

Transition to the 2004 Florida Codes

Update Overview



Florida Building Code, Residential

The Florida Building Code, Residential is based on the 2003 International Residential Code with amendments where necessary for Florida's specific needs.

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 the Florida Building Code, Residential apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

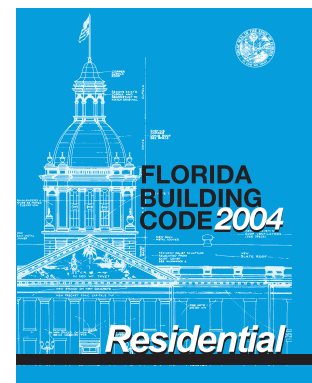
Content

This document provides an overview of the significant changes to code requirements for residential (one- and two family dwellings and townhouses) as a result of the adoption of the 2004 Florida Building Code, Residential (FBCR). The FBCR is new volume to the family of Florida Codes that is intended to be a stand-alone code for applicable residential construction. The 2001 FBC applied to commercial construction as well as all residential construction. The book is intended to be a comparative analysis of the significant differences between the residential provisions of the 2001 FBC and the 2004 FBCR. The table is divided into four specific categories. The left side two columns of the table contains the section and specific requirement from the 2001 FBC. The next two columns contain the corresponding section and specific requirements from the 2004 FBCR. 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 aid 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, Residential by means of a numbered section cross reference.



Topic: General Code Issues
Building Heights and Areas and Construction Types

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
Chapter 5 Chapter 6	<p>All buildings, including Group R3, are limited in height and area in accordance with Table 500 based on construction types in accordance with Table 600.</p> <p>For example, a Type VI Unprotected and unsprinklered building is limited to 7,000 sq ft in area, 2 stories and 40 feet in height. Floor areas are permitted to be increased for frontage and sprinklers. Building height is permitted to be increased for sprinkler systems.</p>	R101.2	<p>The 2004 FBCR applies to detached one- and two-family dwellings and townhouses not more than three stories in height with separate means of egress.</p>	<p>The 2004 FBCR only limits the height of detached one- and two-family dwellings and townhouses to not more than three stories in height.</p> <p>The floor area limits are based strictly on the structural capabilities of the framing system.</p> <p>While no minimum construction types are specified, most Group R3 buildings will be built to Type III or Type V construction as specified in the 2004 FBC, Building (Types V and VI in the 2001 FBC).</p>

Light, Ventilation and Heating

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1203.1.1	Windows required in every habitable room.	R303.1	<p>Habitable rooms to have glazing of not less than 8 percent of floor area. Natural ventilation to be provided with openable area of 4 percent of floor area. Exceptions for mechanical ventilation and artificial light.</p>	<p>Similar requirements. However, the 2004 FBCR provides specific requirements and details for mechanical ventilation and artificial light when used in lieu of glazing –</p> <p>Mechanical ventilation: 0.35 air changes per hour in the room or whole house mechanical ventilation capable of supplying outdoor ventilation air of 15 cfm per occupant.</p> <p>Artificial light: 6 footcandles over area of the room at 30 inches above floor level.</p>
1203.1.2	Required glazing to be openable to achieve ½ the required window area.			
1203.1.4	Clear glass area of 8 percent of floor area of room required.			
1203.1.5	Permits the use of skylights, vents, louvers, or mechanical ventilation provided adequate light and ventilation is provided. Mechanical ventilation to be provided in accordance with FBC, Mechanical.			

