8/18/06

STRUCTURAL TAC - Residential

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FBC TRACKING CHART: PROPOSED MODIFICATIONS

2006 Annual Interim Code Amendments to the 2004 Florida Building Code

This chart is organized according to mod/proponent, section number, and a summary of the proposed change for modifications related to the Technical Advisory Committee's (TAC) area of responsibility. Common designations are:

Admin: Integration of the administration and enforcement portions of all codes and private swimming pool barriers.
Elec: Related to Electrical codes and standards
Energy: Related to the energy codes and standards
Fire: Related to the Fire and life/safety issues as contained within the building code and standards.
Mech: Related to the Mechanical codes and standards.
PlumbGas: Related to the Plumbing, Gas and swimming pool codes and standards (except commercial pools and pool barriers).
SpecOcc: Codes and related standards associated with facilities for special occupancies that are regulated by state agencies.
Struc: Related to the Building code for structural, technical, and material requirements and wind standards.

The proposals are listed sequentially by code section number for the base code designated. The proposed mod numbers are assigned by the BCIS web site as they are received. They are assigned to the TAC that administers that specific subject area. Notations concerning where a proposal has been assigned for action are made in the Comments column. For example, if the first proposed modification to the base code FBC-Mechanical code is for section 603.1.2 (related to duct construction), it would be assigned to the Energy TAC because the issue is with the energy chapter in the building base code. This chart can be used for quick reference and for tracking the status of proposals.

Status Codes:
AS = Approved as submitted
AM = Approved as modified
NAR = No affirmative recommendation [The proposed code modification received less than 75% of the vote.]
W = Withdrawn
I = Insufficient (Incomplete or does not meet criteria)

STRUCTURAL TAC - Residential

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Section/ Chapter	Rationale	Summary
RESIDENTIAL		
R101.2 Scope. The provisions of the Florida Building Code, Residential shall 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. ~~Construction standards or practices which are not covered by this code shall be in accordance with the provisions of Florida Building Code, Building.~~ **Exception:** Existing buildings undergoing repair, alteration or additions, and change of occupancy shall comply with the Florida Existing Building Code.	**[Mod 1579]** This provision was added to the 2004 Florida Building Code, Residential to clarify that construction methods which are outside the scope of the Florida Building Code, Residential Volume, are subject to the Florida Building Code, Building Volume. This provision is already covered by section R301.1.3. Thus, this provision is not needed and removal will clarify the code.	Deletes duplicate text and clarifies the code.
R202 **BASIC WIND SPEED.** Three-second gust speed at 33 feet (10 058 mm) above the ground ~~in Exposure C (see Section R301.2.1)~~ as given in Figure R301.2(4).	**[Mod 1822]** Definition as given is inconsistent with the use of the term throughout the Residential Code.	Revises definition of "basic wind speed"
R202 **EMERGENCY ESCAPE AND RESCUE OPENING.** An operable <u>exterior</u> window, door or similar device that provides for a means of escape and access for rescue in the event of an emergency.	**[Mod 1564]** Rationale: inserting the word exterior to the definitions clarifies the intent of an "emergency escape and rescue opening" is to the outside of the dwelling.	Clarifies the code.
R202 <u>**NATURALLY DURABLE WOOD.** The heartwood of the following species with the exception that an occasional piece with corner sapwood is permitted if 90 percent or more of the width of each side on which it occurs is heartwood:</u>	**[Mod 1567]** Rationale: inserting the word exterior to the definitions clarifies the intent of an "emergency escape and rescue opening" is to the outside of the dwelling.	Adds definition for "naturally durable wood"

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Section/ Chapter	Rationale	Summary
1. Decay resistant. Redwood, cedar, black locust and black walnut. 2. Termite resistant. Redwood and Eastern red cedar.		
R202: **SUNROOM** 1. A room with roof panels that include sloped glazing that is a ~~A~~ one-story structure added to an existing dwelling with an open or glazed area in excess of 40 percent of the gross area of the sunroom structure's exterior walls and roof. 2. A one-story structure added to a dwelling with structural roof panels without sloped glazing. The sunroom walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below 6 foot 8 inches of each wall, measured from the floor. For the purposes of this code the term sunroom as used herein shall include conservatories, sunspaces, solariums, and porch or patio covers or enclosures. ~~**SUNROOM ADDITION.** A one-story structure added to an existing dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.~~	**[Mod 1916]** The current definitions contained in the volumes of the code do not consider the most common sunroom constructed in the State of Florida, the sunroom with a solid roof and primarily glass walls. The proposal adds a definition for sunroom with a solid roof taken from the former Uniform Building Code. The proposal also resolves differences between two volumes of the Florida Building Code. Approval of the proposal will permit more economical construction of sunrooms in Florida.	Deletes definition of "sunroom addition" and revises definition of "sunroom"
WIND-BORNE DEBRIS REGION. 1. Areas within one mile (1.6 km) of the coastal mean high water line where the basic wind speed is 110 mph (49 m/s) or greater. 2. Areas where the basic wind speed is 120 mph (53 m/s) or greater except from the eastern border of Franklin County to the Florida-Alabama line where the region includes areas ~~only within 1 mile of the coast~~ where design to 130mph or higher wind speeds is required and areas within 1500 feet of the coastal		

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Section/ Chapter	Rationale	Summary
mean high water line.		
Figure R301.2(1) **FIGURE R301.2(1)** **ISOLINES OF THE 971/2 PERCENT WINTER (DECEMBER, JANUARY, AND FEBRUARY) DESIGN TEMPERATURES (˚F)**	**[Mod 1749]** Editorial change, title missing.	Editorial change by staff to add Figure title. See 2006 Supplement for the figure.
Figure R301.2(4) **Delete Note 4 and change title.** ~~4) Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.~~ Figure R301.2(4) BASIC DESIGN WIND SPEEDS ~~FOR 50-YEAR MEAN RECURRENCE INTERVAL~~	**[Mod 1924]** The basic wind speed map, Figure R301.2(4) is not the 50-year design wind speed map. The map is based on 500 year return period wind speeds divided by the square root of 1.5 which was the expected load factor. The actual basic design wind speeds shown in the map already include factors that account for return period related risks. Consequently, this section is not needed for wind.	Deletes note #4 and revises Figure title
Figure R301.2(4) **FIGURE R301.2(4)** **BASIC WIND SPEEDS FOR 50-YEAR MEAN RECURRENCE INTERVAL**	**[Mod 1745]** The basic wind speed map, Figure R301.2(4) is not the 50-year design wind speed map. The map is based on 500 year return period wind speeds divided by the square root of 1.5 which was the expected load factor. The actual basic design wind speeds shown in the map already include factors that account for return period related risks. Consequently, this section is not needed for wind.	Editorial change by staff to remove year edition of ASCE 7 from map key. Figure changed to reflect changes in the definition of

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Section/ Chapter	Rationale	Summary
		wind borne debris region. See 2006 Supplement for the figure.
R301.2.1 Wind limitations. Buildings and portions thereof shall be limited by wind speed, as defined in Table R301.2(1), and construction methods in accordance with this code. Basic wind speeds shall be determined from Figure 301.2(4). Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where loads for windows, skylights and exterior doors (other than garage doors) are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure per Table R301.2(3), shall be used to determine design load performance requirements ~~for windows and doors~~. Where loads for garage doors are not otherwise specified, the loads listed in Table R301.2(4) adjusted for height and exposure per Table R301.2(3), shall be used to determine design load performance requirements. Table R301.2(4) Garage Door Loads for a Mean Roof Height of 30 Feet Located in Exposure B	**[Mod 1087]** The table proposed is consistent with Table 1609.6E included in the 2004 Florida Building Code, Building. In the Florida Building Code, Residential, clarification is needed for the code user regarding provisions governing wind effects on garage doors, particularly wind loads. The use of Table 301.2 (2) is difficult to apply to garage doors. Common garage door sizes are other than those shown in the table. Common garage door proximity to building corners results in doors being installed within multiple building wind zones. Consequently, garage door wind load determinations using that table are not adequate. Therefore, DASMA proposes that the IRC include a chart to provide a simplified means of such determinations. The table, formatted for consistency with other similar tables currently in the IRC, takes into consideration the following:	Adds language pertaining to garage doors with respect to wind limitations. Also adds new table for garage door loads. See the 2006 Supplement for the table.

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Section/ Chapter	Rationale	Summary
	1. Common sizes. The 9x7 and 16x7 sizes are most commonly associated with residential applications. 2. Multiple zones. A note below the charts indicates "negative pressures assume door has 2 feet of width in building's end zone." DASMA research has shown that this end zone condition covers the vast majority of applications. 3. Roof angle. Residential applications are closely associated with roof angles greater than 10 degrees.	
R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed 100 miles per hour (160.9 km/h) ~~(177.1 km/h)~~ shall be permitted to be designed in accordance with one of the following: 1. American Forest and Paper Association (AF&PA) *Wood Frame Construction Manual for One- and Two-Family Dwellings* (WFCM); 2. *Minimum Design Loads for Buildings and Other Structures* (ASCE-7); 3. American Iron and Steel Institute (AISI), *Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings* (COFS/PM). 4. Concrete and concrete masonry construction shall be designed in accordance with the provisions of this code or in accordance with the applicable documents adopted in Section R301.2.1.1. 5. *SBCCI SSTD 10* shall be permitted for buildings for a	**[Mod 1815]** This code change is editorial; it merely corrects a metric equivalency. **[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for	Editorial change to correct mph conversion

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Section/ Chapter	Rationale	Summary
basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure R301.2(4) . 6. *The FC&PA Guide to Concrete Masonry Residential Construction in High Wind Areas* shall be permitted for applicable concrete masonry buildings for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure R301.2(4) ; or 7. *The WPPC Guide to Wood Construction in High Wind Areas* shall be permitted for applicable wood-frame buildings for a basic wind speed of 130 mph (58 m/s) or less in Exposure B and 110 mph (49 m/s) or less in Exposure C in accordance with Figure R301.2(4) 8. The Florida Building Code, Building.	the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	Adds the Building Volume of the FBC as a standard for the Residential Volume.
R301.2.1.1 Exception 5 **5.** ~~*SBCCI SSTD 10*~~ *IBHS Guideline for Hurricane Resistant Residential Construction* ~~*2005*~~ shall be permitted for buildings for a basic wind speed of ~~130~~ 140 mph (~~58~~ 63 m/s) or less in Exposure B ~~and 110 mph (49 m/s) or less in Exposure C~~ in accordance with Figure R301.2(4). Provisions for design wind speeds of 140 mph (63 m/s) in the Guideline shall also be permitted for buildings for a basic wind speed of 120 mph (53 m/s) or less in Exposure C in accordance with Figure R301.2(4) and provisions for design wind speeds of 120 mph (54 m/s) in the Guideline shall be permitted for buildings for a basic wind speed of 100 mph (45 m/s) or less in Exposure C in accordance with Figure R301.2(4).	**[Mod 1877]** The IBHS Guideline for Hurricane Resistant Residential Construction represents an update of the SBCCI SSTD 10 document that accomplishes several goals. It extends the range of areas covered by the document to areas with design wind speeds less than 140 mph in exposure B. It updates the document so that it is now based on 3-second gust wind speeds instead of fastest mile wind speeds and uses the same wind speed basis and maps as those used in the FRC 2004. It improves provisions related to the attachment of roof sheathing, shutters in masonry walls and strapping of rafters to reflect the results on more recent research. It updates the reference standards used in the document to those used in	Replaces reference to SBCCI SSTD 10 with reference to IBHS Guideline for Hurricane Resistant Residential Construction—05 and adds text pertaining to the new reference

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	the FBC 2004 and FRC 2004. It incorporates better references to wall and fenestration provisions that should lead to improved performance in hurricanes. By extending the life of this document it provides small volume builders with an alternative method for constructing hurricane resistant homes.	
R301.2.1.1.1 Design. The following design guide shall be accepted as conforming to accepted engineering practices: AAF Guide to Aluminum Construction in High-Wind Areas. **R301.2.1.1.2 Sunrooms.** Sunrooms shall comply with AAMA/NPEA/NSA 2100 with the structural requirements and testing provisions of Chapter 5 modified to incorporate ASCE 7-~~02~~. **Ch. 43** **AAMA** 2100-02 AAMA/NPEA/NSA Voluntary Specifications for Sunrooms R301.2.1.1.2	**[Mod 1917]** The current code provisions result in a number of problems in the field to the industry, to code enforcers, and to the consumer. There is no clear statement regarding whether or not sunrooms are t be considered habitable spaces. In some cases, the consumer does not want electrical outlets or air conditioning in the room. While in other cases the sunroom becomes a lavish addition to the dwelling. The AAMA/NPEA/NSA Standard addresses these issues by providing for different categories of sunrooms. The proposal modifies the structural requirements and testing provisions of the standard to comply with changes made to the Florida Building Code in the 2005 Supplement. Approval of the proposal will permit more economical construction of sunrooms in Florida.	Adds new section pertaining to sunrooms with reference to AAMA 2100-02; Also adds AAMA 2100-02 as a new standard in Chapter 43.
R301.2.1.2 Internal pressure. Windows in buildings located in wind-borne debris regions shall have glazed openings protected from wind-borne debris or the building shall be designed as a partially enclosed building in accordance with the	**[Mod 1088]** ANSI/DASMA 115 is an industry standard, recognized by ANSI, specifically for the wind-borne debris resistance testing of garage doors.	Adds ANSI/DASMA 115 as an option for

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Florida Building Code, Building. Glazed opening protection for wind-borne debris shall meet the requirements of the Large Missile Test of ASTM E 1996 and of ASTM E 1886, SSTD 12, ANSI/DASMA 115 (for garage doors) or TAS 201, 202 and 203 or AAMA 506 referenced therein. (1) Openings in sunrooms, …(remainder of section unchanged) Chapter 43, Referenced Standards, under DASMA: ANSI/DASMA 115-05, Standard Method for Testing Garage Doors and Rolling Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	The test method and acceptance criteria described have been proven to be equal to, or greater than, all other existing standards that may be applicable to such products, based on actual usage of the document in testing and the resultant field performance of the products.	compliance testing of garage doors
R301.2.1.2 Internal Pressure. Windows in buildings located in wind-borne debris regions shall have glazed openings protected from wind-borne debris or the building shall be designed as a partially enclosed building in accordance with the Florida Building Code, Building. Glazed opening protection for wind-borne debris shall meet the requirements of the Large Missile Test of ASTM E1996 and ASTM E 1886,SSTD12, or TAS 201,202 and 203 or AAMA 506 referenced therein.	**[Mod 1161c]** Impact product labeled to AAMA 101 and 506 are currently approved in the Florida Product Approval System based on a 506-compliance statement by AAMA's Director of Product Certification. Referencing the standard improves eliminates this ambiguous situation.	Adds AAMA 506 as a reference standard.
R301.2.1.2 Internal pressure. Windows in buildings located in wind-borne debris regions shall have glazed openings protected from wind-borne debris or the building shall be designed as a partially enclosed building in accordance with the Florida Building Code, Building. Glazed opening protection for wind-borne debris shall meet the requirements of the Large	**[Mod 1914r]** The codes and test standards are silent on the factor of safety for the design of hurricane protection devices. While the industry standard has been to use a 1.5 safety factor in the design of hurricane protection devices, the code and the referenced test standards are silent on the	Adds testing 1.5 times design pressure for impact resistant coverings.

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Missile Test of ASTM E 1996 and of ASTM E 1886, SSTD 12, or TAS 201, 202 and 203 referenced therein. ~~Hurricane protection~~ Impact resistant coverings shall be tested at 1.5 times the design pressure (positive or negative) expressed in pounds per square feet as determined by the Florida Building Code, Residential Section R301 for which the specimen is to be tested.	issue. The recommended language is taken from TAS 202 and has been in use in Miami-Dade and Broward Counties for a number of years with satisfactory results.	
R301.2.1.2 Internal pressure. Windows in buildings located in wind-borne debris regions…(no change to remainder of paragraph)… **Exception:** Wood structural panels with a minimum thickness of 7/16 inch (11.1 mm) and a maximum span of 8 feet (2438 mm) shall be permitted for opening protection in one- and two-story buildings. Panels shall be precut so that they shall be attached to the framing surrounding the opening containing the product with ~~to cover~~ the glazed openings ~~with attachment hardware provided~~. Panels shall be predrilled as required for the anchorage method and all required hardware shall be provided. Permanent corrosion resistant attachment hardware shall be provided Permanent corrosion resistant attachment hardware with anchors permanently installed on the building shall be provided ~~Attachments shall be provided in accordance with Table R301.2.1.2 or shall be~~ and designed to resist the components and cladding loads determined in accordance with the provisions of the *Florida Building Code, Building.* Attachment in accordance with Table R301.2.1.2 with permanent corrosion resistant attachment hardware provided and anchors permanently installed on the building is permitted for buildings with a mean roof height of 45 feet (10 058 mm) or less where wind speeds do not exceed 140 miles per hour (58 m/s). **TABLE R301.2.1.2** **WIND-BORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS**	**[Mod 1885c]** The purpose of this code change is primarily to require permanently mounted hardware when using wood structural panel shutters for window protection for new construction. It is our belief that using wood structural panels as window protection in the manner currently prescribed by the code, is basically an emergency option for protection of existing buildings where the homeowner does not have some permanent shutter system in place. While the code requires the panels to be precut and the attachment hardware provided, there are potentially many logistical problems with homeowners actually installing the panels as required by the code. It's not clear that the homeowners will be sufficiently instructed on (or remember at a later date) how to attach the panels, in particular using the prescribed minimum spacing. Additionally, it can be extremely cumbersome to attempt to nail a sheet	Adds text pertaining to wood structural panel requirements; Revises Table R301.2.1.2. See 2006 Supplement for the table.

