncombustible with fire resistance ratings as specified in Table 600.		Types I and II construction (Type IB) - noncombustible with fire resistance ratings as specified in Table 601.	
605	Type III construction – Heavy Timber. Minimum sizes specified for various building elements. Avoidance of concealed spaces.	602.4	Type IV Construction – Heavy Timber. Minimum sizes specified for various building elements. Avoidance of concealed spaces.	Similar requirements, different designation.
606	Type IV construction - noncombustible with fire resistance ratings as specified in Table 600.	602.2	Types I and II construction (Type II) - noncombustible with fire resistance ratings as specified in Table 601.	Similar requirements, different designation.

Chapter 6 Types of Construction				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
607	Type V construction - noncombustible exterior bearing and nonbearing walls with fire resistance ratings as specified in Table 600. Interior wholly or partly of wood or other approved material.	602.3	Type III construction – noncombustible exterior bearing and nonbearing walls with fire resistance ratings as specified in Table 601. Interior building elements of any material permitted.	Similar requirements, different designation.
608	Type VI construction – wholly or partly of wood or any approved material.	602.5	Type V construction – any material permitted by the code with ratings as specified in Table 601.	Similar requirements, different designation.
Table 600	Construction Types, Fire-resistance rating or exterior walls, allowable openings in exterior walls.	Table 601 Table 602 Table 704.8	Construction Types, Fire-resistance rating or exterior walls, allowable openings in exterior walls.	The required fire resistance for each structural element is given for each construction type in the respective tables. The 2001 FBC required fire-resistance rating of exterior walls is based on construction type and horizontal separation. Table 602 in 2004 FBC specifies fire resistance ratings for exterior walls based on construction type, fire separation distance, and occupancy. Table 704.8 in the 2004 FBC specifies the allowed percentages of protected and unprotected openings.

Chapter 12 Interior Environment				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
1203.2.4	Minimum square footage for rooms in dwelling units.	1208.3	Space requirements for dwelling units.	Notable changes in the 2004 FBC. One room must be at least 120 square feet. (150 square feet was required in 2001 FBC.) Kitchens in one family and two family dwellings that are required to comply with 2004 FBC must be at least 50 square feet in area. In addition, space requirements for efficiency units have been added to Chapter 12.
		1208.4	Space requirements for efficiency dwelling units.	
-		1207	Sound transmission levels for dwelling units.	The 2001 FBC does not contain any specific requirements for sound transmission.

Chapter 34 Existing Buildings				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
Chapter 34	Provisions specific to application of the code to existing buildings.	**Chapter 34**	References the 2004 Florida Existing Building Code for existing buildings.	Chapter 34 in the 2001 FBC contained specific requirements for alterations, repairs, additions, and change of occupancy for existing buildings. These requirements are now covered in the FEBC.
Topic: Fire Protection **Chapter 7 Fire-Resistance-Rated Construction**				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
701.3	Restraint conditions.	**703.2.3**	Restraint classification.	The 2001 FBC has a Table that defines the restraint condition for various steel framing conditions. The 2004 FBC states that the restrained classification shall only be used where technical evidence can be shown to justify that classification.
704.1	Occupancy separation requirements and accessory occupancy separations.	**302**	Separation of occupancies and separation of incidental use areas.	The mixed occupancy provisions in the 2004 FBC are significantly more developed than those in the 2001 FBC. For example the 2004 FBC includes a nonseparated mixed occupancy option in Section 302.3.1.
704.2	Fire partition requirements.	**706, 707, 708, 709 and 710**	Fire separation requirements.	The definition of fire partitions in the 2001 FBC and the 2004 FBC are entirely different. The 2004 FBC specifies different types of walls that are required to be fire rated for certain conditions as fire barriers (706), shaft enclosures (707), fire partitions (708), smoke barriers (709) or smoke partitions (710). Each of these of walls have their own detailed requirements and are required in the locations identified in the cited sections.
704.3	Tenant fire separation. Enclosed spaces with separate tenants to be separated by 1-hour fire-resistant construction. Applies to vertical and horizontal separations. Exception for Group B and Group S occupancies.	**402.7.2, 708.1**	Fire partitions required for walls separating dwelling units in the same building, sleeping units in R-1, R-2 and I-1, tenant spaces in covered malls, and other individual tenant spaces. Exception for Group B and Group S occupancies.	Similar requirements. The 2004 FBC does not require tenants to be separated horizontally.