Minimum Room Areas				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1203.2.4	Minimum floor area of at least one habitable room.	R 304.1	At least one habitable room to have at least 120 sq ft of floor area..	Minimum floor area for one habitable room is reduced from 150 square feet to 120 square feet in the 2004 FBCR.
		R304.2	All other habitable rooms to have at 70 sq ft of floor area.	
Glazing				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
2405.2.1 Item 2	Glazing in doors and enclosures for hot tubs, whirlpools, saunas, etc. considered a hazardous location.	R308.4 Item 5	Glazing in doors and enclosures for hot tubs, whirlpools, saunas, etc. considered a hazardous location.	The 2001 FBC specifies that the glazing has to be located within 36 inches horizontally from standing or walking surface to be considered a hazardous location. The 2004 FBCR does not specify a required horizontal distance from a standing or walking surface.
-		R308.4 Item 10	Glazing adjacent to stairways, landings, and ramps within 36 inches of walking surface where exposed surface of glass is less than 60 inches above walking surface is considered a hazardous location.	No similar requirement in the 2001 FBC.
-		R308.4 Item 11	Glazing adjacent to stairways within 60 inches of the bottom tread when exposed surface of glass is less than 60 inches above the nose of the tread is considered a hazardous location.	No similar requirement in the 2001 FBC.
2407.1	Sloped glazing includes installation of any glass or other glazing material installed at a slope of 15° or more from the vertical plane.	R308.6.1	Definitions of skylights, sloped glazing, and unit skylight. Sloped glazing includes glass or other glazing installed at a slope of more than 15° from vertical.	While the change is subtle, the 2004 FBCR defines sloped glazing as more than 15° from vertical. The 2001 FBC defines sloped glazing as 15° or more from vertical. The 2001 FBC does not contain a definition for unit skylight.
2407.4	Screens for sloped glazing required to support the weight of the glass, be substantially supported, and be installed within 4 inches of the glass.	R308.6.7	Screens and fastenings for sloped glazing have to be capable of supporting twice the weight of the glazing and substantially and firmly fastened to framing.	The 2004 FBCR requires the screens to be capable of supporting twice the weight of the glass. The 2004 FBCR doesn't specify how far from the glass the screens have to be installed. Screen mesh sizes are similar.

Protection Against Decay				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
2306.3	Fasteners for preservative-treated or fire retardant wood to be hot-dipped zinc coated galvanized, stainless steel, silicon bronze or copper. Exception for fastenings in contact with preservative-treated wood not exposed to rainfall or ground moisture.	R319.3	Fasteners for preservative treated wood to be hot-dipped galvanized steel, stainless steel, silicon bronze or copper.	Similar requirements. The 2004 FBCR does not contain the exception for fasteners in contact with preservative-treated wood not exposed to rainfall or ground moisture.
2304.2.7	Specific clearance and attachment requirements for decks, fences, patios, planters, or other wooden components that directly abutting the sidewall of the foundation or structure.	-		No similar requirement in the 2004 FBCR.
Site Address				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R321	Requires all premises to have approved numbers or addresses provided to be visible and legible from the street.	No similar requirement in the 2001 FBC.
Airport Noise				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R325	Requires the use the Aviation Safety and Noise Abatement Act of 1979, 14 CFR Part 150 (U.S. Department of Transportation), including revisions through January, 2005, as a guideline for establishing airport noise control.	No similar requirement in the 2001 FBC.

Topic: Fire Protection
Location on Lot

2001 FBC		2004 FBC		
Section	Requirement	Section	Requirement	Comment
Table 600	Exterior walls required to be rated based on construction type and separation from the property line.	R302.1	Exterior walls separated less than 6 feet required to have 1 hour fire rating. Projections into 6 foot separation to be rated for 1 hour on the underside and no projections permitted within 4 feet of adjacent projection or wall.	<p>The basis for determining exterior wall rating requirements in the 2004 FBCR is based on the horizontal separation from an adjacent building rather than separation from the property line as specified in the 2001 FBC. The 2004 FBCR delineates the rating based solely on the horizontal separation, without regards to the type of construction as specified in Table 600 of the 2001 FBC.</p> <p>While the wording is different, the parameters technically achieve the same result for the least construction type in the 2001 FBC.</p> <p>Limitations on combustible projections in the 2004 FBCR are also based on horizontal separation from adjacent buildings rather than property line as specified in the 2001 FBC.</p>
1404.4	Combustible projections located where protection of openings is required to have 1-hour fire resistance or be heavy timber. Projections prohibited more than 12 inches into where openings required to be protected.			
Table 600	Percent of unprotected and protected opening specified based on construction type and separation from property line.	R302.2	Openings not permitted in exterior walls separated less than 6 feet. Exceptions for foundation vents and walls perpendicular.	<p>Opening limitations in the 2004 FBCR are based on the horizontal separation from an adjacent building rather than separation from the property line as specified in the 2001 FBC.</p> <p>While the wording is different, the parameters technically achieve the similar result for the least construction type in the 2001 FBC. However, the 2001 FBC does limit the amount of openings incrementally based on horizontal separation from the property line. The 2004 FBCR does not limit the amount of openings when buildings are separated by 6 feet or more.</p>
705.1.1	Opening protection not required for Group R3.			