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SI: 1 inch = 25.4 mm, 1 foot = 305 mm. 1. This table is based on a maximum wind speed of 140 ~~130~~ mph (58 m/s) and mean roof height of 45 ~~33~~ feet (10 m) or less. 2. Fasteners shall be installed at opposing ends of the wood structural panel. 3. Where screws are attached to masonry or masonry/stucco, they shall be attached using vibration-resistant anchors having a minimum withdrawal capacity of ~~490~~ 1500 lb (2180 kN). ~~4. Nails shall be 10d common or 12d box double-headed nails.~~	of plywood over a window, particularly on the second story of a building. Additionally, we are concerned about the capacity of nailed connections where the nails are installed in the same hole repeatedly. This proposed change also increases the minimum required capacity of masonry anchors from 490 lbs to 1500 lbs. Evaluation reports (ICC, NES, and SBCCI) for masonry anchors require a Factor of Safety (FS) of 4.0 if a special inspection is performed on the anchor installation. Without a special inspection, the reports require a FS of 8.0. Based on the load conditions specified, the 490 lb required capacity implies a FS of 2.5. We do not believe that special inspections are or will be performed on these anchors. Therefore, raising the required capacity of the masonry anchors to 1500 lbs provides a FS more in line with the evaluation reports for masonry anchors. The change proposed is consistent with the IBHS Guidelines for Hurricane Resistant Construction. This document is based on SSTD 10-99 and the IBHS Guidelines reflect updates to SSTD 10 to allow the use of the prescriptive solutions in higher wind speed areas.	

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R301.2.1.4 Exposure category. For each wind direction considered, an exposure category that adequately reflects the characteristics of ground surface irregularities shall be determined for the site at which the building or structure is to be constructed. For a site located in the transition zone between categories, the category resulting in the largest wind forces shall apply. Account shall be taken of variations in ground surface roughness that arise from natural topography and vegetation as well as from constructed features. For any given wind direction, the exposure in which a specific building or other structure is sited shall be assessed as being one of the following categories: 1. Exposure A. ~~Large city centers with at least 50 percent of the buildings having a height in excess of 70 feet (21 336 mm). Use of this exposure category shall be limited to those areas for which terrain representative of Exposure A prevails in the upwind direction for a distance of at least 0.5 mile (0.8 km) or 10 times the height of the building or other structure, whichever is greater. Possible channeling effects or increased velocity pressures due to the building or structure being located in the wake of adjacent buildings shall be taken into account.~~ This exposure category no longer used in ASCE-7. 2. Exposure B. Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. Exposure B shall be assumed unless the site meets the definition of another type exposure.	**[Mod 1734]** Editorial change to clarity and enhance the Code.	Editorial change by staff to delete definition of "Exposure A" and changes "Exposure C."

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3. Exposure C. ~~Means, except in the High-Velocity Hurricane Zone, that area which lies within 1,500 feet (457 mm) of the coastal construction control line, or within 1,500 feet (457 mm) of the mean high tide line, whichever is less. On barrier islands, Exposure C shall be applicable in the coastal building zone set forth in Section 161.55(4), Florida Statutes.~~ Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet (9144mm) from the building site in any quadrant. This exposure shall also apply to any building located within Exposure B-type terrain where the building is directly adjacent to open areas of Exposure C-type terrain in any quadrant for a distance of more than 600 feet (182.9 m). Short term (less than two year) changes in the pre-existing terrain exposure, for the purposes of development, shall not be considered open fields. Where development build out will occur within 3 years and the resultant condition will meet the definition of Exposure B, Exposure B shall be regulation for the purpose of permitting. This category includes flat open country, grasslands and ocean or gulf shorelines. This category does not include inland bodies of water that present a fetch of 1 mile (1.61 km) ore more or inland waterways or rivers with a width of 1 mile (1.61 km) or more. (See Exposure D.) 4. Exposure D. Flat, unobstructed areas exposed to wind flowing over open water (excluding shorelines in		

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hurricane prone regions) for a distance of at least 1 mile (1.61 km). Shorelines in Exposure D include inland waterways, the Great Lakes and coastal areas of California, Oregon, Washington and Alaska. This exposure shall apply only to those buildings and other structures exposed to the wind coming from over the water. Exposure D extends inland from the shoreline a distance of 1,500 feet (457 m) or 10 times the height of the building or structure, whichever is greater.		
R301.2.1.5 Basic wind speed. The basic wind speed in miles per hour, for the development of windloads, shall be determined from Figure R301.2(4). ~~Basic wind speed for the special wind regions indicated, near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements.~~ The exact location of wind speed lines shall be established by local ordinance using recognized physical landmarks such as major roads, canals, rivers and lake shores whenever possible.	**[Mod 1925]** None of the special wind regions exist in Florida nor are they shown on the map.	Deletes reference to special wind regions in text
R301.3 Story height. Buildings constructed in accordance with these provisions shall be limited to story heights of not more than the following: 1. For conventional light-frame wood construction ~~wall framing~~, the laterally unsupported bearing wall stud height permitted by Table R602.2(5) ~~R602.3(5)~~ plus a height of floor framing not to exceed sixteen inches. For purposes of determining uplift, gravity loads, and lateral bracing requirements, an attic shall be considered an additional story when the roof slope is 6 in 12 or greater. (See Figure R301.3) **Exception:** For wood framed wall buildings with bracing in	**[Mod 1820]** This code change will place limits on story heights for the prescriptive, conventional wood-frame construction in accordance with the limitations for engineered construction as delineated in *ANSI/AF&PA Wood Frame Construction Manual*. The Wood Task Group recommends that prescriptive stud heights should be limited to low wind areas and story height for conventional light-frame wood construction should have the same limitation as that for engineered construction. If the Commission	Adds the term "conventional light-frame construction" to text pertaining to story height. See 2006 Supplement for the figure.

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accordance with Table R602.2.10.1 ~~R602.10.1~~, the wall stud clear height used to determine the maximum permitted story height may be increased to 12 feet without requiring an engineered design for the building wind and seismic force resisting systems provided that the length of bracing required by Table R602.2.10.1 ~~R602.10.1~~ is increased by multiplying by a factor of 1.20. Wall studs are still subject to the requirements of this section. 2. For steel wall framing, a stud height of 10 feet, plus a height of floor framing not to exceed 16 inches. 3. For masonry walls, a maximum bearing wall clear height of 12 feet plus a height of floor framing not to exceed 16 inches. **Exception:** An additional 8 feet is permitted for gable end walls. 4. For insulating concrete form walls, the maximum bearing wall height per story as permitted by Section 611 tables plus a height of floor framing not to exceed 16 inches. Individual walls or walls studs shall be permitted to exceed these limits as permitted by Chapter 6 provisions for buildings where the wind speed is less than 100 mph (160.9 km/h), provided story heights are not exceeded. An engineered design shall be provided for the wall or wall framing members when they exceed the limits of Chapter 6. Where the story height limits are exceeded, an engineered design shall be provided in accordance with the International Building Code the overall wind and seismic force resisting systems. Figure R301.3	decides that the minimum wind speed in Florida is 100 mph, this code change will not be required since conventional wood-frame construction will not be allowed. If the Commission recognizes a small area where ASCE 7 wind speed map denotes wind speeds are less than 100 mph, this change will prevent construction of a steep roofed house without consideration of loads imposed on wall studs by occupancy of an attic space. This code change will also limit allowable increases to stud heights to low wind areas.	
R308.1 Identification. Each pane shall bear the manufacturer's	**[Mod 1860]** To be able to continue to provide the	Adds text

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label designating the type and thickness of glass or glazing material. Except as indicated in Section R308.1.1, each pane of glazing installed in hazardous locations as defined in Section R308.4 shall be provided with a manufacturer's or installer's label, designating the type and thickness of glass and the safety glazing standard with which it complies, which is visible in the final installation. The safety glazing label shall be acid etched, sandblasted, ceramic-fired, embossed mark, or shall be of a type which once applied cannot be removed without being destroyed. **Exceptions:** 1. For other than tempered glass, labels may be omitted provided the building official approves the use of a certificate, affidavit or other evidence furnished by the glazing contractor certifying that each light is glazed in accordance with approved construction documents that comply with the provisions of this chapter confirming compliance with this code. 2. Tempered spandrel glass may be identified by the manufacturer with a removable paper label.	same level of protection for the health, safety, and welfare of the general public as recently required in Section 2403 of the 2001 Florida Building Code. Palm Beach County has experienced many problems with trying to identify code compliant window assemblies. Without this labeling requirement building department would have a difficult time verifying if the window assemble meet or exceeds the actual design pressure requirements.	pertaining to manufacturer's label requirements
R309.1.1 Duct penetration. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel, 1 inch minimum rigid nonmetallic Class 0 or	**[Mod 1562c]** This code change is to remove metallic requirements from a non-rated 1-2 family structure while recognizing a level of protection that is consistent with current code	See the Mechanical Volume for Duct

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Class1 ductboard or other approved material and shall have no openings into the garage.	levels. The three model codes have been exempt from this type of requirement prior to this edition of the FBC-R, FBC-M Duct Systems, already sets out the requirements for residential ducts. Over the years codes have addressed fire issues, we have raised the ignition source, added smoke detectors, and added emergency escape because the need was justified. The addition of smoke detectors has proven to be one of the most life saving requirements ever. Smoke detectors are not recommended in garages due to false alarms. NFPA statistics show 96.9% of fire origin is other than the garage; death from fires is 98.6% in other than the garage; and injuries by fire are 97.4% other than the garage. Of the 1.6 million fires in the last 4 years only .012% were caused by vehicle fire. This would equate to one garage fire in every 833,000 fires. NFPA Fire statistics show fires in 1-2 family dwellings most often start in the: Kitchen 23.5%, Bedroom 12.7%, Living Room 7.9%, Chimney 7.1% and Laundry Area 4.7%. Source of information: National Fire Protection Association 1998. Fire loss in the U.S. and Fire in the United States 1987-1996, 11th Edition.	requirements.
R310.4 Bars, grills, covers and screens. Bars, grills, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or	**[Mod 1910]** The provision being modified is a Florida Specific amendment to allow the temporary installation of hurricane protection	Clarifies means of escape as not through a

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window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. The temporary installation or closure of storm shutters, panels, and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section R310.1.4. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without passing through a lockable door not under their control.	devices over emergency escape and rescue openings during the threat of hurricanes. The prohibition against using the garage as part of the means of escape does not take into account the presence of side hinged doors leading directly to the exterior. While rolling overhead doors may pose a problem during a storm, side hinged doors would provide a safer passage than panels requiring unscrewing and removal from the inside and providing a minimal space for passage. In addition, the building code will now permit doors other than side hinged doors as means of egress and exit doors in R-2 and R-3 Occupancies. (See FBCB Section 1008.1.2.)	garage without a side hinged door leading to the outside.
R311.5.6.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm). **Exception**: When ~~the handrail~~ fittings are used to provide transition between flights, transition from handrail to guardrail, or used at the start of a stair, ~~occurs at a newel post~~, the handrail height at the fitting ~~may vary. If the newel post is located at the top of the stair riser the handrail~~ shall be permitted to exceed the maximum height. **R311.5.6.2 Continuity**. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top ~~riser~~ nosing edge	**[Mod 1827r]** This code change is to provide clarification to the handrail requirements for both height and continuity. The code as it is currently written can be misinterpreted to prevent the use of commonly accepted architectural fittings to accommodate the transition and continuity of handrails throughout a stairway from the start, through transitions between flights and connecting floor levels. In addition the reference of the riser in R311.5.6.2 has been changed to further clarify and match the reference of the nosing in R311.5.6.	Clarifies handrails and adds an exception allowing handrail height to exceed the maximum height at the fitting.

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of the flight to a point directly above the lowest ~~riser~~ nosing edge of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of no less than 1-1/2 inch (38 mm) between the wall and the handrails. **Exceptions**: 1. Handrails shall be permitted to be interrupted by a newel post at the turn and at the top of the flight.. 2. The use of a volute, turnout, starting easing or ~~starting~~ newel shall be allowed over the lowest tread.		
R314 was replaced with new text.	**[Mod 1829]** This proposal is a rewrite of Section R314, Foam Plastic that has been accepted by the International Residential Code. This rewrite is supported by the plastics industry and the following organizations have participated in this effort: Alliance for the Polyurethanes Industry (API) Extruded Polystyrene Foam Association (XPSA) Polyisocyanurate Insulation Manufacturers Association (PIMA) Spray Polyurethane Foam Association (SPFA) The primary intent of the rewrite is to remove vague and permissive language currently in the IRC and thus clarifying the requirements for foam plastics in structures covered by the scope of the IRC. As such, the existing IRC requirements have basically been maintained and in some cases, strengthened. There is also inclusion of IBC requirements as appropriate for residential construction. The basic Section format has been retained with editorial changes so as to make the text more user friendly and provide a better definition	Makes Florida Building Code, Residential consistent with the national code.

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	of Code requirements based on specific applications.	
R316.4 Exposed attic insulation. All exposed insulation materials installed on attic floors shall have a critical radiant flux not less than 0.12 watt per square centimeter. Exposed foam plastic insulation materials exposed on the underside of the roof deck or on the attic walls shall comply with Section 314.	**[Mod 1844]** This code change requires that foam plastic insulation installed in attics meets the Section 314 Plastics which clarifies the fire tests need for the safe use of these products.	Requires fire tests for plastic insulation installed in attics.
R324.1 Sprinkler system requirements for buildings three stories or more in height. NFPA 101 as adopted by FFPC, as regarding the requirements for fire protection sprinklers, is applicable to all multiple-family residential buildings, whether designated as townhouses, condominiums, apartment houses, tenements, garden apartments or by any other name. The attorney general has determined that for the purpose of the fire protection sprinkler requirements in Section 553.895(2), Florida Statutes, townhouses that are three or more stories tall and consist of three or more units together are multiple-family dwellings. Therefore, these types of townhouses are not exempt from being considered for the requirements to provide fire protection sprinklers (even if there are any other definitions that define townhouse as single-family residences). When determining whether townhouses require fire protection sprinkler systems, the building official must consider in parallel: (a) the attorney general's opinion defining the statutory language for townhouses; (b) the building code requirements, including all life-safety chapters, that provide additional determining criteria, such as construction types, fire-resistance, fire protection systems and egress; and (c) the NFPA 101 as	**[Mod 1733]** Editorial change to clarity and enhance the Code	Adds NFPA 101 as adopted by FFPC.

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adopted by FFPC egress and protection determining criteria. The more restrictive criteria are then applied.		
R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. Wood foundations shall be designed and installed in accordance with AF&PA Report No. 7 (see Section R301.2.1.1). **Exceptions**: 1. The provisions of this chapter shall be permitted to be used for wood foundations ~~only in the following situations~~ subject to the following : 1.1. ~~In b~~ Buildings ~~that~~ shall have no more than two floors and a roof. 1.2. ~~When i~~Interior basement and foundation walls ~~are~~ shall be provided at intervals not exceeding 50 feet. 1.3 When the foundation uplift loads determined from Table R401.1 exceed 0 or when such uplift loads cannot be determined from Table R401.1, an engineered design shall be required. 2. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding shall meet the provisions of Section R323. 3. Buildings and structures located within the High-Velocity Hurricane Zone shall comply with the provisions of Chapter 44. **R401.2 Requirements**. Foundations shall be capable of resisting all loads from roof uplift and building overturn. Foundation uplift for light-frame	**[Mod 1645r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes.	Adds foundation uplift as a design issue for foundations; Adds a table of foundation uplift for light frame buildings. See 2006 Supplement for table.

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wood or steel buildings shall be calculated or determined from Table R401.1. Masonry buildings within the dimensional scope of Table R401.1 shall be assumed to be of adequate weight so as not to require uplift resistance greater than that provided by the structure and any normal foundation. Foundation construction shall also be capable of accommodating all gravity loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section R403. Table R401.1 Foundation Uplift Light Steel & Wood Frame Buildings in Exposure B(plf)[5,6] Notes to Tables R401.1B and 401.1C: 1. Based on 1st floor height = 10 ft. or 11 ft. floor to floor in multi-story. 2. Based on 2nd floor height = 8 ft. or 9 ft. floor to floor in multi-story. 3. Based on 3rd floot height = 8 ft. 4. Building length shall be equal to or greater than that shown in tables. 5. Roof and floor framing shall span in the same direction. 6. Includes provision for 2 foot roof overhang		

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R403.1.1 Minimum size. Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 and Figure R403.1(1). Minimum sizes for concrete and masonry footings shall also be as required to provide adequate resistance to uplift and overturn of the building as determined from Table 401.1 or as calculated using engineered design in accordance with the Florida Building Code, Building. The footing width, W, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least ~~6~~ 8 inches (152 mm) in thickness. Footing projections, P, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3). **R403.1.2** ~~Reserved.~~ **Resistance to uplift.** Uplift resistance of common foundations are given in Table R403.1.1. Uplift resistance of these foundations may be increased by increasing the size of the concrete footing. When determining the modified uplift resistance the added weight shall be reduced by multiplying by a factor of 0.6 ~~as in accordance with the Florida Building Code~~. Other foundation systems shall be engineered in accordance with the Florida Building Code, Building.	**[Mod 1803r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations in high wind areas from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. These modifications are also intended to make it clear that uplift loads must be addressed in high wind areas. Drawings of common foundations are taken from the Standard for Hurricane Resistant Residential Construction SSTD10-99. A table of uplift resistance values for these typical foundation systems is provided.	Adds concrete and masonry foundation uplift details in the text.
R403.1.6 Foundation anchorage. Reserved. ~~When braced wall panels are supported directly on continuous foundations, the wall wood sill plate or cold-formed steel bottom track shall be anchored to~~		

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~~the foundation in accordance with this section.~~ ~~The wood sole plate at exterior walls on monolithic slabs and wood sill plate shall be anchored to the foundation with anchor bolts spaced a maximum of 6 feet (1829 mm) on center. There shall be a minimum of two bolts per plate section with one bolt located not more than 12 inches (305 mm) or less than seven bolt diameters from each end of the plate section. Bolts shall be at least ½ inch (12.7 mm) in diameter and shall extend a minimum of 7 inches (178 mm) into masonry or concrete. Interior bearing wall sole plates on monolithic slab foundations shall be positively anchored with approved fasteners. A nut and washer shall be tightened on each bolt to the plate. Sills and sole plates shall be protected against decay and termites where required by Sections R319 and R320. Cold-formed steel framing systems shall be fastened to the wood sill plates or anchored directly to the foundation as required in Section R505.3.1 or R603.1.1.~~ ~~Exception: Foundation anchor straps, spaced as required to provide equivalent anchorage to ½-inch-diameter (12.7 mm) anchor bolts.~~		
FIGURE R 403.1(1) **CONCRETE AND MASONRY FOUNDATION DETAILS** Delete illustrations and replace with the following: **FOOTING A** **MONOLITHIC SLAB ON GRADE EXTERIOR WALL** **FOOTING B**	**[Mod 1803r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations in high wind areas from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. These modifications are also intended to make it clear that uplift loads must be addressed in high wind areas. Drawings of common foundations are taken from the Standard for Hurricane Resistant Residential Construction SSTD10-99. A table of uplift	Adds uplift resistance foundation drawings. See the 2006 Supplement for the figures and table.