Chapter 7 Fire-Resistance-Rated Construction				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
709.1	Calculated fire resistance general requirements.	**721.1**	Calculated fire resistance general requirements.	The 2004 FBC adds the ASCE/SFPE 29 standard for the calculated fire resistance of steel assemblies. The definitions that relate to calculated fire resistance are listed in this section in the 2004 FBC. All definitions of terms are in Chapter 2 in the 2001 FBC.
-		**720**	The 2004 FBC contains comprehensive tables with prescriptive details for specific fire resistance ratings.	No similar requirements in the 2001 FBC.

Chapter 8 Interior Finishes				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
803.1.1	Combustible materials permitted to be used as interior finish in accordance to section 803. (Exception for show windows in first story of building.)	**801.1.1**	Flame spread and smoke-developed indexes apply to interior finishes, with some exceptions, based on location and occupancy.	Similar requirements, but 2004 FBC is broader in scope with respect to components that must comply with interior finish requirements. Sections 801.1.3 and 801.2.2 mention other code sections that may be applicable. (Also see section 603 for additional exceptions for combustible materials in Type I and Type II construction.)
		801.1.2	Decorative materials and trim restricted by combustibility and flame resistance. (Refers to section 805.)	
		801.1.3	Refers to section 3110 for buildings located in flood hazard area.	
		801.2	Combustible material allowed for interior finish.	
		801.2.1	Exception for showroom windows on first story of building.	
		801.2.2	Refers to sections 2603.7 and 2604 for foam plastics.	
803.9.2	Criteria for installing finishes on set out construction or dropped ceilings to walls and ceilings that are required to be fire resistant or noncombustible. (Spaces greater than 1.75 inches.)	**803.4.2**	Criteria for installing finishes on set out construction or dropped ceilings to walls and ceilings that are required to be fire resistant or noncombustible. (Spaces greater than 1.75 inches.)	Section 803.4.2 of the 2004 FBC allows FRT hangers and assembly members for dropped ceilings in Type III and V construction only. (2001 FBC allows FRT in all construction types.)

Chapter 9 Fire Protection Systems				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
903.1	Requires the use of approved sprinklers and layout submitted to building official for approval before installation.	901.5	When fire protection systems are required to be tested, tests have to be conducted in the presence of the building official.	Similar requirements. However, the 2004 FBC section addresses testing and requires the tests to be conducted in the presence of the building official.
		903.3.5	Testing and maintenance of sprinklers system in accordance with FFPC.	No similar requirement in the 2001 FBC.
-		901.3	Prohibits removal or modification of sprinkler system with approval of building official.	No similar requirement in the 2001 FBC.
-		901.6.2	Fire alarm system required to be monitored by supervising station in accordance with NFPA 72. Three exceptions permitted.	No similar requirement in the 2001 FBC.
-		901.7	Where fire areas are used to subdivide building so as not to exceed limits in Chapter 9, fire areas have to separated by fire barriers with rating as required in 706.3.7.	2004 FBC permits compartmentalizing as substitute for sprinklers where areas exceed limits established in Chapter 9. No similar requirement in 2001 FBC.
903.7.5	Sprinklers required in R-1. Exception for exterior exitway stairs complying with 1006.2 for guest rooms.	903.2.7	Sprinklers required in all Group R. Not applicable to one- and two-family dwellings comply with Florida Building Code, Residential.	The 2004 FBC requires an automatic sprinkler system in all Group R occupancies regardless of height. This does not apply to one- and two-family dwellings complying with the 2004 Florida Building Code, Residential.
903.7.6	Sprinklers required in R-2 three or more stories in height. Exception for exterior exitway stairs complying with 1006.2. Exception permits compliance with NFPA 13R not exceeding 4 stories and sprinkler system not considered an alternate to other provisions of the code.	903.2.7 903.3.1.2	Sprinklers required in all Group R. Not applicable to one- and two-family dwellings comply with Florida Building Code, Residential. Compliance with NFPA 13R permitted for buildings up to 4 stories.	The 2004 FBC requires an automatic sprinkler system in all Group R occupancies regardless of height. This does not apply to one- and two-family dwellings complying with the 2004 Florida Building Code, Residential.