Garages and Carports				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
411.2.8	Openings from parking garage to sleeping room not permitted.	R309.1	Openings from garage not permitted to open directly to sleeping rooms. Other openings required to be 1 3/8 in. solid wood doors; 1 3/8 in. solid or honeycomb core steel doors; or 20 min fire-rated doors.	Similar requirements. The 2001 FBC does not provide specifications for door openings from garages into the dwelling.
-		R309.1.1	Duct penetration of garage walls and ceilings separating the garage from the dwelling required to be No. 26 gage sheet steel or other approved material.	No similar requirement in the 2001 FBC.
411.2.6	Separation is not required between a Group R3 and attached garage.	R309.2	Garages to be separated from the residence and attic areas with ½ in. gypsum board. Garages beneath habitable rooms to be separated with 5/8 in. Type X gypsum board.	The 2004 FBCR provides specific fire separation requirements for separating the garage from the residence. The 2001 FBC specifically exempted garages from being separated from the residence.
-		R309.4	Carports to be open on at least 2 sides. Floor surface to be approved non-combustible material and required to slope toward drain or entrance.	The 2001 FBC does not contain similar provisions for carports.
Smoke Alarms				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
905.2.1	Smoke detectors installed in accordance with NFPA 72 in every dwelling and townhouse. Smoke detectors required to be wired such that actuation of one alarm will activate all others.	R313.1	<p>Smoke alarms required in:</p> <ol style="list-style-type: none"> 1. Each sleeping room. 2. Outside each sleeping room in immediate vicinity. 3. Each addition story. Split levels permitted to have one alarm on upper level provided lower level is less than one full story below. <p>Alarms required to be interconnected such that actuation of one alarm will activate all alarms.</p> <p>Installation in accordance with NFPA 72.</p>	Similar requirements. The 2004 FBCR requires smoke alarms within each sleeping room whereas the 2001 FBC only requires alarms in corridors or the area giving access to the sleeping rooms.
905.2.2	Smoke detectors required to be mounted centrally within the corridor or area giving access to sleeping rooms. Smoke detectors required on each story.			
905.2.3	Split levels permitted to have one alarm on upper level provided lower level is less than one full story below.			

Smoke Alarms				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R313.1.1	<p>Specific criteria for smoke alarms in regards to alterations, repairs, and additions to existing buildings. Requires smoke alarms to be located as required for new dwellings, to be interconnected and hard wired.</p> <p>Exceptions are permitted based on the level of and location of alteration or repair.</p>	No similar requirement in the 2001 FBC. Provisions for existing buildings are contained in Chapter 34 of the 2001 FBC.
Dwelling Unit Separation				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
704.3	Where enclosed spaces are provided for separate tenants, spaces are required to be separated by not less than 1-hour fire resistance.	R317.1	<p>Requires dwelling units in two-family dwellings to be separated with 1-hour fire resistance rating.</p> <p>½-hour separation rating permitted for buildings with sprinkler system in accordance with NFPA 13</p>	The 2004 FBCR contains additional provision permitting walls to be rated ½ hour where sprinkler system is installed in accordance with NFPA 13.
601.3.2	<p>Construction required to have fire resistance rating is required to be support by construction of equal or greater fire resistance.</p> <p>Exception for Type IV, V, and VI Unprotected construction for structural elements supporting tenant separation walls of not more than 1 hour fire resistance.</p>	R317.1.1	Supporting construction to afford equal or greater fire resistance.	<p>The 2001 FBC provides an exception for construction supporting fire resistance rated construction. Tenant separation walls with a fire resistance rating of 1 hour or less are not required to be supported by construction with same fire resistance rating.</p> <p>The 2004 FBCR does not contain this exception.</p>