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MONOLITHIC SLAB ON GRADE INTERIOR WALL **FOOTING C** **STEM WALL WOOD JOIST FLOOR** **Footing D** **Monolithic Exterior Footing** **Footing E** **Monolithic Interior Footing** **Footing F** **Wood Floor to Concrete or Masonry Stemwall** **Footing G** **Stemwall Foundation with Slab-on-grade** **Footing H** **R403.1.1 Minimum size.** Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 and Figure R403.1(1). Minimum sizes for concrete and masonry footings shall also be as required to provide adequate resistance to uplift and overturn of the	resistance values for these typical foundation systems is provided.	

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building as determined from Table 401.1 or as calculated using engineered design in accordance with the Florida Building Code, Building. The footing width, W, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least ~~6~~ 8 inches (152 mm) in thickness. Footing projections, P, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3). **R403.1.2** ~~Reserved.~~**Resistance to uplift.** Uplift resistance of common foundations are given in Table R403.1.1. Uplift resistance of these foundations may be increased by increasing the size of the concrete footing. When determining the modified uplift resistance the added weight shall be reduced by multiplying by a factor of 0.6 ~~as in accordance with the Florida Building Code~~. Other foundation systems shall be engineered in accordance with the Florida Building Code, Building.. **Table R403.1.1**		
Table R403.1.1	**[Mod 1803r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with	Adds uplift resistance foundation table. See

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	information regarding uplift on foundations in high wind areas from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. These modifications are also intended to make it clear that uplift loads must be addressed in high wind areas. Drawings of common foundations are taken from the Standard for Hurricane Resistant Residential Construction SSTD10-99. A table of uplift resistance values for these typical foundation systems is provided.	2006 Supplement for the table.
R404.1.1 Masonry foundation walls. Concrete masonry and clay masonry foundation walls shall be constructed as set forth in Tables ~~R404.1.1(1)~~, R404.1.1(2), R404.1.1(3) and R404.1.1(4) and shall also comply with the provisions of this section and the applicable provisions of Sections R606, R607 and R608. Rubble stone masonry foundation walls shall be constructed in accordance with Sections R404.1.8 and ~~R606.2.2~~. The use of rubble stone masonry foundation walls and plain masonry shall be limited to regions where the basic wind speed is 100 mph or less unless an engineered design is provided. **R404.1.1.1 Bond beams, footing dowels and foundation wall reinforcing, wood or steel light-framed first story walls**. Where first story walls are of wood or steel light-frame, a minimum 8 inch x 8 inch (203 mm x 203 mm) nominal grouted masonry or concrete bond beam shall be provided at the top	**[Mod 1812r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. Modification provides construction details now found in Hurricane Resistant Residential Construction Manual SSTD-10 and the work of the ICC Hurricane Resistant Construction Committee.	Adds new sections pertaining to uplift on masonry foundations from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes.

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course of the foundation wall. The bond beam shall be reinforced with not less than one No. 5 bar, continuous around corners and intersections. **R404.1.1.2** Where first story walls are of wood or steel light-frame, footing dowel bars and foundation vertical reinforcing shall be not less than No. 4 bars at 8 ft (2438 mm) on center, placed in fully grouted cells. Dowels shall extend into the cast concrete footing and terminate with a standard hook at three inches clear of the footing bottom. Vertical wall reinforcing shall be lap spliced with the dowel, extend into the bond beam at the wall top, and terminate with a standard hook at 1-1/2 inches (38 mm) clear of the top of the bond beam. Alternately stem wall vertical reinforcing shall be permitted to extend into the footing and be terminated with a standard hook at 3 inches (76 mm) clear of the bottom of the footing. In addition grouted, reinforced vertical cells shall be provided at hold down post anchorages and at uplift anchorages that use straps embedded into concrete or masonry.		
R404.1.4 ~~Reserved~~ Anchorage of wood and steel light-frame wall systems. Anchorage of wood or steel light framed first story walls shall be in accordance with the following: **R404.1.4.1** For wood light-frame walls, sill plate anchorage, Wall stud to foundation uplift anchorage and hold down post anchorage shall be in accordance with AF&PA WFCM **R404.1.4.2** For steel light-frame walls, Wall bottom and braced wall chord stud anchorage shall be in accordance	**[Mod 1812r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. Modification provides construction details now found in Hurricane Resistant Residential	Adds new sections pertaining to uplift on foundations from aerodynamic uplift from the roof and uplift

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with AISI COFS/PM Chapter 43 AISI American Iron and Steel Institute: AISI/COFS/PM - 2001 and AISI/COFS/PM SUPPLEMENT – 2004 Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings, Referenced in code sections 301.1, 301.2.1.1, R404.1.4.2	Construction Manual SSTD-10 and the work of the ICC Hurricane Resistant Construction Committee.	from over-turn on a range of building shapes and sizes.
R404.1.5.1 Pier and curtain wall foundations. In regions where the basic wind speed is 100 mph or less ~~P~~ pier and curtain wall foundations shall be permitted to be used to support light-frame construction not more than two stories in height, provided the following requirements are met:….	**[Mod 1812r]** Information regarding foundations in the current Florida Residential Code addresses gravity loads only. These modifications are intended to provide the code user with information regarding uplift on foundations from aerodynamic uplift from the roof and uplift from over-turn on a range of building shapes and sizes. Modification provides construction details now found in Hurricane Resistant Residential Construction Manual SSTD-10 and the work of the ICC Hurricane Resistant Construction Committee.	Clarifies curtain wall foundations for wind speeds 100 mph or less.
R404.2.6 Fastening. Wood structural panel foundation wall sheathing shall be attached to framing in accordance with Table R602.2(1) ~~R602.3(1)~~ and Section R402.1.1.		
R502.1.3.2 ~~**R502.11.2**~~ **Bracing.** Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual	**[Mod 1260r]** HIB-91 is no longer published and this change merely updates the reference to the most current version of truss installation guidelines. The BCSI 1-03 information has been	Replace reference to HIB-91 with reference to

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truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with ~~the TPI, HIB~~ TPI/WTCA BCSI 1.	updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual sections of BCSI 1-03 are also available in English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	BCSI 1-03
SECTION R502 **WOOD FLOOR FRAMING** **R502.1 General Requirements.** Floor framing of light-frame wood construction shall be in accordance with the provisions of this Section. **R502.1.1 ~~R502.1~~ Identification.** Load-bearing dimension lumber for joists, beams and girders shall be identified by a grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20. In lieu of a grade mark, a certificate of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted. **R502.1.1.1 ~~R502.1.1~~ Preservatively treated lumber.** Preservatively treated dimension lumber shall also be identified as required by Section R319.1.	**[Mod 1821rev]** This modification reorganizes the provisions for wood-frame construction of floors by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 502.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in	Reorganizes the provisions for wood frame construction of floors

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R502.1.1.2 ~~R502.1.2~~ Blocking and subflooring. Blocking shall be a minimum of utility grade lumber. Subflooring may be a minimum of utility grade lumber or No. 4 common grade boards. **R502.1.1.3 ~~R502.1.3~~ End-jointed lumber.** Approved end-jointed lumber identified by a grade mark conforming to Section R501.2 may be used interchangeably with solid-sawn members of the same species and grade. **R502.1.1.4 ~~R502.1.4~~ Prefabricated wood I-joists.** Structural capacities and design provisions for prefabricated wood I-joists shall be established and monitored in accordance with ASTM D 5055. **R502.1.1.5 ~~R502.1.5~~ Structural glued laminated timbers.** Glued laminated timbers shall be manufactured and identified as required in AITC A190.1 and ASTM D3737. **R502.1.2 ~~R502.12~~ Draftstopping required.** When there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet (92.9 m2). Draftstopping shall divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below draftstopping shall be provided in floor/ceiling assemblies under the following circumstances: 1. Ceiling is suspended under the floor framing. 2. Floor framing is constructed of truss-type open-web or perforated members. **R502.1.2.1 ~~R502.12.1~~ Materials.** Draftstopping materials	Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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shall not be less than 1/2-inch (12.7 mm) gypsum board, 3/8-inch (9.5 mm)wood structural panels, 3/8-inch (9.5 mm) Type 2-M-W particleboard or other approved materials adequately supported. Draftstopping shall be installed parallel to the floor framing members unless otherwise approved by the building official. The integrity of all draftstops shall be maintained. **R502.1.2.2 ~~R502.13~~ Fireblocking required.** Fireblocking shall be provided in wood-frame floor construction and floor-ceiling assemblies in accordance with Section R602.1.2 ~~R602.8~~. **R502.1.3 ~~R502.11~~ Wood trusses.** **R502.1.3.1 ~~R502.11.1~~ Design.** Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1. **R502.1.3.2 ~~R502.11.2~~ Bracing.** Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with the TPI/WTCA BCSI 1 ~~TPI, HIB.~~ **R502.1.3.3 ~~R502.11..3~~ Alterations to trusses.** Truss members and components shall not be cut, notched, spliced or		

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otherwise altered in anyway without the approval of a registered design professional. Alterations resulting in the addition of load (e.g., HVAC equipment, water heater, etc.), that exceed the design load for the truss, shall not be permitted without verification that the truss is capable of supporting the additional loading. **R502.1.3.4 ~~R502.11.4~~ Truss design drawings.** Truss design drawings, prepared in compliance with Section R502.1.3.1 ~~R502.11.1~~, shall be provided to the building official and approved prior to installation. Truss design drawing shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below: 1. Slope or depth, span, and spacing. 2. Location of all joints. 3. Required bearing widths. 4. Design loads as applicable. a. Top chord live load (including snow loads). b. Top chord dead load. c. Bottom chord live load. d. Bottom chord dead load. e. Concentrated loads and their points of application. f. Controlling wind and earthquake loads. 5. Adjustments to lumber and joint connector design		

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values for conditions of use. 6. Each reaction force and direction. 7. Joint connector type and description (e.g., size, thickness or gauge); and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface. 8. Lumber size, species and grade for each member. 9. Connection requirements for: a. Truss-to-truss girder. b. Truss ply-to-ply. c. Field splices. 10. Calculated deflection ratio and/or maximum description for live and total load. 11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents. 12. Required permanent truss member bracing location. **R502.2 Design and construction where wind speed is less than 100 mph.** Floors shall be designed and constructed in accordance with the provisions of this ~~chapter~~ Section and Figure R502.2 and Sections R319 and R320 or in accordance with AF&PA~~'~~'s NDS. **R502.2.1 Decks.** Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure		

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and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck. **R502.2.2 ~~R502.3~~ Allowable joist spans.** Spans for floor joists shall be in accordance with Tables R502.2.2 ~~3.1~~(1) and R502.2.2 .~~3.1~~(2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters. **R502.2.2.1 ~~R502.3.1~~Sleeping areas and attic joists.** Table R502.2.2 ~~3.1~~(1) shall be utilized to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway provided that the design live load does not exceed 30 psf (1.44 kN/m2) and the design dead load does not exceed 10 psf (0.48 kN/m2). The allowable span of ceiling joists that support attics utilized for limited storage or no storage shall be determined in accordance with Section R802.2.2 ~~R802.4~~. **TABLE R502.2.2 .~~3.1~~(1)** **FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES** **(Residential sleeping areas, live load=30 psf, L/ Δ =360)** **TABLE R502.2.2 .~~3.1~~(2)** **FLOOR JOIST SPANS FOR COMMON LUMBER SPECIES**		

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(Residential sleeping areas, live load=40 psf, L/ Δ =360) **R502.2.2.2 ~~R502.3.2~~ Other floor joists.** Table R502.2.2.~~3.1~~(2) shall be utilized to determine the maximum allowable span of floor joists that support all areas of the building, other than sleeping and attics, provided that the design live load does not exceed 40 psf (1.92 kN/m2) and the design dead does not exceed 10 psf (0.48 kN/m2). **R502.2.2.3 ~~R502.3.3~~ Floor cantilevers.** Floor cantilever spans shall not exceed the nominal depth of the wood floor joist. Floor cantilevers constructed in accordance with Table R502.2.2 3.~~3~~(1) shall be permitted when supporting a light-frame bearing wall and roof only. Floor cantilevers supporting an exterior balcony are permitted to be constructed in accordance with Table R502.2.2.3.~~3~~(2). **TABLE R502.2.2.3.~~3~~(1)** **CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING LIGHT-FRAME EXTERIOR BEARING WALL AND ROOF ONLY** [a, b, c, f, g,h] **(Floor Live Load ≤ 40 psf, Roof Live Load ≤ 20 psf)** **TABLE R502.2.2.3.~~3~~(2)** **CANTILEVER SPANS FOR FLOOR JOISTS SUPPORTING EXTERIOR BALCONY** [a, b, e, f] **R502.2.3 ~~R502.4~~ Joists under bearing partitions.** Joists under parallel bearing partitions shall be of adequate size to support the load. Double joists, sized to adequately support the load, that are separated to permit the installation of piping or vents shall be full depth solid blocked with lumber not less than 2 inches (51 mm) in		

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nominal thickness spaced not more than 4 feet (1219 mm) on center. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls or partitions more than the joist depth unless such joists are of sufficient size to carry the additional load. **R502.2.4 ~~R502.5~~Allowable girder spans.** The allowable spans of girders fabricated of dimension lumber shall not exceed the values set forth in Tables R502.2.4 ~~5~~(1) and R502.2.4 ~~5~~(2). **TABLE R502.2.4.~~5~~ (1)** **GIRDER SPANS [a] AND HEADER SPANS [a] FOR EXTERIOR BEARING WALLS** **(Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir [b] and required number of jack studs)** **TABLE R502.2.4 ~~5~~ (2)** **GIRDER SPANS [a] AND HEADER SPANS [a] FOR INTERIOR BEARING WALLS** **(Maximum spans for Douglas fir-larch, hem-fir, southern pine and spruce-pine-fir [b] and required number of jack studs)** **R502.2.5 ~~R502.6~~ Bearing.** The ends of each joist, beam or girder shall have not less than 1.5 inches (38 mm) of bearing on wood or metal and not less than 3 inches (76 mm) on masonry or concrete except where supported on a 1-inch-by-4-inch (25.4 mm by 102 mm) ribbon strip and nailed to the adjacent stud or by the use of approved joist hangers. **R502.2.5.1 ~~R502.6.1~~ Floor systems.** Joists framing from opposite sides over a bearing support shall lap a minimum of 3 inches (76 mm) and shall be nailed together with a		

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minimum three 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the nailed lap is permitted. **R502.2.5.2 ~~R502.6.2~~Joist framing.** Joists framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips not less than nominal 2 inches by 2 inches (51 mm by 51 mm). **R502.2.6 ~~R502.7~~ Lateral restraint at supports.** Joists shall be supported laterally at the ends by full-depth solid blocking not less than 2 inches (51 mm) nominal in thickness; or by attachment to a header, band, or rim joist, or to an adjoining stud; or shall be otherwise provided with lateral support to prevent rotation. **Exception: Reserved.** **R502.2.6.1 ~~R502.7.1~~ Bridging.** Joists exceeding a nominal 2 inches by 12 inches (51 mm by 305 mm) shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch (25.4 mm by 76 mm) strip nailed across the bottom of joists perpendicular to joists at intervals not exceeding 8 feet (2438 mm). **R502.2.7 ~~R502.8~~ Drilling and notching.** Structural floor members shall not be cut, bored or notched in excess of the limitations specified in this section. See Figure R502.2.7~~8~~. **FIGURE R 502.2.7 ~~8~~** **CUTTING, NOTCHING AND DRILLING**		

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R502.2.7.1 ~~R502.8.1~~ Sawn lumber. Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4 inches (102 mm) or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2 inches (51 mm) to the top or bottom of the member, or to any other hole located in the member. Where the member is also notched, the hole shall not be closer than 2 inches (51 mm) to the notch. **R502.2.7.2 ~~R502.8.2~~ Engineered wood products.** Cuts, notches and holes bored in trusses, laminated veneer lumber, glue-laminated members or I-joists are not permitted unless the effects of such penetrations are specifically considered in the design of the member. **R502.2.8 ~~R502.9~~ Fastening.** Floor framing shall be nailed in accordance with Table R602.2(1) ~~R602.3(1)~~. Where posts and beam or girder construction is used to support floor framing, positive connections shall be provided to ensure against uplift and lateral displacement. **R502.2.9 ~~R502.10~~ Framing of openings.** Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet (1219 mm), the header joist may be a single member the same size as the floor joist. Single trimmer joists may be used to carry a single header joist that is located within 3 feet (914 mm) of the trimmer joist		

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bearing. When the header joist span exceeds 4 feet (1219 mm), the trimmer joists and the header joist shall be doubled and of sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header joist to trimmer joist connections when the header joist span exceeds 6 feet (1829 mm). Tail joists over 12 feet (3658mm)long shall be supported at the header by framing anchors or on ledger strips not less than 2 inches by 2 inches (51 mm by 51 mm). **R502.3 Design and construction where wind speed is 100 mph or greater.** Floor framing of light-frame wood construction shall be designed and constructed in accordance with the provisions of Section R301.2.1.1, Section R502.1, R503.2.3, and R503.3.3.		
R601.2 Requirements. Wall construction shall be capable of accommodating all loads imposed according to Section R301 and of transmitting the resulting loads to the supporting structural elements. A continuous load path between foundations walls, and roofs shall be provided. **R601.2.2 Fastening devices**. Approved connectors, anchors and other fastening devices not included in this code shall be installed in accordance with the manufacturer's recommendations. **R601.2.3 Corrosive conditions**. Metal plates, connectors, screws, bolts and nails exposed directly to the weather or subject to salt corrosion in coastal areas, as determined by the building official, shall be stainless steel, hot dipped galvanized after the fastener or connector is fabricated to form a zinc coating not less than 1 oz per sq ft, or hot dipped	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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galvanized coated with a minimum of 1.8 oz per sq ft of steel.		
R602.1 General Requirements. Exterior walls of light-frame wood construction shall be in accordance with the provisions of this chapter. **R602.1.1 ~~R602.1~~…** **R602.1.1.1 ~~R602.1.1~~…** **R602.1.1.2 ~~R602.1.2~~…** **R602.1.2 ~~R602.8~~…** **R602.1.2.1. ~~R602.8.1~~ Materials.** Except as provided in Section R602.1.2~~8~~, Item 4, fireblocking shall consist of 2-inch (51mm)nominal lumber, or two thicknesses of 1-inch (25.4 mm) nominal lumber with broken lap joints, or one thickness of 23/32-inch (19.8 mm) wood structural panels with joints backed by 23/32-inch (19.8 mm)wood structural panels or one thickness of 3/4-inch (19.1 mm) particleboard with joints backed by 3/4-inch (19.1 mm) particleboard, 1/2-inch (12.7 mm) gypsum board, or 1/4-inch (6.4 mm) cement-based millboard. Batts or blankets of mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place shall be permitted as an acceptable fire block. Batts or blankets of mineral or glass fiber or other approved non-rigid materials shall be permitted for compliance with the 10 foot horizontal fireblocking in walls constructed using parallel rows of studs or staggered studs. Loose-fill insulation material shall not be used as a fire block unless specifically tested in the form and manner intended for	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	Reorganizes and renumbers the provisions for wood frame construction of walls adding wind provisions.