Chapter 9 Fire Protection Systems				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
903.7.7	Approved sprinkler system required for Group R4. Protection with quick-response residential sprinklers. Exception permits compliance with NFPA 13R or NFPA 13D for Group R4 Small provided the system is not considered an alternate to other requirements of the code.	903.2.7 903.3.1.4	Sprinklers required in all Group R. Not applicable to one- and two-family dwellings comply with Florida Building Code, Residential. Permits compliance with NFPA 13R or NFPA 13D for Group R4 Small provided the system is not considered an alternate to other requirements of the code.	The 2004 FBC requires an automatic sprinkler system in all Group R occupancies regardless of height. This does not apply to one- and two-family dwellings complying with the 2004 Florida Building Code, Residential.
		903.3.2	Quick-response or residential sprinklers required in: 1. Smoke compartment spaces containing sleeping units in Group I-2 2. Dwelling and sleeping units in Group R and I-1 3. Light hazard occupancies in accordance with NFPA 13.	
-		903.3.1.3	Sprinkler systems in one- and two-family dwellings, where required, permitted to comply with NFPA 13D.	No similar section in the 2001 FBC.
-		903.2.2	Sprinklers required for Group E when: 1. Fire area greater than 20,000 sq ft. 2. Throughout every portion below level of exit discharge. Exception permitted for existing educational buildings unless 50% of aggregate area is being remodeled.	No similar requirement in the 2001 FBC.
-		904	Automatic fire extinguishing systems other than sprinkler systems required to be designed, installed, inspected, tested and maintained in accordance with 904	No similar requirement in 2001 FBC. Covered by FFPC.

Chapter 9 Fire Protection Systems				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
904.2.2 **904.3.4**	Standpipes required in all buildings where highest floor is 30 feet or less above lowest level of fire department vehicle access where building exceeds 10,000 sq ft per story when any portion of the building's interior is more than 200 feet of travel from nearest point of fire department vehicle access. Exceptions for R2, R3 and S2 under certain criteria; and buildings protected with NFPA 13 sprinkler system. Class I dry standpipes required.	-		No similar requirement in 2004 FBC.
904.3.5	Dry standpipes with no permanent water supply permitted when in the opinion of building and fire official, a constant and automatic water supply is not necessary.	**905.8**	Dry standpipes not permitted. Exception for when subject to freezing and in accordance with NFPA 14.	2004 FBC specifically prohibits the use of dry standpipes except when subject to freezing.
905.1.1	Fire alarm systems installed in accordance with NFPA 72. Installed in occupancies as below:	**907.1.1**	Specific requirements on contents of construction documents to be submitted for review and approval.	
		907.2	Fire alarm systems installed in accordance with NFPA 72. Installed in occupancies as below:	
	Group A with occupant load of 1000 or more.	**907.2.1**	Group A with occupant load of 300 or more. Exception for manual fire alarm boxes where sprinkler system provided and notification appliances activate upon sprinkler flow.	
		907.2.1.1	Group A with occupant load of 1000 or more, activation of fire alarm initiate a signal using emergency voice/alarm system. Exception for manually deactivating announcement for 3 minutes or less to allow a live voice announcement.	
		907.2.1.2	Emergency voice/alarm system provided with emergency power source.	