Topic: Means of Egress
Emergency Escape and Rescue Openings

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1005.4.1	Emergency escape and rescue openings required on first, second, and third story and within basements. Exceptions for: 1. Sprinkler system 2. Sleeping rooms with door to corridor with access to two remote exits in opposite direction. 3. Balconies in an atrium in specific situations.	R310.1	Basements with habitable space and every sleeping room required to have emergency escape and rescue opening. Sill height cannot exceed 44 inches above the floor. Net clear opening obtained by normal operation of the opening from the inside. Where emergency escape and rescue with finished sill height below grade, window well is required. Emergency escape and rescue opening permitted to open onto screen enclosure open to atmosphere where screen door is leading away from residence.	The 2004 FBCR requires emergency escape and rescue openings in basements with habitable space. The 2004 FBCR does not contain the exceptions permitted in the 2001 FBC. The 2001 FBC does not contain the language requiring the opening to be obtained by the normal operation of the opening from the inside.
1005.4.3	Sill height cannot exceed 4 inches above the floor.			
1005.4.6	Where emergency escape and rescue with finished sill height below grade, window well is required.			
1005.4.5 1005.5	Security devices.	R310.4	Bars, grills, covers, and screens. Hurricane protective devices installed over emergency escape and rescue openings.	The 2004 FBCR contains more specific criteria on the use of security devices over emergency escape and rescue openings. The 2004 FBCR also contains provisions addressing the use of hurricane protection devices, such as shutters, to cover emergency escape and rescue openings.

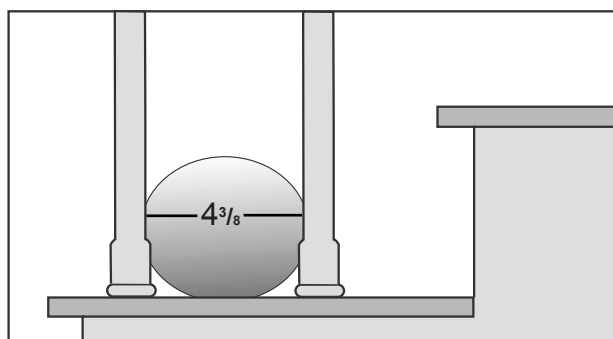
Means of Egress

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R311.2.1	Exit balconies, stairs and other exit facilities required to be positively anchored to the primary structure. Toenails or nails subject to withdrawal not permitted.	No similar requirement in the 2001 FBC.