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use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases.		
R602.1.2.1.1 ~~R602.8.1.1~~… **R602.1.2.1.2 ~~R602.8.1.2~~…** **R602.1.3 ~~R602.7.2~~ Nonbearing walls.** Load-bearing headers are not required in interior or exterior nonbearing walls. A single flat 2-inch-by-4-inch (51 mm by 102 mm) member may be used as a header in interior or exterior nonbearing walls for openings up to 8 feet (2438 mm) in width if the vertical distance to the parallel nailing surface above is not more than 24 inches (610 mm). For such nonbearing headers, no cripples or blocking are required above the header. **R602.1.3.1. ~~R602.5~~ Interior nonbearing walls.** Interior nonbearing walls shall be permitted to be constructed with 2-inch-by-3-inch (51 mm by 76 mm) studs spaced 24 inches (610 mm) on center or, when not part of a braced wall line, 2-inch-by-4-inch (51mmby 102 mm) flat studs spaced at 16 inches (406 mm) on center. Interior nonbearing walls shall be capped with at least a single top plate. Interior nonbearing walls shall be fireblocked in accordance with Section R602.1.2~~8~~.	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R602.2 ~~R602.3~~ Design and construction where wind speed is less than 100 miles per hour (45 m/s). Exterior walls of wood-frame wood construction shall be designed and constructed in accordance with the provisions of this ~~chapter~~ Section and Figures R602.2~~3~~(1) and R602.2~~3~~(2) or in accordance with AF&PA's NDS. Components of exterior walls shall be fastened in accordance with Table R602.2~~3~~(1) through R602.2~~3~~(4). Exterior walls covered with foam	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission	

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plastic sheathing shall be braced in accordance with Section R602.2.10. Structural sheathing of shall be fastened directly to structural framing members. **R602.2.1 ~~R602.2~~ Stud grade.** Studs shall be a minimum No. 3, standard or stud grade lumber. **Exception:** Bearing studs not supporting floors and nonbearing studs may be utility grade lumber, provided the studs are spaced in accordance with Table R602.2~~3~~(5). **R602.2.2 ~~R602.3.1~~Stud size, height and spacing.** The size, height and spacing of studs shall be in accordance with Table R602.2~~3~~.(5). **Exceptions:** 1. Utility grade studs shall not be spaced more than 16 inches (406 mm) on center, shall not support more than a roof and ceiling, and shall not exceed 8 feet (2438 mm) in height for exterior walls and load-bearing walls or 10 feet (3048 mm) for interior nonload-bearing walls. 2. Studs more than 10 feet (3048 mm) in height which are in accordance with Table R602.2~~3~~.1. **R602.2.3 ~~R602.3.2~~…** **R602.2.4 ~~R602.3.3~~…** **R602.2.5 ~~R602.3.4~~…** **R602.2.6 ~~R602.4~~…**	policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R602.2.7 ~~R602.6~~ Drilling and notching—studs. Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25 percent of its width. Studs in nonbearing partitions may be notched to a depth not to exceed 40 percent of a	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered,	

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single stud width. Any stud may be bored or drilled, provided that the diameter of the resulting hole is no greater than 40 percent of the stud width, the edge of the hole is no closer than 5/8 inch (15.9 mm) to the edge of the stud, and the hole is not located in the same section as a cut or notch. See Figures R602.2.7(1) ~~R602.6(1)~~ and R602.2.7(2) ~~R602.6(2)~~. **R602.2.7.1 ~~R602.6.1~~ Drilling and notching of top plate.** When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie of not less than 0.054 inches thick (1.37mm) (16ga) and 11/2 inches (38mm) wide shall be fastened to each plate across and to each side of the opening with not less than eight 16d nails at each side or equivalent. See Figure R602.2.7.1 ~~R602.6.1~~. **Exception:** When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing. **R602.2.8 ~~R602.7~~ Headers.** For header spans see Tables R502.2.4(1) ~~R502.5(1)~~ and R502.2.4(2) ~~R502.5(2)~~. **R602.2.8.1 ~~R602.7.1~~Wood structural panel box headers.** Wood structural panel box headers shall be constructed in accordance with Figure R602.1.3 ~~R602.7.2~~ and Table R602.1.3 ~~R602.7.2~~. **R602.2.9 ~~R602.9~~ Cripple walls.** Foundation cripple walls shall be framed of studs not less in size than the studding above. When exceeding 4 feet (1219 mm) in height, such walls shall be framed of studs having the size required for an additional story.	wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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Cripple walls with a stud height less than 14 inches (356 mm) shall be sheathed on at least one side with a wood structural panel that is fastened to both the top and bottom plates in accordance with Table R602.2~~3~~(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations.		
R602.2.10 ~~R602.10~~Wall bracing. All exterior walls shall be braced in accordance with this section. In addition, interior braced wall lines shall be provided in accordance with Section R602.2.10.1.1. **R602.2.10.1 ~~R602.10.1~~ Braced wall lines.** Braced wall lines shall consist of braced wall panel construction methods in accordance with Section R602.2.10.3. The amount and location of bracing shall be in accordance with Table R602.2.10.1 and the amount of bracing shall be the greater of that required by the design wind speed. Braced wall panels shall begin no more than 12.5 feet (3810 mm) from each end of a braced wall line. Braced wall panels that are counted as part of a braced wall line shall be in line, except that offsets out-of-plane of up to 4 feet (1219 mm) shall be permitted provided that the total out-to-out offset dimension in any braced wall line is not more than 8 feet (2438 mm). A designed collector shall be provided if the bracing begins more than 12 feet (3658 mm) from each end of a braced wall line. **R602.2.10.1.1 ~~R602.10.1.1~~ Spacing.** Spacing of braced wall lines shall not exceed 35 feet (10,668 mm) on center in both the longitudinal and transverse directions in each story.	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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Exception: Spacing of braced wall lines not exceeding 50 feet shall be permitted where: 1. The wall bracing provided equals or exceeds the amount of bracing required by Table R602.2.10.1 multiplied by a factor equal to the braced wall line spacing divided by 35 feet, and 2. The length-to-width ratio for the floor/wall diaphragm does not exceed 3:1. **R602.2.10.2 ~~R602.10.2~~ Cripple wall bracing.** Cripple walls shall be braced with an amount and type of bracing as required for the wall above in accordance with Table R602.2.10.1 with the following modifications for cripple wall bracing: 1. The percent bracing amount as determined from Table R602.2.10.1 shall be increased by 15 percent, and 2. The wall panel spacing shall be decreased to 18 feet (5486 mm) instead of 25 feet (7620 mm). **R602.2.10.2.1 ~~R602.10.2.1~~ Redesignation of cripple walls.** Cripple walls are permitted to be redesignated as the first storywalls for purposes of determining wall bracing requirements. If the cripple walls are redesignated, the stories above the redesignated story shall be counted as the second and third stories respectively.		
R602.2.10.3 ~~R602.10.3~~ Braced wall panel construction methods. The construction of braced wall panels shall be in accordance with one of the following methods:	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered,	

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1. Nominal 1-inch-by-4-inch (25.4 mm by 102 mm) continuous diagonal braces let in to the top and bottom plates and the intervening studs or approved metal strap devices installed in accordance with the manufacturer's specifications. The let-in bracing shall be placed at an angle not more than 60 degrees (1.06 rad) or less than 45 degrees (0.79 rad) from the horizontal. 2. Wood boards of 5/8 inch (15.9 mm) net minimum thickness applied diagonally on studs spaced a maximum of 24 inches (610 mm). Diagonal boards shall be attached to studs in accordance with Table R602.2~~3~~(1). 3. Wood structural panel sheathing with a thickness not less than 5/16 inch (7.9 mm) for 16-inch (406 mm) stud spacing and not less than 3/8 inch (9.5 mm) for 24-inch (610 mm) stud spacing. Wood structural panels shall be installed in accordance with Table R602.2~~3~~(3). 4. One-half-inch (12.7mm)or 25/32-inch (19.8mm)thick structural fiberboard sheathing applied vertically or horizontally on studs spaced a maximum of 16 inches (406 mm) on center. Structural fiberboard sheathing shall be installed in accordance with Table R602.2~~3~~(1). 5. Gypsum board with minimum 1/2-inch (12.7 mm) thickness placed on studs spaced a maximum of 24 inches (610 mm) on center and fastened at 7 inches (178 mm) on center with the size nails specified in Table R602.2~~3~~(1) for sheathing and Table R702.3.5 for interior gypsum board. 6. Particleboard wall sheathing panels installed in	wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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Section/ Chapter	Rationale	Summary
accordance with Table R602.2~~3~~(4) 7. Portland cement plaster on studs spaced a maximum of 16 inches (406 mm) on center and installed in accordance with Section R703.6. 8. Hardboard panel siding when installed in accordance with Table R703.4. **Exception:** Alternate braced wall panels constructed in accordance with Section R602.2.10.6 shall be permitted to replace any of the above methods of braced wall panels.		
R602.2.10.4 ~~R602.10.4~~ Length of braced panels. For Methods 2, 3, 4, 6, 7 and 8 above, each braced wall panel shall be at least 48 inches (1219 mm) in length, covering a minimum of three stud spaces where studs are spaced 16 inches (406 mm) on center and covering a minimum of two stud spaces where studs are spaced 24 inches (610 mm) on center. For Method 5 above, each braced wall panel shall be at least 96 inches (2438 mm) in length where applied to one face of a braced wall panel and at least 48 inches (1219 mm) where applied to both faces. **Exceptions:** 1. Lengths of braced wall panels for continuous wood structural panel sheathing shall be in accordance with Section R602.2.10.5. 2. Lengths of alternate braced wall panels shall be in accordance with Section R602.2.10.6. **TABLE R602.2.10.1**	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely	

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Section/ Chapter	Rationale	Summary
WALL BRACING **TABLE R602.2.3.1** **MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO WIND SPEEDS OF LESS THAN 100 MPH [b,c]** **R602.2.10.5 ~~R602.10.5~~ Continuous structural panel sheathing.** When continuous wood structural panel sheathing is provided in accordance with Method 3 of R602.2.10.3 on all sheathable areas of all exterior walls, and interior braced wall lines, where required, including areas above and below openings, braced wall panel lengths shall be in accordance with Table R602.2.10.5. Wood structural panel sheathing shall be installed at corners in accordance with Figure R602.2.10.5. The bracing amounts in Table R602.2.10.1 for Method 3 shall be permitted to be multiplied by a factor of 0.9 for walls with a maximum opening height that does not exceed 85 percent of the wall height or a factor of 0.8 for walls with a maximum opening height that does not exceed 67 percent of the wall height.	directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R602.2.10.6 ~~R602.10.6~~ Alternate braced wall panels. Alternate braced wall lines constructed in accordance with one of the following provisions shall be permitted to replace each 4 feet (1219 mm) of braced wall panel as required by Section R602.2.10.4: 1. In one-story buildings, each panel shall have a length of not less than 2 feet, 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 3 / 8-inch minimum- thickness (9.5 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida	

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Table R602.2~~3~~(1) and blocked at all wood structural panel sheathing edges. Two anchor bolts installed in accordance with Figure R403.1(1) shall be provided in each panel. Anchor bolts shall be placed at panel quarter points. Each panel end stud shall have a tie-down device fastened to the foundation, capable of providing an uplift capacity of at least 1,800 pounds (816.5 kg). The tie-down device shall be installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation or on floor framing supported directly on a foundation which is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom. When the continuous foundation is required to have a depth greater than 12 inches (305 mm), a minimum 12-inch-by-12-inch (305 mm by 305 mm) continuous footing or turned down slab edge is permitted at door openings in the braced wall line. This continuous footing or turned down slab edge shall be reinforced with not less than one No. 4 bar top and bottom. This reinforcement shall be lapped 15 inches (381 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line. 2. In the first story of two-story buildings, each braced wall panel shall be in accordance with Item 1 above, except that the wood structural panel sheathing shall be provided on both faces, sheathing edge nailing spacing shall not exceed four inches on center, at least three anchor bolts shall be placed at one-fifth points, and tie-down device uplift capacity shall not be less than 3,000	with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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pounds (1360.8 kg).		
R602.2.10.7 ~~R602.10.7~~ Panel joints. All vertical joints of panel sheathing shall occur over studs. Horizontal joints in braced wall panels shall occur over blocking of a minimum of 11/2 inch (38 mm) thickness. **Exception:** Blocking is not required behind horizontal joints when constructed in accordance with R602.2.10.3, Braced-wall-panel construction method 3 and Table R602.2.10.1, method 3, or where permitted by the manufacturer's installation requirements for the specific sheathing material. **R602.2.10.8 ~~R602.10.8~~ Connections.** Braced wall panel sole plates shall be fastened to the floor framing and top plates shall be connected to the framing above in accordance with Table R602.2~~3~~(1). Sills shall be fastened to the foundation or slab in accordance with Sections R403.1.6. Where joists are perpendicular to the braced wall lines above, blocking shall be provided under and in line with the braced wall panels. **R602.2.10.9 ~~R602.10.9~~ Interior braced wall support. Reserved.**	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R602.2.10.10 ~~R602.10.10~~ Design of structural elements. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with accepted engineering practice. **R602.2.10.11 ~~R602.10.11~~ Bracing in Seismic Design Categories D_1 and D_2. Reserved.**	**[Mod 1823]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already	

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Table R602.2.10.11 ~~R602.10.11~~ Adjustment of Bracing Amounts for Interior Braced Wall Lines According to Braced Wall Line Spacing. Reserved. **R602.2.11 ~~R602.11~~ Framing and Connections for Seismic Design Categories D_1 and D_2. Reserved.** **Figure R602.2.11.3 ~~R602.11.3~~ Stepped Foundation Construction. Reserved.** **R602.3 Design and construction where wind speeds is 100 miles per hour (45 m/s) or greater.** Exterior walls of light-frame wood construction shall be designed and constructed in accordance with the provisions of Section R301.2.1.1 and Section R602.1.1.	made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
TABLE R603.3.2(1) WALL FASTENING SCHEDULEa DESCRIPTION OF BUILDING ELEMENT NUMBER AND SIZE OF FASTENERSa SPACING OF FASTENERS Floor joist to track of load-bearing wall 2-No. 8 screws Each joist Wall stud to top or bottom track 2-No. 8 screws Each end of stud, one per flange Structural sheathing to wall studs No. 8 screws 6² o.c. on edges and 12² o.c. at intermediate supports Roof framing to wall Approved design or tie down in accordance with Section R802.2.9 ~~R802.11~~		

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For SI: 1 inch = 25.4 mm. a. All screw sizes shown are minimum.		
R606.2 Thickness of masonry. The minimum nominal thickness of exterior concrete masonry walls shall be 8 inches or shall be designed in accordance with Section R606.1. ~~The nominal thickness of masonry walls shall conform to the requirements of Sections R606.2.1 through R606.2.4.~~ ~~R606.2.1 Minimum thickness. The minimum thickness of masonry bearing walls more than one story high shall be 8 inches (203 mm). Solid masonry walls of one-story dwellings and garages shall not be less than 6 inches (152 mm) in thickness when not greater than 9 feet (2743 mm) in height, provided that when gable construction is used, an additional 6 feet (1829mm) is permitted to the peak of the gable. Masonry walls shall be laterally supported in either the horizontal or vertical direction at intervals as required by Section R606.8.~~ ~~R606.2.2 Rubble stone masonry wall. The minimum thickness of rough, random or coursed rubble stone masonry walls shall be 16 inches (406 mm).~~ **R606.2.~~3~~ 1 Change in thickness**. Where walls of masonry of hollow units or masonry bonded hollow walls are decreased in thickness, a course of solid masonry shall be constructed between the wall below and the thinner wall above, or special units or construction shall be used to transmit the loads from face shells or wythes above to	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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those below. **R606.2.4 2 Parapet walls.** Unreinforced solid masonry parapet walls shall not be less than 8 inches (203 mm) in thickness and their height shall not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls shall be not less that 8 inches (203 mm) in thickness, and their height shall not exceed three times their thickness. Masonry parapets ~~in areas subject to wind loads of 30 pounds per square foot (1.44 kN/m^2)~~ shall be reinforced in accordance with ACI 530/ASCE 5/TMS 402….		
R606.4 Allowable stresses ~~Allowable compressive stresses in masonry shall not exceed the values prescribed in Table R606.4.~~ Concrete masonry units shall be hollow or solid unit masonry in accordance with ASTM C 90 and shall have a minimum net area compressive strength of 1900 psi in compliance with ASTM C 90. Mortar shall comply with Section R607.1. In determining the stresses in masonry, the effects of all loads and conditions of loading and the influence of all forces affecting the design and strength of the several parts shall be taken into account….. ~~**R606.5 Piers**. The unsupported height of masonry piers shall not exceed ten times their least dimension. When structural clay tile or hollow concrete masonry units are used for isolated piers to support beams and girders, the cellular spaces shall be filled solidly with concrete or Type M or S mortar, except that unfilled hollow piers may be used if their unsupported height is not more than four times their least dimension. Where hollow masonry units are solidly filled with~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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~~concrete or Type M, S or N mortar, the allowable compressive stress shall be permitted to be increased as provided in Table R606.4.~~ **R606.5 ~~.1~~ Pier cap**. Hollow piers shall be capped with 4 inches (102 mm) of solid masonry or concrete or shall have cavities of the top course filled with concrete or grout or other approved methods.		
R606.7 ~~Stack b~~ Bond. Masonry walls shall be running bond or stack bond construction. ~~In unreinforced masonry where masonry units are laid in stack bond, longitudinal reinforcement consisting of not less than two continuous wires each with a minimum aggregate cross-sectional area of 0.017 square inch (11 mm^2) shall be provided in horizontal bed joints spaced not more than 16 inches (406 mm) on center vertically.~~ **R606.7.1 Joint reinforcement stack bond**. When masonry units are laid in stack bond, horizontal joint reinforcement shall be placed in bed joints at not more than 16 inches on center. Horizontal joint reinforcement shall be a minimum of 9-gage and shall be in addition to required vertical reinforcement, Joint reinforcement shall be embedded in accordance with R606.9.6. ~~TABLE R606.4~~ ~~ALLOWABLE COMPRESSIVE STRESSES FOR EMPIRICAL DESIGN OF MASONRY~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
~~R606.8 Lateral support. Masonry walls shall be laterally supported in either the horizontal or the vertical direction. The maximum spacing between lateral supports shall not exceed the~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which	