Chapter 9 Fire Protection Systems				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
905.1.1	Group B with 500 or more persons or 100 persons above or below street floor.	907.2.2	Group B where an one of below occur: 1. Two or more stories above level of exit discharge. 2. Fifty or more occupants above or below level of exit discharge. 3. Occupant load of 300 or more.	
	Group E.	907.2.3	Group E. When sprinkler system or smoke detectors installed, required to be connected to fire alarm system. Exceptions for 1. Occupant load less than 50. 2. Where all of 6 specific criteria apply.	
	Group F two or more stories, and occupant load of 500 or more above or below street floor level.	907.2.4	Group F unless total capacity of building is less than 100 and of these fewer than 25 are above or below level of exit discharge.	
	Group H.	907.2.5	Group H-5 and manufacture of organic coatings. Automatic smoke detection system required for highly toxic gases, organic peroxides and oxidizers in accordance with FFPC.	
	Group I.	907.2.6	Group I. Electrically supervised, automatic smoke detection system required in waiting areas open to corridors. Exception for Group I-1 and I-2 at exits if manual fire alarm boxes are installed at nurse's stations.	
	Group M with 500 or more persons or 100 persons above or below street floor.	907.2.7	Group M other than covered malls, with occupant load of 500 or more or 100 persons above or below lowest level of exit discharge. Exception for sprinkler system and alarm notification appliances activate upon water flow.	
		907.2.7.1	Emergency voice/alarm communication system permitted to be used manually in lieu of automatic alarm when building is occupied.	

Chapter 9 Fire Protection Systems				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
905.1.1	Group R1 with accommodations for more than 15 guests.	907.2.8.1	Group R1. Manual fire alarm system required. Exceptions permitted	
		907.2.8.2	Group R1. Automatic fire alarm required in all interior corridors serving guestrooms. One exception provided.	
		907.2.8.3	Group R1. Smoke alarm requirements.	
	Group R2 four or more stories and more than 15 sleeping accommodations.	907.2.9	Group R2 where: 1. Dwelling or sleeping unit located 3 or more stories above lowest level of exit discharge. 2. Dwelling or sleeping unit more than one story below highest level of exist discharge. 3. More than 11 dwelling units or 11 sleeping units. Three exceptions permitted.	
	Group R4.	907.2.6	Group I. Electrically supervised, automatic smoke detection system required in waiting areas open to corridors. Exception for Group I-1 and I-2 at exits if manual fire alarm boxes are installed at nurse's stations.	
	Exceptions for all occupancies except Group I.	-		
-		909	Smoke control systems.	Smoke control requirements are provided for specific occupancies and building types in Chapter 4 of the 2001 FBC.

Chapter 15 Roof Assemblies and Rooftop Structures				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
1505.1	General charging language for Section 1505 on fire classification. Also requires roof assemblies to be tested in accordance with ASTM E 108 or UL 790, and additional testing in accordance with ASTM D 2898 for fire retardant treated wood roofing.	**1505.1**	Specifies minimum fire classifications. Also requires roof assemblies to be tested in accordance with ASTM E 108 or UL 790, and additional testing in accordance with ASTM D 2898 for fire retardant treated wood roofing.	The 2004 FBC contains a new table (1505.1) specifying minimum roof covering fire classifications for each construction type.
Topic: Means of Egress **Chapter 10 Means of Egress**				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
1003.1.1	Section refers to Table 1003.1 which specifies the area per occupant density to be used that will result in the minimum occupant load required by the code.	**1004.1, 1004.1.1, 1004.1.2, 1004.1.3**	Occupant load: Requires that the design occupant load be the largest number of occupants determined by Table 1004.1.2, the actual number of occupants anticipated for the space (1004.1.1) or the total of occupants of the space and the occupants who egress through the space (1004.1.3).	The 2004 FBC includes two other criteria for the determination of the design occupant load that are not included in the 2001 FBC. The two exceptions in Sections 1003.1 and 1004.1are the same. Table 1004.1.2 of the 2004 FBC include several occupancies that are not included in Table 1003.1 of the 2001 FBC.
1003.2.1	Requires width of means of egress to be determined from the occupants served in Table 1004.	**1005.1**	Egress width: Specifies the minimum egress width shall not be less than that calculated according to the requirements of this section for the total occupant load served and not less than specified elsewhere in the code. This section also includes provisions for the sizing of multiple means of egress and specifies that the maximum egress capacity required from any story of a building shall be maintained to the termination of the means of egress.	The phrase “specified elsewhere in the code” in the 2004 FBC addresses minimum egress widths that may exceed those calculated according to Section 1005.1. These requirements are not in the 2001 FBC