Means of Egress

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R311.2.1	Exit balconies, stairs and other exit facilities required to be positively anchored to the primary structure. Toenails or nails subject to withdrawal not permitted.	No similar requirement in the 2001 FBC.
1012.1.3	Exception 1 permits the floor level outside exterior doors to be on step lower than the inside but not more than 8 in. Exception 2 limits threshold heights to $\frac{3}{4}$ in. for sliding doors.	R311.4.3	Landing required on each side of exterior doors. Exception for exterior stairways of two or fewer risers where the landing is not required.	The 2001 FBC did not require a landing at exterior doors for one- and two-family dwellings regardless of the number of risers.
1012.1.5	Landing required except for one- and two-family dwellings		Floor or landing at exterior doors required to have a rise no greater than that permitted for stair risers. Widths of landings to be not less than the door and minimum dimension in direction of travel of 36 in.	The 2001 FBC limits the step down at exterior doors to 8 in. below. The 2004 FBCR reduces this limit to $7\frac{3}{4}$ in. The 2004 FBCR does not limit the threshold height.
1007.3.1 Exception 1	Maximum stair riser height limited $7\frac{3}{4}$ in.	R311.5.3.1	Maximum stair riser height limited to $7\frac{3}{4}$ in.	Similar requirements. The 2004 FBCR does not limit the variation in height of adjacent risers to 3/16 in.
1007.3.3	Tolerance on riser height variation within any flight is limited to 3/8 in. Tolerance on riser height variation on adjacent risers limited to 3/16 in.		Tolerance on riser height variations within any flight is limited to 3/8 in.	
1007.3.1 Exception 1	Stair treads required to be minimum 9 inches excluding nosing. Treads and risers proportioned such that the sum of two risers and tread in not less than 24 in. nor more than 25 in.	R311.5.2	Minimum stair tread depth exclusive of nosing required to be not less than 9 in. Treads and risers proportioned such that the sum of two risers and tread in not less than 24 in. nor more than 25 in.	Similar requirements. The 2004 FBCR does not limit the variation in height of adjacent risers to 3/16 in.
1007.3.3	Tolerance on tread depth variation within any flight is limited to 3/8 in. Tolerance on tread depth variation on adjacent risers limited to 3/16 in.		Tolerance on tread depth variations within any flight is limited to 3/8 in.	
1007.8.1	Winders required to have minimum tread depth of 6 in. at narrow edge. Treads to have minimum depth of 11 in. at 12 in. from narrow edge		Winders required to have a minimum tread depth of 10 in. measured 12 in. from the narrow side of tread. Winders required to have minimum tread depth of 6 in. anywhere. Tolerance on winder tread depth variations at 12 in. point limited to 3/8 in.	

Means of Egress				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1007.5.3	Handrails required to have circular cross section with dimensions as specified or non-circular cross section with equivalent graspability performance.	R311.5.6.3	Handrails required to be Type I or Type II handrails. Type I handrails have a circular cross section with dimensions as specified. Type II handrails have non-circular cross section with dimensions as specified..	Provisions for handrails with circular cross sections are similar. The 2001 FBC does not provide specific dimensional criteria for non-circular handrails. The 2004 FBCR provides specific dimensional criteria for Type II (non-circular) handrails.
Guards				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1015.1	Unenclosed floor and roof openings, open and glazed sides of landings, stair, ramps, balconies, and porches more than 30 inches high required to have guardrail	R312.1	Porches, balconies, or raised floor surfaces more than 30 inches above floor required to have guards not less than 36 in high. Open sides of stairs with rise greater than 30 inches required to have guards not less than 34 in. high.	Similar requirements. This terminology has changed. The 2001 FBC refers to this feature as guardrails. The 2004 FBCR refers to this feature as guards. 2001 FBC requires guardrails on glazed sides of stairs. Porches with insect screening are not specifically addressed in the 2001
1026.5.1	Guardrails for dwellings required to be minimum 36 inches high.			
1015.3	Intermediate rails or ornamental pattern required such that 4 inch diameter sphere cannot pass. Exception for triangular opening formed by riser and tread where a 6 in. sphere diameter is not permitted to pass.	R312.2	Intermediate rails or ornamental closures required that do not allow passage of 4 in. diameter sphere. Exception for triangular opening formed by riser and tread where a 6 in. sphere diameter is not permitted to pass. Exception permits guards attached directly to stair treads to not allow a 4 3/8 in. sphere to pass.	The 2004 FBCR contains a new exception for the opening limits for guardrails. Where rails are attached directly to treads, the opening limitation is increased to a 4 3/8 in. diameter sphere.