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~~distances in Table R606.8. Lateral support shall be provided by cross walls, pilasters, buttresses or structural frame members when the limiting distance is taken horizontally, or by floors or roofs when the limiting distance is taken vertically.~~ ~~R606.8.1 Horizontal lateral support. Lateral support in the horizontal direction provided by intersecting masonry walls shall be provided by one of the methods in Section R606.8. 1.1 or Section R606.8. 1.2.~~ ~~R606.8.1.1 Bonding pattern. Fifty percent of the units at the intersection shall be laid in an overlapping masonry bonding pattern, with alternate units having a bearing of not less than 3 inches (76mm) on the unit below.~~ ~~R606.8.1.2 Metal reinforcement. Interior nonload-bearing walls shall be anchored at their intersections, at vertical intervals of not more than 16 inches (406 mm) with joint reinforcement of at least 9 gage, or 1/4 inch (6.4 mm) galvanized mesh hardware cloth. Intersecting masonry walls, other than interior nonload-bearing walls, shall be anchored at vertical intervals of not more than 8 inches (203 mm) with joint reinforcement of at least 9 gage and shall extend at least 30 inches (762mm) in each direction at the intersection. Other metal ties, joint reinforcement or anchors, if used, shall be spaced to provide equivalent area of anchorage to that required by this section.~~	may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
~~TABLE R606.8~~ ~~SPACING OF LATERAL SUPPORT FOR MASONRY WALLS~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed	

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~~R606.8.2 Vertical lateral support. Vertical lateral support of masonry walls shall be provided in accordance with one of the methods in Section R606.8.2. 1 or Section R606.8.2.2.~~ **R606.8.9 Lintels.** Masonry over openings shall be supported by steel lintels, reinforced concrete or masonry lintels or masonry arches, designed to support load imposed. ~~R606.10 Anchorage. Masonry walls shall be anchored to floor and roof systems in accordance with the details shown in Figure R606. 10(1). Footings may be considered as points of lateral support.~~ Figure R606.10(1) Reserved. Figure R606.10(2) Reserved. Figure R606.10(3) Reserved. ~~R606.11 Reserved.~~ TABLE R606.11.3.2 Reserved. TABLE R606.11.4.1 Reserved. TABLE R606.11.4.2 Reserved.	modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R606.9 ~~12~~ ~~Protection for r~~ Reinforcement. Reinforcing steel shall be a minimum of Grade 60 No. 5 or No. 4 bars and shall be identified in an approved manner. ~~All bars shall be completely embedded in mortar or grout. Joint reinforcement embedded in horizontal mortar joints shall not have less than 5/8 inch (15.9 mm) mortar coverage from the exposed face. All other reinforcement shall have a minimum coverage of one bar diameter over all bars, but not less than 3/4 inch (19.1 mm), ex-~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions	

<table>
<tr><th>Section/ Chapter</th><th>Rationale</th><th>Summary</th></tr>
<tr><td>~~cept where exposed to weather or soil, in which case the minimum coverage shall be 2 inches (51 mm).~~
<u>R606.9.1Bundling.</u> <u>Bundling shall be permitted when two bars are required at the same location in a wall or in a bond beam.</u>
<u>R606.9.2 Splicing.</u> <u>Splices shall be lap splices. Non-contact lap splices shall be permitted provided reinforcing bars are not spaced farther apart than 5 inches. Splice lengths shall be in accordance with Table R606.9.2. and shall be a minimum of 25 inches for No. 5 bars and 20 inches for No. 4 bars.</u>

<u>TABLE R606.9.2
LAP SPLICE
LENGTHS</u>
<table><tr><th><u>Bar Size (No.)</u></th><th><u>Lap Length (in.)</u></th></tr><tr><td><u>3</u></td><td><u>15</u></td></tr><tr><td><u>4</u></td><td><u>20</u></td></tr><tr><td><u>5</u></td><td><u>25</u></td></tr><tr><td><u>6</u></td><td><u>42</u></td></tr><tr><td><u>7</u></td><td><u>59</u></td></tr></table></td><td>are based on the latest edition of nationally recognized standards.</td><td></td></tr>
<tr><td><u>R606.9.3 Bending.</u> <u>Reinforcement shall be bent in the shop or in the field. All reinforcement shall be bent cold. The diameter of the bend, measured on the inside of the bar, shall not be less than six-bar diameters. Reinforcement partially embedded in concrete shall not be field bent.</u></td><td>[Mod 1918r] The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for</td><td></td></tr>
</table>

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EXCEPTION: Where bending is necessary to align dowel bars with a vertical cell, bars partially embedded in concrete shall be permitted to be bent at a slope of not more than 1 inch of horizontal displacement to 6 inches of vertical bar length. **R606.9.4 Clearance from masonry**. Reinforcing bars embedded in grouted masonry cells shall have a minimum clear distance between reinforcing bars and any face of a cell of ¼-inch for fine grout or ½-inch for coarse grout. **R606.9.5 Cover for reinforcing steel.** Reinforcing bars used in masonry walls shall have a masonry cover, including grout, of not less than 2 inches for masonry units with face exposed to earth or weather and 1½-inch for masonry units not exposed to earth or weather. **R606.9.6 Joint reinforcement embedment**. Longitudinal wires of joint reinforcement shall be fully embedded in mortar or grout with a minimum cover of ⅝- inch when exposed to earth or weather and ½-inch when not exposed to earth or weather.	the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R606.9.7 Cleanout openings. Cleanout openings shall be provided for cells containing spliced reinforcement when the grout pour exceeds 5 feet in height. Where cleanout openings are required, an opening shall be provided in the bottom course of the masonry cell to be filled. Cleanout openings shall have a minimum opening dimension of 3 inches. **R606.9.8 Termination.** All vertical wall reinforcement shall be terminated by hooking into a bond beam or footing with a standard hook. Standard hooks shall be formed by bending the vertical wall reinforcement in accordance with Section R606.9.3 or shall be a prefabricated standard hook. Splices to standard	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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hooks shall be lap splices with the minimum extension length beyond the bend for standard hooks of 10 inches for No. 5 bars and 8 inches for No. 4 bars. Hooks at bond beams shall extend to the uppermost horizontal reinforcement of the bond beam and shall be embedded a minimum of 6 inches into the bond beam as detailed in Figure R606.9a and Figure R606.9b. Where multiple bars are required, a single standard hook shall terminate into the bond beam or footing. In narrow footings where the width is insufficient to accommodate a standard 90-degree hook and provide the concrete cover required by Table 1907.7.1 of the Florida Building Code, Building, the hook shall be rotated in the horizontal direction until the required concrete cover is achieved.		
R606.9.9 Continuity multi-story construction. Vertical wall reinforcement in multi-story construction shall extend through bond beams and shall be continuous with the vertical wall reinforcement of the wall above or be offset in accordance with Section R606.9.9.1 and Figure R606.9.9B **Exception**: Where more than one bar in the same cell is required for vertical wall reinforcement, only one bar shall be required to be continuous between stories. **R606.9.9.1 Offset reinforcement.** Vertical reinforcement shall be permitted to be offset between floor levels. Reinforcement for the lower story shall be anchored into the upper floor level bond beam and reinforcement for the upper story shall be anchored into the bond beams above and below in accordance with Section R606.9.8 and Figures R606.9A and R606.9B.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
R606.9.10 ~~R606.14~~ Metal Accessories. Joint reinforcement, anchors, ties and wire fabric shall conform to the following: ASTM A 82 for wire anchors and ties; ASTM A 36 for plate, headed and bent-bar anchors; ASTM A 510 for corrugated sheet metal anchors and ties; ASTM A 951 for joint reinforcement; ASTM B 227 for copper-clad steel wire ties; or ASTM A 167 for stain-less steel hardware. **R606.~~14~~ 10.10.1 Corrosion protection.** Minimum corrosion protection of joint reinforcement, anchor ties and wire fabric for use in masonry wall construction shall conform to Table ~~R606.14.1.~~ R606.9.10.1	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
FIGURE R606.9.9A CONTINUITY OF REINFORCEMENT ONE STORY MASONRY WALL FIGURE R606.9.9B CONTINUITY OF FIRST AND SECOND FLOOR VERTICAL WALL REINFORCEMENT TABLE R606.9.10.1 ~~14.1~~ MINIMUM CORROSION PROTECTION	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R606.11 ~~3~~ Beam supports. Beams, girders or other concentrated loads supported by a wall or column shall have a bearing of at least 3 inches (76 mm) in length measured parallel to the beam upon solid masonry not less than 4 inches (102 mm) in thickness, or upon a metal bearing plate of adequate design and dimensions to distribute the load safely, or upon a continuous reinforced masonry member projecting not less than 4 inches	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure	

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Section/ Chapter	Rationale	Summary
(102 mm) from the face of the wall. **R606.11 ~~3.1~~ Joist bearing**. ~~Joists shall have a bearing of not less than 1½ inches (38 mm), except as provided in Section R606.13, and shall be supported in accordance with Figure R606. 10(1).~~ Except where supported on a 1-inch by 4-inch (25.4 mm by 102 mm) ribbon strip and nailed to the adjoining stud and as provided in Section 606.11, the ends of each joist shall not have less than 11/2 inches (38 mm) of bearing on wood or metal, or less than 3 inches (76 mm) on masonry. ~~FIGURE R606.10(1) Reserved.~~ ~~ANCHORAGE REQUIREMENTS FOR MASONRY WALLS LOCATED WHERE WIND LOADS ARE LESS THAN 30 PSF~~	categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R607.1 Mortar. Mortar for use in masonry construction shall be either Type M or S with a f'm of 1500- psi in accordance with ~~comply with~~ ASTM C 270. ~~The type of mortar shall be in accordance with Sections R607. 1.1, and R607. 1.2~~ and shall meet the proportion specifications of Table R607. 1 or the property specifications of ASTM C 270. **R607.1.1 Foundation walls.** Reserved. ~~Masonry foundation walls constructed as set forth in Tables R404.1.1(1) through R404.1.1(4) and mortar shall be Type M or S.~~ **R607.1.2 All other masonry.** Reserved. ~~Mortar for masonry serving as the lateral-wind-force-resisting system shall be Type M, S or N mortar.~~ **R607.1.3** Reserved.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
TABLE R607.1 MORTAR PROPORTIONS[a, b] ~~TABLE R607.1~~ ~~MORTAR PROPORTIONS[a,b]~~		
R609.1 General. ~~Grouted multiple-wythe masonry is a form of construction in which the space between the wythes is solidly filled with grout. It is not necessary for the cores of masonry units to be filled with grout.~~ Grouted hollow unit masonry is a form of construction in which certain cells of hollow units are continuously filled with grout. **R609.1.1 Grout**. Grout shall consist of cementitious material and aggregate in accordance with ASTM C 476 and the proportion specifications of Table R609. 1.1. Type M or Type S mortar to which sufficient water has been added to produce pouring consistency can be used as grout. **R609.1.2 Grout lift height.** ~~Grouting requirements. Maximum pour heights and the minimum dimensions of spaces provided for grout placement shall conform to Table R609. 1.2.~~ Where the following conditions are met, place grout in lifts not exceeding 12.67 ft (3.86 m). 1. The masonry has cured for at least 4 hours. 2. The grout slump is maintained between 10 and 11 in. (254 and 279 mm). 3. No intermediate reinforced bond beams are placed between the top and the bottom of the pour height. Otherwise, place grout in lifts not exceeding 5 ft (1.52 m). If ~~the~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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~~work~~ grouting is stopped for one hour or longer, the horizontal construction joints shall be formed by stopping all tiers at the same elevation and with the grout 1 inch (25.4 mm) below the top. TABLE R609.1.2 Reserved. ~~GROUT SPACE DIMENSIONS AND POUR HEIGHTS~~		
R609.1.3 Grout space (cleaning). Provision shall be made for cleaning grout space. Mortar projections that project more than 0.5 inch (12.7mm) into grout space and any other foreign matter shall be removed from grout space prior to inspection and grouting. **R609.1.4 Grout placement**. All cells containing reinforcement or anchor bolts shall be grouted solid. Grout shall be a plastic mix suitable for pumping without segregation of the constituents and shall be mixed thoroughly. Grout shall have a maximum coarse aggregate size of ⅜-inch and shall be placed at an 8 to 11-inch slump and shall have a minimum specified compressive strength of 2000 psi at 28 days when tested in an approved manner or shall be in accordance with ASTM C 476. Grout shall be placed by pumping or by an approved alternate method and shall be placed before any initial set occurs and in no case more than $1^1/_2$ hours after water has been added. Grouting shall be done in a continuous pour, in lifts ~~not exceeding 5 feet (1524 mm). It shall be consolidated by puddling or mechanical vibrating during placing and reconsolidated after excess moisture has been absorbed but before plasticity is lost.~~. in accordance with Section 609.1.2. Grout shall be consolidated at the time of placement in accordance with the following:	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
1. Consolidate grout pours 12 in. (305 mm) or less in height by mechanical vibration or by puddling. 2. Consolidate pours exceeding 12 in. (305 mm) in height by mechanical vibration, and reconsolidate by mechanical vibration after initial water loss and settlement has occurred.		
R609.1.4.1 Grout pumped through aluminum pipes. Grout shall not be pumped through aluminum pipes. **R609.1.5 Cleanouts**. ~~Where required by the building official, cleanouts shall be provided as specified in this section.~~ Cleanouts shall be provided at the bottom course at each pour of grout where such pour exceeds 5 feet (1524 mm) in height and where required by the building official. Cleanouts shall be provided with an opening of sufficient size to permit removal of debris. The minimum opening dimension shall be 3 in. (76.2 mm). The cleanouts shall be sealed before grouting and after inspection. **R609.1.5.2 Grouted hollow unit masonry.** Reserved. ~~Cleanouts shall be provided at the bottom course of each cell to be grouted at each pour of grout, where such pour exceeds 4 5 feet (1219 mm) in height.~~	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R609.2 Bond beams. A reinforced bond beam shall be provided in masonry walls at the top of the wall and at each floor level of each exterior wall. Masonry walls not extending to the roof line shall have a bond beam at the top of the wall. **Exceptions:** 1. A bond beam is not required at the floor level for slab-on-ground floors. 2. Gable endwalls shall be in conformance with	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally	Replaces deleted sections.