Chapter 10 Means of Egress				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
1003.2.2	The egress width shall be measured in the clear from the narrowest point. Specifies allowable projections for handrails and door jambs.	**1003.6, 1008.1.1.1 and 1009.11.7**	Means of egress continuity: Obstructions shall not be placed in the required width of a means of egress except projections permitted by Chapter 10. Door projections are stated in Section 1008.1.1.1. Stairway projections are in Section 1009.11.7.	The allowable projections in the 2004 FBC are located in the component sections. For example door projections are in the section regarding doors.
1003.2.7.3	Requires slip resistant walking surfaces. Refers to another section for one and two family dwelling requirements.	**1003.4**	Requires slip resistant walking surfaces.	The 2004 FBC does not include the reference to another section for the one and two family requirements.
1003.3.3	Defines the capacity of an exit access corridor.	**1005.1**	Minimum occupant load: Establishes the required corridor egress width based on occupant load.	The two methods of determining the required egress width are significantly different.
1004.1.1	States the allowable travel distance to an exit, the maximum dead end corridor travel distance and the egress width required per person for exit stairways.	**1015.1, 1016.3 and 1005.1**	Section 1015.1 includes the allowable travel distance to an exit. Section 1016.3 includes the maximum dead end corridor travel distance and Section 1005.1 states the required egress width for exit stairways.	The format of the 2004 FBC is a major improvement in format in relation to the 2001 FBC. The 2004 FBC requirements for travel distance are in a Section entitled “Exit Access Travel Distance”. The limits for dead end corridors are located in the “Corridors” section. The 2001 FBC requirements for these issues are located in a section entitled “Arrangement and Number of Exits”. There are significant differences in the requirements for these issues.

Topic: Structural Chapter 16 Structural Design				
2001 FBC		**2004 FBC**		
Section	**Requirement**	**Section**	**Requirement**	**Comment**
1603.2	Actual weight of all permanent partitions to be included in dead load. Movable partitions are locations where partitions are likely to be used, 20 psf is added to the dead load. Exception for light partitioning.	**1607.5**	Movable partitions and locations where partitions are likely to be used required to to be designed for a uniformly distributed live load of not less than 20 psf. Exception for when the specified live load exceeds 80 psf.	The 2001 FBC designates partitions as dead loads. The 2004 FBC designates partitions as live loads.
1604.2	Live load reductions for loads specified in Table 1604.1, for two-way slabs designed for flexure, beams, girders, columns, piers and foundations. Not permitted for Group A occupancies. Not permitted for live loads exceeding 100 psf, except columns. Equation provided for determining percent reduction.	**1607.9**	Live loads of Table 1607.1 reduced according to influence area method (Tributary area and K_{LL}) based on Equation 16-21.	In the 2004 FBC, two methods are permitted to be used to reduce live loads – Section 1607.9.1 and 1607.9.2. Live load reduction method of Section 1607.9.1 significantly different from method in 2001 FBC. The alternate method specified in Section 1607.9.2 is similar to the method specified in the 2001 FBC.
		1607.9.1.1	Live loads exceeding 100 psf not permitted to be reduced except for members supporting 2 or more floors.	
		1607.9.1.2	Live loads not permitted to be reduced in passenger vehicle garages except for members supporting 2 or more floors.	
		1607.9.1.3	Live loads exceeding 100 psf not permitted to be reduced in public assembly occupancies.	
		1607.9.1.4	Live loads not permitted to be reduced for one-way slabs except in accordance with Section 1607.9.1.1. Lives loads of 100 psf and less not permitted to be reduced for roof members except in accordance with 1607.11.2.	
		1607.9.2	Alternate Live load reduction method. Similar to method in 2001 FBC	