**Topic: Structural
Design Criteria**

2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
-		R301.1.1	Permits the use of the AF&PA WFCM and AISI COFS/PM as an alternate for structural design criteria.	No similar requirements in the 2001 FBC except the AF&PA WFCM is permitted to be used for wood frame construction in regions where the basic wind speed exceeds 100 mph.
-		R301.1.2	Construction provisions are based on platform and balloon-frame systems. Concrete and masonry based on balloon framing system	No similar requirement in 2001 FBC. Prescriptive provisions for wood and masonry on the 2001 FBC are for areas where the wind speed is less than 100 mph. Design criteria in the 2001 FBC is more performance-based.
-		R301.1.3	Permits specific elements to be designed in accordance with accepted engineering practice without requiring the complete building to be designed.	No similar requirement in 2001 FBC. However, the essence of this provision is implied by the performance-based approach in the 2001 FBC.
-		R301.2	Climatic and geographic design criteria.	Table R301.2(1) in the 2004 FBCR essentially provides a checklist for applicable climatic and geographic design criteria.
1606.1 1606.1.6 1606.2.2.1 1606.2.5 2405.3.1 2405.3.2	Wind speed determined in accordance with Figure 1606. Component and cladding loads determined in accordance with Tables 1606.2B, 1606.2C, and 1606.2D. All glass within 15° of vertical to resist wind loads for components and cladding.	R301.2.1	Wind limitations. Wind speed determined from Figure R301.2(4). Loads on windows and skylights to be determined in accordance with Tables R301.2(2) and R301.2(3) unless otherwise specified.	Requirements are similar. The simplified table for components and cladding is similar in both codes. While the direction and wording in the codes are little different, they result in essentially the same requirement by requiring windows and skylights to meet the applicable component and cladding loads. The 2004 FBCR does not contain the Allowable Equivalent Load graphs for glazing contained in Section 2405.3 of the 2001 FBC. Section R613.3.1 of the 2004 FBCR refers to ASTM E 1300 for determination of load resistance of glass. The Allowable Equivalent Load graphs and design equations specified in Chapter 24 of the 2001 FBC, are contained in ASTM E 1300 as referenced by the 2004 FBCR.

Design Criteria				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
1606.1	Wind loads determined in accordance with ASCE 7. Exception permits the use the simplified method in the code and a list of prescriptive documents.	R301.2.1.1	The prescriptive provisions of the FBCR are only applicable to areas where the wind speed is less than 100 mph. A list of acceptable design and prescriptive documents are permitted to be used where wind speeds are greater than 100 mph.	The 2004 FBCR adds the AISI COFS for steel framing. Prescriptive solutions for ICF construction in high wind regions is contained in the 2004 FBCR. Other limitations are consistent.
1916.2	Prescriptive provisions for ICF limited to where wind speed does not exceed 100 mph.			
2103.2.2	Empirical design of masonry limited to where wind speed does not exceed 100 mph.			
2301.1.2	Conventional construction for wood limited to where wind speed does not exceed 100 mph.			
-		R301.2.1.1.1	AAF Guide for Aluminum Construction in High Wind Regions. Requires Vinyl and acrylic panels to be removable. Decal required stating "Removable panel SHALL be removed when wind speeds exceed 75 mph (34 m/s)".	2001 FBC does not contain this reference.
1610 Table 1610	Deflections.	R301.7 Table R301.7	Allowable deflections.	Allowable deflections have changed somewhat. The 2004 FBCR permits the wind loads to be taken as 0.7 times the component and cladding loads for determining wind load deflection for walls.

Flood Resistant Construction				
2001 FBC		2004 FBCR		
Section	Requirement	Section	Requirement	Comment
3109	Flood resistant construction.	R323.1	Floodplain construction.	The 2004 FBCR defers to local governments for floodplain construction.
3107	Structures seaward of a coastal construction control line.	R323.2	Structures seaward of a coastal construction control line.	2004 FBCR references Section 3109 of the FBC, Building.