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Section/ Chapter	Rationale	Summary
Section R609.4. **R609.2.1 Bond beam types**. Bond beams shall be one of the following: 1. 8" thick x 8" high masonry. 8" thick x 12" high masonry. 8" thick x 16" high masonry. 8" thick by 24" high masonry 8" thick x 32" high masonry. 2. Precast units certified by the manufacturer for the uplift loads as set forth in Table R802.11. Precast units shall be installed in accordance with the manufacturer's specifications, and approved by the building official.	recognized standards.	
R609.2.2 Bond beam reinforcement. The minimum reinforcement for bond beam roof diaphragm chord tension reinforcement steel shall be as set forth in Table R609.2.2A1 through Table R609.2.2A-4 for the appropriate grade of steel and exposure category. The minimum reinforcement for bond beam uplift resisting reinforcement steel shall be as set forth in Tables R609.2.2B-1 through R609.2.2B-8 for the loads set forth in Table R802.11. The total minimum area of bond beam reinforcement shall be the sum of the required area of the diaphragm chord tension steel and the required area of bond beam uplift steel. Bond beam area shall be converted to bar size in accordance with Table R609.2.2C.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
R609.2.3 Location of reinforcement. Reinforcement shall be located in the top of bond beams and in the top and bottom of bond beams also serving as lintels. **R609.2.4 Corner continuity.** Corner continuity. Reinforcement in bond beams shall be continuous around corners as detailed in Figure R609.2.4. **Exception**: In bond beams requiring two reinforcing bars, one bar shall be continuous around corners.		
FIGURE R609.2.4 CORNER CONTINUITY OF BOND BEAM AND WALL REINFORCEMENT **R609.2.5 Change in height.** Changes in bond beam height shall be permitted as detailed in Figure R609.2.5. FIGURE R609.2.5 CHANGES IN BOND BEAM HEIGHT **R609.2.6 Precast units reinforcement**. Precast bond beams shall properly receive and retain all vertical wall reinforcement. Precast bond beams shall contain the minimum amount of continuous reinforcement set forth in Sections R609.2.2 and R609. 6 as applicable and shall be reinforced at joints to act as drag struts and diaphragm chords. TABLE R609.2.2A-1 GRADE 60 EXPOSURE B ROOF DIAPHRAGM CHORD TENSION	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
BOND BEAM STEEL AREA, IN^2 TABLE R609.2.2A-2 GRADE 60 ROOF EXPOSURE C DIAPHRAGM CHORD TENSION BOND BEAM STEEL AREA, IN^2		
TABLE R609.2.2A-3 - GRADE 40 EXPOSURE B ROOF DIAPHRAGM CHORD TENSION BOND BEAM STEEL AREA IN^2 TABLE R609.2.2A-4 - GRADE 40 EXPOSURE C ROOF DIAPHRAGM CHORD TENSION BOND BEAM STEEL AREA IN^2 TABLE R609.2.2B-1 GRADE 60 AREA OF STEEL REQUIRED IN BOND BEAM FOR UPLIFT BENDING, IN^2 TABLE R609.2.2B-2 GRADE 60 AREA OF STEEL REQUIRED IN BOND BEAM FOR UPLIFT BENDING, IN^2 TABLE R609.2.2B-3 GRADE 60 AREA OF STEEL REQUIRED IN BOND BEAM FOR UPLIFT BENDING, IN^2 TABLE R609.2.2B-4 GRADE 60 AREA OF STEEL REQUIRED IN BOND BEAM FOR UPLIFT BENDING, IN^2	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
TABLE R609.2.2B-5 GRADE 40 AREA BOND BEAM/LINTEL UPLIFT STEEL DESIGN TABLE R609.2.2B-6 GRADE 40 AREA BOND BEAM/LINTEL UPLIFT STEEL DESIGN TABLE R609.2.2B-7 GRADE 40 AREA BOND BEAM/LINTEL UPLIFT STEEL DESIGN TABLE R609.2.2B-8GRADE 40 AREA BOND BEAM/LINTEL UPLIFT STEEL DESIGN TABLE R609.2.2C BOND BEAM AREA OF STEEL PROVIDED IN^2/FT		
R609.3 Vertical Reinforcement. Vertical reinforcement shall be provided in conformance with Sections R609.3.1 through R609.3.6. **R609.3.1** One reinforcement bar shall be provided in each corner, including interior corners and corners created by changes in wall direction or offsetting of walls. **R609.3.2 Openings.** A minimum of one bar of the size used for vertical wall reinforcement shall be provided on each side of openings wider than 6 feet. If more vertical reinforcement is interrupted by an opening than is provided beside the opening (total in the first and second cells adjacent to the opening), one-half of the equivalent area of reinforcement interrupted by the	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

Section/ Chapter	Rationale	Summary
opening shall be placed on each side of the opening. This reinforcement shall be placed within the first and/or second cells beside the opening. **R609.3.2 Girders.** At least one reinforcement bar shall be provided where girders or girder trusses bear on masonry walls. **R609.3.3 Spacing**. Vertical reinforcement shall be provided as set forth in Tables R609.3.3.A-1 through Table R609.3.3A-4 and R609.3.3.B-1, through R609.3.3B-4 as applicable. **R609.3.4 Precast bond beams**. Vertical reinforcement used in conjunction with precast bond beams shall be spaced the same as for masonry bond beams. Reinforcement shall terminate in the precast beam as set forth in Section R606.9.8. **R609.3.5 Duplication.** Reinforcing steel requirements shall not be additive. A single bar shall be permitted to satisfy multiple requirements. **R609.3.6 Termination.** Vertical reinforcement shall terminate in footings and bond beams as set forth in Section R606.9.8.		
TABLE R609.3.3A-1 GRADE 60 SINGLE STORY AND TOP STORY WALLS PARALLEL TO RIDGE VERTICAL REINFORCEMENT SPACING No. 5 BARS (⅝") TABLE R609.3.3A-2 GRADE 60 SINGLE STORY AND TOP STORY WALLS PARALLEL TO RIDGE VERTICAL REINFORCEMENT SPACING No. 4 BARS (½") TABLE R609.3.3A-3 GRADE 40 SINGLE STORY AND TOP STORY WALLS PARALLEL TO RIDGE VERTICAL	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
REINFORCEMENT SPACING No. 5 BARS(⅝") TABLE R609.3.3A-4 GRADE 40 SINGLE STORY AND TOP STORY WALLS PARALLEL TO RIDGE VERTICAL REINFORCEMENT SPACING No. 4 BARS (½") TABLE R609.3.3B-1 GRADE 60 MAXIMUM SPACING OF No. 5 ($^5/_8$")VERTICAL REINFORCEMENT AT CONTINUOUS CONCRETE MASONRY LOWER STORIES OF MULTISTORY AND GABLE ENDS SINGLE STORY OR TOP STORY OF MULTISTORY, FEET TABLE R609.3.3B-2 GRADE 60 MAXIMUM SPACING OF No. 4 (½")VERTICAL REINFORCEMENT AT CONTINUOUS CONCRETE MASONRY LOWER STORIES OF MULTISTORY AND GABLE ENDS SINGLE STORY OR TOP STORY OF MULTISTORY, FEET TABLE R609.3.3B-3 GRADE 40 MAXIMUM SPACING OF No. 5 ($^5/_8$")VERTICAL REINFORCEMENT AT CONTINUOUS CONCRETE MASONRY LOWER STORIES OF MULTISTORY AND GABLE ENDS SINGLE STORY OR TOP STORY OF MULTISTORY, FEET TABLE R609.3.3B-4 GRADE 40		

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Section/ Chapter	Rationale	Summary
GRADE 40MAXIMUM SPACING OF NO. 4 (½") VERTICAL REINFORCEMENT AT CONTINUOUS CONCRETE OR MASONRY LOWER STORIES OF MULTISTORY AND GABLE ENDS SINGLE STORY OR TOP STORY OF MULTISTORY, FEET		
R609.4 Masonry gables. Gable end walls of concrete or masonry shall be constructed full height to the roof line. **Exception**: Gable end trusses or wood framed gable end walls in conformance with Tables R609.4A and R609.4B and Figure R609.4. Wood gable stud wall connectors shall be capable of resisting the vertical and horizontal loads of Table 609.4B as well as the uplift load stipulated at Figure 609.4. Where masonry gable end walls do not go to the roof a bond beam complying with Section R609.2 shall be provided at the top of the masonry. **R609.4.1 Rake beam**. Where concrete or masonry is carried full height to the roof line, a cast-in-place rake beam as detailed in Figure R609.4.1 shall be provided. The minimum thickness of the rake beam from top of masonry shall be 4 inches. One No. 5 continuous reinforcing bar shall be placed in the rake beam along the roof line. **R609.4.2 Vertical reinforcement**. Vertical reinforcement shall be provided at the maximum spacing as set forth in Tables R609.3.3B-1 through R609.3.3.B-4 as applicable. **R609.4.3 Termination**. Required vertical reinforcement shall terminate at the rake beam in accordance with Section R606.9.8. **R609.4.4 Nailer**. A minimum 2x4 nailer for connecting roof	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
sheathing shall be bolted to the top of the wall with a minimum of ½" anchor bolts spaced as set forth in Table R609.4.4. The nailer shall be permitted to be bolted to the inside or outside of the wall. **R609.4.5 Gable Overhang**. Gable overhangs up to 2 feet in width complying with Figure R609.4.5 shall be permitted.		
TABLE R609.4A WOOD GABLE BRACE NAILING TABLE R609.4B WOOD GABLE STUD CONNECTOR LOADS FIGURE R609.4 GABLE END BRACING FOR MASONRY WALLS NOT CONTINUOUS TO THE ROOF DIAPHRAGM FIGURE R609.4.1 CONTINUOUS GABLE ENDWALL REINFORCEMENT ONE AND MULTISTORY TABLE R609.4.4 ANCHOR BOLT SPACING FOR ATTACHING 2X4 MINIMUM WOOD NAILER TO RAKE BEAM Figure R609.4.5 Gable Overhang	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
R609.5 Exterior shearwalls. Each exterior wall shall have the required length of effective shearwall to resist horizontal movement or forces at the ends of diaphragms in conformance with this section.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed	

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Section/ Chapter	Rationale	Summary
R609.5.1 Shearwall lengths. The required shearwall segment length shall be as set forth in Table R609.5.1A through Table R609.5.1F as applicable. **R609.5.2 Multi-Story Shearwalls.** Shearwall segments in an upper story shall be located directly over and within the length of shearwall segments in the story below. Reinforcement at the ends of shearwall segments shall be continuous from the bond beam of the upper story through the story below. **Exception**: Offsetting of vertical reinforcement as set forth in Section R606.9.9.1 shall be permitted. **R609.5.3** The connector load for total shear at the top story wall shall be determined in accordance with Table R609.5.3A and Figure R609.5.3. Transverse connector loads shall be in accordance with Table R 609.5.3B and Figure R609.5.3 **R609.5.4** Endwall roof shear loads shall be in accordance with Table R609.5.4.	modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
TABLE R609.5.1A GRADE 60 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 4 REINFORCEMENT ROOF ANGLE $\leq 23^0$ REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 5 REINFORCEMENT ROOF ANGLE $\leq 23^0$ TABLE R609.5.1B GRADE 60 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 4 REINFORCEMENT ROOF ANGLE 30^0 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
RIDGE NO. 5 REINFORCEMENT ROOF ANGLE 30^0		
TABLE R609.5.1C GRADE 60 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 4 REINFORCEMENT ROOF ANGLE 45^0 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 5 REINFORCEMENT ROOF ANGLE 45^0 TABLE R609.5.1D GRADE 60 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT PER FOOT OF BUILDING LENGTH ROOF ANGLE $\leq 23^0$ REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH ROOF ANGLE $\leq 23^0$	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
TABLE R609.5.1E GRADE 60 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT PER FOOT OF BUILDING LENGTH ROOF ANGLE 30^0 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH ROOF ANGLE 30^0 TABLE R609.5.1F GRADE 60 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT PER FOOT OF	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
BUILDING LENGTH ROOF ANGLE 45^0 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH ROOF ANGLE 45^0		
TABLE R609.5.1G GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT[1,2,3,5] ROOF ANGLE $\leq 23^0$ TABLE R609.5.1H GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE ~~GRADE 40~~ NO. 5 REINFORCEMENT[1,2,3,6] ROOF ANGLE $\leq 23^0$ TABLE R609.5.1I GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT[1,2,3,5] ROOF ANGLE 30^0	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
TABLE R609.5.1J GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 5 REINFORCEMENT[1,2,3,6] ROOF ANGLE 30^0 TABLE R609.5.1K GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 4 REINFORCEMENT[1,2,3,5] ROOF ANGLE 45^0	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally	

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TABLE R609.5.1L GRADE 40 REQUIRED SHEARWALL LENGTH PARALLEL TO RIDGE NO. 5 REINFORCEMENT[1,2,3,6] ROOF ANGLE 45^0	recognized standards.	
TABLE R609.5.1M GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE ~~GRADE 40~~ NO. 4 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,5] ROOF ANGLE $\leq 23^0$ TABLE R609.5.1N GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE ~~GRADE 40~~ NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,6] ROOF ANGLE $\leq 23^0$ TABLE R609.5.1O GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 4 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,5] ROOF ANGLE 30^o	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
TABLE R609.5.1P GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,6] ROOF ANGLE 30^o	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the	

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TABLE R609.5.1Q GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 4 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,5] ROOF ANGLE 45°~~0~~ TABLE R609.5.1R GRADE 40 REQUIRED SHEARWALL LENGTH PERPENDICULAR TO RIDGE NO. 5 REINFORCEMENT PER FOOT OF BUILDING LENGTH[1,2,3,4,6] ROOF ANGLE 45[0] TABLE R609.5.1S SHEARWALL LENGTH ADJUSTMENT FACTOR GRADE 40 STEEL TABLE R609.5.3A TOTAL SHEAR AT TOP OF TOP STORY WALL[1, 2] TABLE R609.5.3B TRANSVERSE CONNECTOR LOAD (F_2)[1, 2] FIGURE R609.5.3 TYPICAL ROOF TO WALL CONNECTIONS TABLE R609.5.4 END WALL ROOF SHEAR PER FOOT OF BUILDING LENGTH	various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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Section/ Chapter	Rationale	Summary
R609.6 Assemblies and beams spanning openings. **R609.6.1 Pre-engineered Assemblies for Masonry Walls.** **R609.6.1.1** Unreinforced masonry units above an opening and 8 inch high bond beams above an opening shall be supported by an assembly. **R609.6.1.2** Pre-engineered assemblies shall be selected from a manufacturer's approved schedule or other approved tables for the load capacities based on the appropriate minimum gravity load carrying capacities established in Tables 609.6.1.2(1), 609.6.1.2(2), and 609.6.1.2(3). **R609.6.1.3** Pre-engineered assemblies may function as a bond beam over an opening provided that: 1. The bond beam reinforcement is continuous through the assembly. 2. The assembly has an uplift rating that equals or exceeds the appropriate value stipulated in Table 609.6.1.2(1) if the lintel directly supports a roof. **EXCEPTION:** If the reinforcement in the top of the assembly is equal to or greater than the reinforcement required in the bottom of the assembly by the manufacturer, uplift need not be considered. **R609.6.1.4** Pre-engineered assemblies spanning openings shall extend a minimum of 4 inches nominal past each side of the opening.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
TABLE R609.6.1.2(1) SUPERIMPOSED LOADS MINIMUM RATED LOAD CAPACITY OF 6 INCH OR 8	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed	

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INCH THICK PRE-ENGINEERED ASSEMBLIES SPANNING OPENINGS OF ONE STORY AND TOP STORY OF MULTI-STORY BUILDINGS TABLE R609.6.1.2(2) SUPERIMPOSED LOADS MINIMUM RATED LOAD CAPACITY OF 8 INCH THICK PRE-ENGINEERED ASSEMBLIES SPANNING OPENINGS OF BOTTOM STORY OF TWO-STORY BUILDINGS, SECOND AND BOTTOM STORIES OF THREE-STORY BUILDINGS—WOOD FLOOR SYSTEM TABLE R609.6.1.2(3) SUPERIMPOSED LOADS MINIMUM RATED LOAD CAPACITY OF NOMINAL 8 INCH THICK PRE-ENGINEERED ASSEMBLIES SPANNING OPENINGS OF BOTTOM STORY OF TWO-STORY BUILDINGS, SECOND AND BOTTOM STORIES OF THREE-STORY BUILDINGS—HOLLOWCORE FLOOR SYSTEM	modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	
609.6.2 Continuous Bond Beams Spanning Openings. **609.6.2.1** Under the provisions of this section, bond beams shall: 1. Be 16 inches high nominal over openings, except cast-in-place concrete bond beams which may be 12 inches high nominal. 2. Have top reinforcement continuous over the wall and opening.	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally	

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3. Have bottom reinforcement extending past each side of the opening a minimum of 24 inches for concrete walls and 4 inches for masonry walls. 4. Meet the provisions of Tables R609.6.2.1(1), R609.6.2.1 (2), and R609.6.2.1 (3) as appropriate. **609.6.2.2** Top reinforcement required over the opening which is in addition to that required over the wall shall extend past the opening a minimum of 24 inches. **609.6.2.3** When pre-engineered assemblies are utilized to form the bottom portion of the bond beam over the opening in masonry walls, the bottom reinforcement of the pre-engineered assemblies shall be counted toward the additional bottom reinforcement required over the opening.	recognized standards.	
R609.6.3 Bond beams combined with lintels. **R609.6.3.1** The provisions of this section shall apply when the lintel, the wall area between the lintel and the bond beam, and the bond beam itself are solid grouted masonry units or cast together as one unit. **R609.6.3.2** Combined bond beams/lintels shall meet the requirements of the appropriate Table 609.6.3.2(1), (2), or (3). **R609.6.3.3** Top reinforcement which is in addition to that required in the bond beam over the wall shall extend a minimum of 24 inches past each side of the opening. Top bond beam reinforcement shall be continuous over wall and opening. **609.6.3.4** Bottom reinforcing shall extend past each side of the opening a minimum of 24 inches for concrete walls and 4 inches for masonry walls. When using a precast lintel, the reinforcing in the precast lintel shall be included when	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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determining the total amount of bottom reinforcement furnished. **609.6.3.5** For masonry walls, a cleanout shall be provided in the cells directly above the ends of the lintel when the reinforcing steel in the bottom of the lintel is more than 22 inches below the top of the bond beam.		
TABLE R609.6.2.1(1) MAXIMUM CLEAR SPAN CAPACITY OF CONTINUOUS BOND BEAMS ACTING AS LINTELS ONE STORY AND TOP STORY OF MULTI-STORY BUILDINGS TABLE R609.6.2.1.(2) MAXIMUM CLEAR SPAN CAPACITY OF CONTINUOUS BOND BEAMS ACTING AS LINTELS BOTTOM STORY OF TWO-STORY BUILDINGS, SECOND AND BOTTOM STORIES OF THREE-STORY BUILDINGS—WOOD FLOOR SYSTEM TABLE R609.6.2.1(3) MAXIMUM CLEAR SPAN CAPACITY OF CONTINUOUS BOND BEAMS ACTING AS LINTELS BOTTOM STORY OF TWO-STORY BUILDINGS, SECOND AND BOTTOM STORIES OF THREE-STORY BUILDINGS—HOLLOWCORE SECOND FLOOR TABLE R609.6.3.2(1) COMBINED BOND BEAM/LINTELS ONE STORY AND TOP STORY OF MULTI-STORY BUILDINGS	**[Mod 1918r]** The code as adopted does not contain prescriptive structural provisions which may be used in the State of Florida. The proposed modifications provide prescriptive provisions for the construction of masonry structures for the various basic wind speeds and exposure categories prevalent in the state. The provisions are based on the latest edition of nationally recognized standards.	