Chapter 16 Structural Design				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
-		1607.6 T.1607.6	Specifies live loads for truck and bus garages, in addition to the application. Table 1607.6 specifies minimum uniform live and concentrated loads for different AASHTO truck loading classes.	Table 1604.1 in the 2001 FBC refers to AASHTO Lane Loads.
1606.1.3	Requires anchorage to resist wind-induced uplift, overturning, and sliding. When dead load is used to resist these forces, only the minimum dead load likely to be in place is permitted to be used.	1609.1.3	Requires anchorage to resist wind-induced uplift, overturning, and sliding. When dead load is used to resist these forces, only the minimum dead load likely to be in place is permitted to be used.	The 2004 FBC contains 2 methods for combining loads using ASD. Section 1609.1.3 in the 2004 FBC limits the amount of dead load used to resist wind forces to 2/3 of the minimum dead load likely to be in place when using the load combinations specified in Section 1605.3.2 (Alternate ASD combinations).
-		1609.1.4.2	Permits components of side-hinged door assemblies to be tested and rated for impact in accordance with SDI 250.13.	No similar requirement in 2001 FBC.
-		1609.6.5.1 T.1609.6.5.1	Garage doors required to be designed for pressures specified in Table 1609.6.5.1 modified for height and exposure in accordance with Table 1609.6D.	No similar requirement in 2001 FBC.
1608.2.2.2	Guardrail systems design for load 50 plf applied horizontally at guardrail height and 100 plf downward at top of guardrail.	1607.7.1	Guards designed for uniform load of 50 plf in any direction.	2001 FBC provides exception for dwelling units. 2004 FBC provides exception for one- and two-family dwellings and Groups I-3, F, H and S for areas not accessible to the general public. Differences between loading requirements.
1608.2.2.3	Guardrail system and intermediate rails designed for 200 lb over 1 ft².	1607.7.1.2	Intermediate rails, balusters, and panel fillers designed for horizontal load of 50 lb over 1 ft².	Differences between loading requirements.

Chapter 18 Soils and Foundations				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
-		1802.2.4	Requires a foundation investigation for pile and pier foundations.	No similar section in the 2001 FBC.
-		1802.2.5	Requires investigative borings to determine the soundness of foundation beds where the soundness or structure of underlying strata is in question.	No similar section in the 2001 FBC.
1804.1.7	Requires the finished grade to be sloped away from the foundation.	1803.3	Requires the finished grade to be sloped away from the foundation.	The 2004 FBC requires a minimum slope of 5% within 10 feet of the building, whereas the 2001 FBC does not specify a minimum slope.
1804.2.6	Requires an investigation to determine the possibility of the water table rising above the lowest floor level. Exceptions are granted where the foundation is waterproofed in accordance with Section 1814.2, and where there is data from adjacent areas confirming that groundwater is not a problem.	1802.2.3	Requires an investigation to determine the possibility of the water table rising above or to within 5 feet below the lowest floor level. Exception is granted where the foundation is waterproofed in accordance with Section 1807.	The 2004 FBC is more stringent in that it lowers the threshold water table level to 5 feet below the lowest floor. Also, the exception for cases in which data from adjacent areas may be used has been removed.
-		1805.3	Provides requirements for minimum building clearances from ascending slopes, minimum setbacks of pools from descending slopes, minimum footing setbacks from descending slopes, and foundation elevation in order to ensure proper drainage away from the structure..	No similar section in 2001 FBC.

Chapter 19 Concrete				
2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
1914	Detailed provisions are provided for determining the design strengths of headed bolts and headed stud anchors.	1912.1	Allowable stress design provisions for anchoring headed bolts and studs in concrete. Allowable service loads are tabulated based on bolt diameter, embedment, edge distance, spacing, and concrete strength.	Anchorage for headed bolts and studs in concrete differ significantly from the 2001 FBC to the 2004 FBC. The provisions in the 2001 FBC are based of the NEHRP recommendations. The provisions in the 2004 FBC are based on new methodologies and research.
		1912.2	Strength design of headed bolts an studs anchored in concrete to be in accordance with Appendix D of ACI 318	
1916	Prescriptive criteria provided for insulated concrete form wall construction.	-		No similar requirement in 2004 FBC. Prescriptive provisions for insulated concrete form wall construction are contained in the 2004 FBC, Residential.