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TABLE R609.3.2.2(2) COMBINED BOND BEAM/LINTELS BOTTOM STORY OF TWO-STORY BUILDINGS, SECOND AND BOTTOM STORIES OF THREE STORY BUILDINGS - WOOD FLOOR SYSTEM TABLE R609.6.3.2(3) COMBINED BOND BEAM/LINTELS BOTTOM STORY OF TWO-STORY BUILDINGS , SECOND AND BOTTOM STORIES OF THREE-STORY BUILDINGS - HOLLOWCORE FLOOR SYSTEM		
SECTION R613 **EXTERIOR WINDOWS AND DOOR ASSEMBLIES** **R613.1 General.** This section prescribes performance and construction requirements for exterior window systems installed in wall systems. Waterproofing, sealing and flashing systems are not included in the scope of this section. **R613.2 Performance.** Exterior windows and doors shall be designed to resist the design wind loads specified in Table R301.2(2) adjusted for height and exposure per Table R301.2(3). **R613.3 Exterior windows, sliding and patio glass doors.** **R613.3.1 Testing and Labeling.** Exterior windows and glass doors shall be tested by an approved independent testing laboratory, and shall be labeled with an approved label identifying the manufacturer, performance characteristics and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade notice of acceptance to indicate compliance with the requirements of one of the following specifications:	**[Mod 1651rc]** This change is primarily intended to accomplish 2 goals: 1) Reference new standards applicable to fenestrations and fenestration components with regard to wind resistance; and 2) Provide for improved criteria for resistance to water penetration and infiltration. The standards proposed for inclusion are recently available fenestration industry standards that were developed through ANSI's Consensus Process. The ANSI/WDMA/CSA 101/I.S. 2/A440-05 is an update to the other 2 listed standards in Section R613.3.1 and also covers exterior side hinged doors with and without glazing. In the 2001 and 2004 code, these doors were required to be tested	Adds new referenced standards pertaining to fenestrations and their components; Also adds new sections on flashings, sealants, and weather stripping

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ANSI/AAMA/NWWDA 101/I.S. 2-~~97~~ or ~~ANSI/AAMA/WDMA~~ 101/I.S. 2/NAFS-~~02~~ or ~~ANSI~~ AAMA/WDMA/CSA 101/I.S. 2/A440-~~05~~ TAS 202 (HVHZ shall comply with TAS 202 utilizing ASTM E 1300-98 or ASTM E 1300-02). Glass Strength: Determination of load resistance of glass for specified loads of products tested and certified in accordance with s. R613.3.1 shall be designed to comply with ASTM E 1300. **R613.3.2 Supplemental label.** A supplemental temporary label conforming to AAMA 203, Procedural Guide for the Window Inspection and Notification System, shall be acceptable for establishing calculated allowable design pressures higher than indicated on the label required by R613.3.1 for window sizes smaller than that required by the ANSI/AAMA/NWWDA 101/IS2 test requirements. This supplemental label shall remain on the window until final approval by the building official. **R613.4 Exterior door assemblies.** Exterior door assemblies not covered by R613.3 or R613.4.3 shall comply with Section R613.4.1 or R613.4.2 **R613.4.1** Exterior door assemblies ~~not covered by R613.3 or R613.4.1~~ shall be tested for structural integrity in accordance with ASTM E 330 Procedure A at a load of 1.5 times the required design pressure load. The load shall be sustained for 10 seconds with no permanent deformation of any main frame or panel member in excess of 0.4 percent of its span after the load is removed. HVHZ shall comply with TAS 202. After each specified loading, there shall be no glass breakage, permanent damage to fasteners, hardware parts, or any other damage which causes the door to be inoperable. The minimum test sizes and minimum design pressures shall be as indicated in Table R613.4	in accordance with ASTM E 330. This change keeps that option but permits the use of the ANSI/WDMA/CSA 101/I.S. 2/A440-05 for exterior glass windows, sliding glass doors, and exterior side hinged doors. The addition of AAMA 450 permits the use of tested mullions as option over engineered mullions. The changes proposed to Section R613.6 are merely intended to clarify the intent of that section and to specifically point out that the anchorage spacing cannot exceed the spacing as dictated by the tested assembly for the performance specified. The proposed language in Section R613.8 is intended to provide improved performance for exterior fenestration products from water penetration and infiltration. While the codes have historically required flashing at specific locations, detailed information pertaining installing flashing in and around windows and doors has not been included in the code. ASTM E 2112 specifies details and installation procedures that are aimed at minimizing water infiltration. ASTM E 2112 only applies to wood frame construction. It is anticipated, based on information provided by fenestration industry representatives that similar	

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The unit size tested shall qualify all units smaller in width and/or height of the same operation type and be limited to cases where frame, panels and structural members maintain the same profile as tested. **R613.4.23 ~~613.4.1~~** Sectional garage doors shall be tested for determination of structural performance under uniform static air pressure difference in accordance with ANSI/DASMA 108 or TAS 202 (HVHZ shall comply with TAS 202). **R613.4.34 ~~613.4.2~~ Custom doors.** Custom (one of a kind) exterior door assemblies shall be tested by an approved testing laboratory or be engineered in accordance with accepted engineering practices. **R613.4.45 ~~613.4.3~~** Door components evaluated by an approved product evaluation entity, certification agency, testing laboratory or engineer may be interchangeable in exterior door assemblies provided that the door component(s) provide equal or greater structural performance as demonstrated by accepted engineering practices. **R613.4.45.1 ~~613.4.3.1~~ Optional exterior door component testing.** With the exception of HVHZ, exterior side-hinged door assemblies not covered by Section R613.3 shall have the option to have the components of the assembly tested and rated for structural integrity in accordance with the following specification: SDI A250.13 Following the structural testing of exterior door components, there shall be no permanent deformation of any perimeter frame or panel member in excess of 0.4 percent of its span after the load is removed. After each specified loading, there shall be no glass breakage, permanent damage to fasteners, hardware parts, or any other damage that causes the door to be inoperable, as applicable.	requirements are under development for concrete masonry and concrete construction. AAMA 800 is a compilation of standards and test methods for determining the performance of both compounds and tapes used in the manufacture and/or installation of windows, sliding glass doors and curtain walls. Sealant specifications in this publication include: Back Bedding Compounds Back Bedding Mastic Tapes Glazing Tapes Narrow Joint Seam Sealers Exterior Perimeter Sealing Compounds Non-Drying Sealants Expanded Cellular Glazing Tapes Weatherstripping is necessary to resist wind-driven rain penetration around doors. ASTM E 331 is test method for determining the resistance of exterior windows, curtain walls, skylights, and doors to water penetration when water is applied to the outdoor face and exposed edges simultaneously with a uniform static air pressure at the outdoor face higher than the pressure at the indoor face. This test method is applicable to any curtain-wall area or to windows, skylights, or	

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R613.5 Windborne debris protection. ~~Reserved.~~ Protection of exterior windows , glass doors, and other glazed areas shall be in accordance with Section R 301.2.1.2. **R613.6 Anchorage methods. Reserved.** **R613.6.1 Anchoring requirements.** Window and door assembly anchoring systems ~~assemblies~~ shall be tested to achieve the ~~anchored in accordance with the published manufacturer's recommendations to achieve the~~ design pressure specified. Substitute anchoring systems ~~used for substrates not specified by the fenestration manufacturer~~ shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice. When provided, the manufacturer's published installation instructions for as tested or substitute anchoring systems can be used. In no case shall the anchorage exceed the spacing for the tested rated performance. **R613.6.1.1 ~~R613.6.2~~ Masonry, concrete or other structural substrate.** Where the wood shim or buck thickness is less than 1 1/2 inches (38 mm), window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system, in accordance with the manufacturers published installation instructions. Anchors shall be securely fastened directly into the masonry, concrete or other structural substrate material. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate. Where the wood buck thickness is 1 1/2 inches (38 mm) or greater, the buck shall be securely fastened to transfer load to the masonry, concrete or other structural substrate and the buck shall extend beyond the interior face of the window or door frame. Window and door assemblies shall be anchored	doors alone.	

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through the main frame or by jamb clip or subframe system or through the flange to the secured wood buck in accordance with the manufacturers published installation instructions. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame assembly to the secured wood buck. **R613.6.1.2 ~~R613.6.3~~ Wood or other approved framing material.** Where the framing material is wood or other approved framing material, window and glass door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange in accordance with the manufacturer's published installation instructions. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate. **R613.7 Mullions occurring between individual window and glass door assemblies.** **R613.7.1 Mullions.** Mullions, other than mullions which are an integral part of a window or glass door assembly tested and labeled in accordance with Section R613.3.1, shall be tested by an approved testing laboratory in accordance with AAMA 450 or be engineered in accordance with accepted engineering practice. ~~Both methods shall use performance criteria cited in Sections R613.7.2, R613.7.3 and R613.7.4.~~ **R613.7.1.1 Engineered Mullions.** Mullions qualified by accepted engineering practice shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4. **R613.7.1.2 Mullions tested as stand alone units.** Mullions tested as stand		

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alone units in accordance with AAMA 450 shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4. **R613.7.1.3 Mullions tested in an assembly.** Mullions qualified by a test of an entire assembly in accordance with AAMA 450 shall comply with Sections R613.7.2 and R613.7.4. **R613.7.2 Load transfer.** Mullions shall be designed to transfer the design pressure loads applied by the window and door assemblies to the rough opening substrate. **R613.7.3 Deflection.** Mullions shall be capable of resisting the design pressure loads applied by the window and door assemblies to be supported without deflecting more than L/175, where L is the span of the mullion in inches. **R613.7.4 Structural safety factor.** Mullions shall be capable of resisting a load of 1.5 times the design pressure loads applied by the window and door assemblies to be supported without exceeding the appropriate material stress levels. If tested by an approved laboratory, the 1.5 times the design pressure load shall be sustained for 10 seconds, and the permanent deformation shall not exceed 0.4 percent of the mullion span after the 1.5 times design pressure load is removed. **R613.8 Flashing, Sealants and Weatherstripping.** Flashing and sealants for Exterior windows and doors shall comply with Section R703.8 .		
R613.3.1 Testing and Labeling. Exterior windows and glass doors shall be tested by an approved independent testing laboratory, and shall be labeled with an approved label identifying the manufacturer, performance characteristics and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade notice of acceptance to indicate compliance with the requirements of one of the	**[Mod 1866r]** To be able to continue to provide the same level of protection for the health, safety, and welfare of the general public as recently required in Section 2403 of the 2001 Florida Building Code. Palm Beach County has experienced many problems with trying to identify code compliant window assemblies.	Adds requirements for label display on glazing

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following specifications: ANSI/AAMA/NWWDA 101/I.S. 2-~~97~~ or 101/I.S. 2/NAFS or TAS 202, (HVHZ shall comply with TAS 202 utilizing ASTM E 1300-98 or ASTM E 1300-02). Glass Strength: Products tested and labeled as conforming to the requirements of s.R613.3.1 shall not be subject to the requirements of the FBC, Building. Determination of load resistance of glass for specifiede loads of products not tested and certified in accordance with s. R613.3.1 shall be designed and labeled to comply with ASTM E 1300 ~~the FBC, Building Volume~~. The label shall designate the type and thickness of glass or glazing material.	Without this labeling requirement building department would have a difficult time verifying if that the load resistance of the glass meet or exceeds the job specific design pressure requirements.	
R.613.3.1 Testing and labeling. Exterior windows and glass doors shall be tested by an approved independent testing laboratory, and shall be labeled with an approved label identifying the manufacturer, performance characteristics and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade notice of acceptance to indicate compliance with the requirements of one of the following specifications: ANSI/AAMA/WDMA 101/I.S.2-~~97~~ or 101/I.S.2/NAFS-~~02~~ or AAMA/WDMA/CSA 101/IS 2/A440 ~~450~~ or TAS 202 (HVHZ to comply with TAS 202 utilizing ASTM E1300 98 or ASTM E 1300-02).	**[Mod 1162rc]** Provides approved and tested products for homeowners, which choose to use mulled units in their dwelling. It also simplifies the local and statewide Product approval Process.	Adds AAMA 450 which was later replaced with AAMA 440.

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Glass Strength: Determination of load resistance of glass for specified loads of products tested and certified in accordance with s. 613.3.1 shall be designed to comply with ASTM E 1300.		
R613.7 Mullions occurring between individual window and glass door assemblies. **R613.7.1 Mullions.** Mullions, other than mullions which are an integral part of a window or glass door assembly tested and labeled in accordance with Section R613.3.1, shall be tested by an approved testing laboratory in accordance with AAMA 450 or be engineered in accordance with accepted engineering practice. ~~Both methods shall use performance criteria cited in Sections R613.7.2, R613.7.3 and R613.7.4.~~ **R613.7.1.1 Engineered Mullions.** Mullions qualified by accepted engineering practice shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4. **R613.7.1.2 Mullions tested as stand alone units.** Mullions tested as stand alone units in accordance with AAMA 450 shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4. **R613.7.1.3 Mullions tested in an assembly.** Mullions qualified by a test of an entire assembly in accordance with AAMA 450 shall comply with Sections R613.7.2 and R613.7.4.	**[Mod 1426rc]** Consistency between model codes means that manufacturers and builders are less likely to miss details that lead to a non-compliance issue. The current language tends to steer manufacturers away from testing to engineering calculations, but testing can uncover other issues and should be encouraged.	Adds compliance sections for "mullions"
SECTION R614 **COMBINED CONCRETE, MASONRY, ICF, AND WOOD EXTERIOR WALL CONSTRUCTION** **R614,1 General.** This section prescribes construction requirements for individual building elements where one or more exterior walls above the foundation contain multiple construction types. Where specific construction requirements are not specifically prescribed in this section, the requirements in the applicable sections of each material shall govern.	**[Mod 1920r]** This change primarily intends to add a new section to address situations where more than one type of construction is used such as masonry for the first story and wood framing for the second story. It is anticipated that the changes proposed to this section will need to be coordinated with those submitted for the other materials. Specific pointers and guidance are	Adds new section pertaining to combined concrete, masonry, ICF, steel and wood exterior wall

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R614.2 Concrete, masonry, or ICF first story, wood frame second and third story. **R614.2.1 Foundation.** The foundation system shall be designed in accordance with Chapter 4. **R614.2.2 First story construction.** The concrete, masonry, or ICF first story shall be in accordance with the Chapter 6 for the applicable first story construction method. **R614.2.3 Floor systems.** The second and third story floor system shall be in accordance with Chapter 5. **R614.2.4 Second and third story construction.** The second and third story walls, ceilings, and roof shall be in accordance with the appropriate sections in Chapters 6, 8, and 9. **R614.2.5 Shear wall connections.** Second story shearwalls shall be connected to first-story walls in accordance with Tables 3.2A, 3.2B, 3.2C, A-3.2A, A-3.2B, or A-3.2C of the *AF&PA Wood Frame Construction Manual for One- and Two-Family Dwellings* as applicable. **R614.3 Wood frame gable endwalls above concrete, masonry, or ICF walls.** This condition is not permitted unless there is a ceiling diaphragm in accordance with Figure 3.7a and Figure 3.15 of the *AF&PA Wood Frame Construction Manual for One- and Two-Family Dwellings*. **R614.3.1 Gable construction.** Gable construction shall be in accordance with the *AF&PA Wood Frame Construction Manual for One- and Two-Family Dwellings*. **R614.3.2 Wall construction.** Concrete, masonry, or ICF wall construction shall be in accordance with Chapter 6. **R614.3.3 Gable connection.** The connection of the wood frame gable endwall to the concrete, masonry or ICF wall shall be in accordance with Figures R614.3(1), R614.3(2), or Figure R609.4. **Figure R614.3(1)** **Direct Truss to Concrete, Masonry, or ICF Wall Connection for Gypsum Board Ceiling Diaphragm**	required to the prescriptive standards that are referenced.	construction

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Section/ Chapter	Rationale	Summary
Figure R614.3(2) **Direct Truss to Concrete, Masonry, or ICF Wall for Gypsum Board Ceiling Diaphragm**		
R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer as required by Section R703.2. All exterior finishes shall be applied in accordance with the manufacturer's specifications or installation instructions. **R703.1.1 Load resistance.** All exterior walls, wall coverings and soffits shall be capable of resisting the design pressures specified in Table R301.2(2) for walls. **R703.2 Weather-resistant sheathing paper.** Asphalt saturated felt free from holes and breaks, weighing not less than 14 pounds per 100 square feet (0.683 kg/m_2) and complying with ASTM D 226 or other approved weather-resistant material shall be applied over studs or sheathing of all exterior walls as required by Table R703.4. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm). Where joints occur, felt shall be lapped not less than 6 inches (152 mm). **Exception:** Such felt or material is permitted to be omitted in the following situations: 1. In detached accessory buildings. ~~2. Under panel siding with shiplap joints or battens.~~ 2~~3~~. Under exterior wall finish materials as permitted in Table R703.4. ~~4. Under paperbacked stucco lath.~~ **R703.3.3 Attachment.** Wood, hardboard and wood structural panel siding shall be attached in accordance with Tables R 703.3.3(1) and R703.3.3(2). Specific gravities, G for solid sawn lumber are specified in Table 703.3.3(3). **TABLE R703.3.3(1)** **WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL**	**[Mod 1731r]** This proposed code changes is intended to clarify the applicability limits of the existing provisions in the FBCR as it relates to wind load resistance and to provide wind resistant prescriptive solutions where available. The prescriptive solutions in the FBCR pertaining to wind resistance of structural elements that comprise a building (MWFRS and Components and Cladding) are limited to areas where the basic wind speed is less than 100 mph. Accordingly, most of the prescriptive solutions for wind load resistance in the FBCR are not applicable to Florida since most of the state has a designated wind speed greater than 100 mph. In general, the proposed change is structured around the fact that the prescriptive methods outlined in Table R703.4 are capable of resisting a design wind pressure of 30 psf. The scoping language and material performance criteria for each material section acknowledges this and requires testing or design for situations where the design pressure exceeds 30 psf. The material performance criteria was taken directly from Florida Building Code, Building where it was lacking in the FBCR.	Clarifies the applicability limits of existing provisions of the FBCR as it pertains to wind load resistance

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Section/ Chapter	Rationale	Summary
SIDING ATTACHMENT EXPOSURE CATEGORY B **TABLE R703.3.3(2)** **WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL** **SIDING ATTACHMENT EXPOSURE CATEGORY C** **TABLE R703.3.3(3)** **SPECIFIC GRAVITIES OF SOLID SAWN LUMBER**	All references to the use staples are deleted. This proposed change also incorporates the changes in the 2005 Supplement, shown in legislative format so that all changes to the 2004 FBCR can be readily identified.	
R703.3.4 Minimum thickness. Wood, hardboard and wood structural panel siding shall be of the minimum thickness specified in Tables R 703.3.4(1) and R703.3.4(2). **TABLE R703.3.4(1)** **WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL** **SIDING MINIMUM THICKNESS** **EXPOSURE CATEGORY B** **TABLE R703.3.4(2)** **WOOD, HARDBOARD, AND WOOD STRUCTURAL PANEL** **SIDING MINIMUM THICKNESS** **EXPOSURE CATEGORY C** **R703.4 Attachments.** Unless specified otherwise, all wall coverings shall be secured with ~~securely fastened in accordance with Table R703.4 or with other~~ approved aluminum, stainless steel, zinc-coated or other approved corrosion-resistive fasteners in accordance with the approved manufacturer's installation instructions. Where wind pressures determined in accordance with Table R301.2(2) do not exceed 30 psf, wall coverings are permitted to be installed in accordance with Table R703.4. **R703.5.3 Attachment.** Wood shakes and shingles, and attachment and supports shall be capable of resisting the wind pressures determined in accordance with Table R310.2(2). Where wind pressures determined in accordance with Table R301.2(2) do not exceed 30 psf, ~~E~~each shake or shingle shall be held in place by two hot-dipped zinc-coated, stainless steel, or aluminum nails ~~or staples~~. The fasteners shall be long enough to penetrate	**[Mod 1731r]** This proposed code changes is intended to clarify the applicability limits of the existing provisions in the FBCR as it relates to wind load resistance and to provide wind resistant prescriptive solutions where available. The prescriptive solutions in the FBCR pertaining to wind resistance of structural elements that comprise a building (MWFRS and Components and Cladding) are limited to areas where the basic wind speed is less than 100 mph. Accordingly, most of the prescriptive solutions for wind load resistance in the FBCR are not applicable to Florida since most of the state has a designated wind speed greater than 100 mph. In general, the proposed change is structured around the fact that the prescriptive methods outlined in Table R703.4 are capable of resisting a design wind pressure of 30 psf. The scoping language and material performance criteria for each material section acknowledges this and	

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the sheathing or furring strips by a minimum of 1/2 inch (12.7 mm) and shall not be overdriven. Where pressures determined in accordance with Table R301.2(2) exceed 30 psf, the attachment shall be designed to resist the prescribed wind pressures. **R703.5.3.1 Staple attachment. Reserved.** ~~Staples shall not be less than 16 gage and shall have a crown width of not less than 7/16 inch (11.1 mm), and the crown of the staples shall be parallel with the butt of the shake or shingle. In single-course application, the fasteners shall be concealed by the course above and shall be driven approximately 1 inch (25.4 mm) above the butt line of the succeeding course and 3/4 inch (19.1 mm) from the edge. In double-course applications, the exposed shake or shingle shall be face-nailed with two casing nails, driven approximately 2 inches (51 mm) above the butt line and 3/4 inch (19.1 mm) from each edge. In all applications, staples shall be concealed by the course above. With shingles wider than 8 inches (203 mm) two additional nails shall be required and shall be nailed approximately 1 inch (25.4 mm) apart near the center of the shingle.~~	requires testing or design for situations where the design pressure exceeds 30 psf. The material performance criteria was taken directly from Florida Building Code, Building where it was lacking in the FBCR. All references to the use staples are deleted. This proposed change also incorporates the changes in the 2005 Supplement, shown in legislative format so that all changes to the 2004 FBCR can be readily identified.	
TABLE R703.4 **WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS** **R703.6.3** ~~**R703.2.1**~~ **R703.6.4** ~~**R703.6.3**~~ **R703.6.4.1** ~~**R703.6.3.1**~~ **R703.6.4.2** ~~**R703.6.3.2**~~ **R703.6.4.3** ~~**R703.6.3.3**~~ **R703.7 Stone and masonry veneer, general.** All stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. The provisions of this section are limited to areas where the wind speed is equal or less than 130 mph. ~~Such veneers installed over a backing of wood or cold-formed steel shall be limited to the first story above grade and shall not exceed 5 inches (127 mm) in thickness.~~ **Exceptions: Reserved.** **R703.7.4.1 Size and spacing.** Veneer ties, if strand wire, shall not be less in	**[Mod 1731r]** This proposed code changes is intended to clarify the applicability limits of the existing provisions in the FBCR as it relates to wind load resistance and to provide wind resistant prescriptive solutions where available. The prescriptive solutions in the FBCR pertaining to wind resistance of structural elements that comprise a building (MWFRS and Components and Cladding) are limited to areas where the basic wind speed is less than 100 mph. Accordingly, most of the prescriptive solutions for wind load resistance in the FBCR are not applicable to Florida since most of the state has a designated wind speed greater than 100 mph.	

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thickness than No. 9 U.S. gage wire and shall have a hood embedded in the mortar joint, or if sheet metal, shall be not less than No. 22 U.S. gage by 7/8 inch (22.3 mm) corrugated. Each tie shall be spaced not more than 24 inches (610mm)on center horizontally and vertically and shall support not more than 2.67 square feet (0.248 m_2) of wall area. **Exception:** Where the wind speed ~~pressure~~ determined in accordance with Figure R301.2(4) exceeds 110 mph (176.99 km/h) or is less than or equal to 130 mph (208 km/h) ~~30 pounds per square foot pressure (1.44kN/m^2)~~, each tie shall support not more than 1.8 ~~2~~ square feet (0.167 ~~0.186~~ m^2) of wall area and anchors shall be spaced at a maximum 18 inches (457 mm) horizontally and vertically. **R703.7.4.2 Air space.** The veneer shall be separated from the sheathing by an air space of a minimum of 1 inch (25.4 mm) but not more than 4.5 inches (114 mm). The weather-resistant membrane or asphalt-saturated felt required by Section R703.2 is not required over water- repellent sheathing materials. **Exception:** Where the wind pressure determined in accordance with Table R301.2(2) exceeds 30 pounds per square foot pressure (1.44 kN/m_2), the air space shall not exceed 2 inches (51 mm).	In general, the proposed change is structured around the fact that the prescriptive methods outlined in Table R703.4 are capable of resisting a design wind pressure of 30 psf. The scoping language and material performance criteria for each material section acknowledges this and requires testing or design for situations where the design pressure exceeds 30 psf. The material performance criteria was taken directly from Florida Building Code, Building where it was lacking in the FBCR. All references to the use staples are deleted. This proposed change also incorporates the changes in the 2005 Supplement, shown in legislative format so that all changes to the 2004 FBCR can be readily identified.	
R703.8 Flashing. Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The flashing shall extend to the surface of the exterior wall finish and shall be installed to prevent water from reentering the exterior wall envelope. Approved corrosion-resistant flashings shall be installed at all of the following locations: 1. Flashing for windows and doors shall be in accordance with Section R613.8. ~~At top of all exterior window and door openings in such a manner as to be leakproof, except that self flashing windows having a continuous lap of not less than 1 1/8 inches (28 mm) over the sheathing material around the perimeter of the opening, including corners, do not require additional~~	**[Mod 1731r]** This proposed code changes is intended to clarify the applicability limits of the existing provisions in the FBCR as it relates to wind load resistance and to provide wind resistant prescriptive solutions where available. The prescriptive solutions in the FBCR pertaining to wind resistance of structural elements that comprise a building (MWFRS and Components and Cladding) are limited to areas where the basic wind speed is less than 100 mph. Accordingly,	

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~~flashing; jamb flashing may also be omitted when specifically approved by the building official.~~ 2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings. 3. Under and at the ends of masonry, wood or metal copings and sills. 4. Continuously above all projecting wood trim. 5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction. 6. At wall and roof intersections. 7. At built-in gutters. **R703.9 Exterior insulation finish systems, general.** All Exterior Insulation Finish Systems (EIFS) shall be designed or tested to meet the wind pressures specified in Table R301.2(2) and installed in accordance with the manufacturer's approved installation instructions and the requirements of this section. Decorative trim shall not be face nailed through the EIFS. The EIFS shall terminate not less than 6 inches (152 mm) above the finished ground level. **R703.10 Fiber-cement siding.** Fiber-cement siding complying with ASTM C1186, Type A, minimum Grade II, shall be permitted on exterior walls ~~for~~ in accordance with the approved manufacturer's installation instructions. **R703.10.1 Fastening.** ~~Weather boarding and~~ Fiber-cement siding ~~wall coverings~~ shall be securely fastened with aluminum, copper, zinc, zinc-coated or other approved corrosion-resistant fasteners in accordance with the manufacturer's approved ~~manufacturer's~~ installation instructions. Attachment and supports shall be capable of resisting the wind pressure determined in accordance with Table R301.2(2). Where the wind pressure determined in accordance with Table R301.2(2) does not exceed 30 pounds per square foot pressure (1.44kN/m2), fiber-cement siding is permitted to be attached in accordance with Table R703.4.	most of the prescriptive solutions for wind load resistance in the FBCR are not applicable to Florida since most of the state has a designated wind speed greater than 100 mph. In general, the proposed change is structured around the fact that the prescriptive methods outlined in Table R703.4 are capable of resisting a design wind pressure of 30 psf. The scoping language and material performance criteria for each material section acknowledges this and requires testing or design for situations where the design pressure exceeds 30 psf. The material performance criteria was taken directly from Florida Building Code, Building where it was lacking in the FBCR. All references to the use staples are deleted. This proposed change also incorporates the changes in the 2005 Supplement, shown in legislative format so that all changes to the 2004 FBCR can be readily identified.	
R703.10.2~~1~~ Panel Siding. Panels shall be installed with the long dimension either parallel or perpendicular to framing. Vertical and horizontal joints shall occur over framing members and shall be sealed with caulking or covered with battens. Panel siding shall be installed with fasteners according to Table R703.4 or approved manufacturer's installation instructions.	**[Mod 1731r]** This proposed code changes is intended to clarify the applicability limits of the existing provisions in the FBCR as it relates to wind load resistance and to provide wind resistant	

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~~Horizontal joints shall be flashed with Z-flashing and blocked with solid wood framing.~~ **R703.10.3** ~~Horizontal~~ Lap siding. Lap siding having a maximum width of 12 inches shall be lapped a minimum of 1¼ inches (32 mm) and shall have the ends sealed with caulking, covered with an H-section joint cover, or located over a strip of flashing. Lap siding courses may be installed with the fastener heads exposed or concealed, according to Table R703.4 or approved manufacturer's installation instructions. **R703.11 Vinyl Siding.** Vinyl siding shall comply with ASTM D 3679 and is permitted to be used on exterior walls for in accordance with the manufacturer's approved installation instructions. **R703.11.1 Labeling.** Vinyl Siding shall be labeled as conforming to the requirements of ASTM D 3679. **R703.12 Metal veneers.** Veneers of metal shall be fabricated from approved corrosion-resistant materials or shall be protected front and back with porcelain enamel, or otherwise be treated to render the metal resistant to corrosion. Such veneers shall not be less than specified in Table R703.13 mounted on wood or metal furring strips or approved sheathing on the wood construction. **R703.12.1 Attachment.** Exterior metal veneer shall be securely attached to the supporting masonry or framing members with corrosion-resistant fastenings, metal ties or by other approved devices or methods capable of resisting the wind pressures specified in Table R301.2(2)., but in no case less than 20 psf (0.958 kg/m$_2$). Where the wind pressure determined in accordance with Table R301.2(2) do not exceed 30 pounds per square foot pressure (1.44 kN/m$_2$), metal veneers are permitted to be attached in accordance with Table R703.4. **R703.12.2 Weather protection.** Metal supports for exterior metal veneer shall be protected by painting, galvanizing or by other equivalent coating or treatment. Wood studs, furring strips or other wood supports for exterior metal veneer shall be approved pressure-treated wood or protected as	prescriptive solutions where available. The prescriptive solutions in the FBCR pertaining to wind resistance of structural elements that comprise a building (MWFRS and Components and Cladding) are limited to areas where the basic wind speed is less than 100 mph. Accordingly, most of the prescriptive solutions for wind load resistance in the FBCR are not applicable to Florida since most of the state has a designated wind speed greater than 100 mph. In general, the proposed change is structured around the fact that the prescriptive methods outlined in Table R703.4 are capable of resisting a design wind pressure of 30 psf. The scoping language and material performance criteria for each material section acknowledges this and requires testing or design for situations where the design pressure exceeds 30 psf. The material performance criteria was taken directly from Florida Building Code, Building where it was lacking in the FBCR. All references to the use staples are deleted. This proposed change also incorporates the changes in the 2005 Supplement, shown in legislative format so that all changes to the 2004	

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required in Section 1403.2 of the *Florida Building Code, Building*. Joints and edges exposed to the weather shall be caulked with approved durable waterproofing material or by other approved means to prevent penetration of moisture. **R703.12.3 Aluminum Siding.** Aluminum siding shall conform to the requirements of AAMA 1402. **R703.13 ~~R703.11~~Weather protection.** Exterior walls shall provide weather protection for the building. The materials of the minimum nominal thickness specified in Table R703.13 ~~R703.11~~ shall be acceptable as approved weather coverings. **TABLE R703.13~~ R703.11~~** **MINIMUM THICKNESS OF WEATHER COVERINGS**	FBCR can be readily identified.	
R703.7 Stone and masonry veneer, general. All stone and masonry veneer shall be installed in accordance with this chapter, Table R703.4 and Figure R703.7. Such veneers installed over a backing of wood or cold-formed steel shall be limited to the first story above grade and shall not exceed 5 inches (127 mm) in thickness. **Exceptions:** ~~Reserved~~ For detached one- and two- family dwellings, exterior masonry veneer with a backing of wood or cold-formed steel framing shall not exceed 30 feet (9144 mm) in height above the noncombustible foundation, with an additional 8 feet (2348 mm) permitted for gabled ends.	**[Mod 1339]** It appears an oversight occurred while converting the *International Residential Code* (IRC) to the 2004 *Florida Building Code, Residential* (FBC, Residential), through the elimination of the IRC seismic provisions. Therefore, the proposed additional language makes the FBC, Residential consistent with the 2003 requirements of the IRC on which the FBC, Residential is based, as well as consistent with other model building codes. In addition, the proposed language reinstates the provision previously permitted in the *2001 Florida Building Code*.	Adds an exception for detached one- and two-family dwellings regarding stone and masonry veneer over wood- frame construction in low wind areas.
R703.8 Flashing. Approved corrosion-resistive flashing shall be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The	**[Mod 1244]** This clarification will provide needed delineation for the intent and will coincide with the supplemental changes that became effective November 1, 2005. This section and	Editorial change to clarify section

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flashing shall extend to the surface of the exterior wall finish and shall be installed to prevent water from reentering the exterior wall envelope. Approved corrosion-resistant flashings shall be installed at, but not limited to, all of the following locations: 1. At top of all exterior window and door openings in such a manner as to be leakproof, except that self-flashing windows having a continuous lap of not less than 11/8 inches (28 mm) over the sheathing material around the perimeter of the opening, including corners, do not require additional flashing; jamb flashing may also be omitted when specifically approved by the building official. 2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings. 3. Under and at the ends of masonry, wood or metal copings and sills. 4. Continuously above all projecting wood trim. 5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction. 6. At wall and roof intersections. 7. At built-in gutters.	section 1405.3 were referenced by supplements dealing specifically with flashing of penetrations, wall configuration, etc.	
R703.11 Vinyl Siding **R703.11 Vinyl Siding shall be ~~certified and~~ labeled as conforming to the requirements of ASTM D 3679 ~~by an approved quality control agency~~.**	**[Mod 1772r]** The current code requires siding to conform to ASTM D 3679, but fails to give the code official any tool for verifying compliance. The Vinyl Siding Institute (VSI) is the trade	Adds labeling to the test standard ASTM 3679

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	association representing US and Canadian manufacturers of vinyl siding. Since 1998 VSI has sponsored a third-party program to certify compliance of vinyl siding with ASTM D 3679.	
R802.1 General Requirements. Roof and ceiling framing of wood construction shall be designed and constructed in accordance with the provisions of this Section. **R802.1.1 Identification.** **R802.1.3 End-jointed lumber.** Approved end-jointed lumber identified by a grade mark conforming to Section R802.1.1 may be used interchangeably with solid-sawn members of the same species and grade. **R802.1.4 Fire-retardant-treated wood.** **R802.1.4.1 Labeling.** Fire-retardant-treated lumber and wood structural panels shall be labeled. The label shall contain: 1. The identification mark of an approved agency in accordance with Section 1703.5 of the ~~*International*~~ *Florida Building Code*. 2. Identification of the treating manufacturer. 3. The name of the fire-retardant treatment. 4. The species of wood treated. 5. Flame spread and smoke developed rating. 6. Method drying after treatment. 7. Conformance with appropriate standards in accordance with Sections R802.1.4~~3~~.2 through R802.1.4~~3~~.5.	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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8. For FRTW exposed to weather, damp or wet location, the words "No increase in the listed classification when subjected to the Standard Rain Test" (ASTM D2898).		
R802.1.4.2 Strength adjustments. **R802.1.4.2.1Wood structural panels.** **R802.1.4.2.2 Lumber.** **R802.1.4.3 Exposure to weather.** Where fire-retardant-treated wood is exposed to weather, or damp or wet locations, it shall be identified as "Exterior" to indicate there is no increase in the listed flame spread index as defined in Section R802.1.43 when subjected to ASTM D 2898. **R802.1.4.4 Interior applications.** Interior fire retardant-treated wood shall have a moisture content of not over 28 percent when tested in accordance with ASTM D 3201 procedures at 92 percent relative humidity. Interior fire-retardant-treated wood shall be tested in accordance with Section R802.1.43.2.1 or R802.1.43.2.2. Interior fire-retardant-treated wood designated as Type A shall be tested in accordance with the provisions of this section. **R802.1.4.5 Moisture content.** Fire-retardant-treated wood shall be dried to a moisture content of 19 percent or less for lumber and 15 percent or less for wood structural panels before use. For wood kiln dried after treatment (KDAT) the kiln temperatures shall not exceed those used in kiln drying the lumber and plywood submitted for the tests described in Section R802.1.43.2.1 for plywood and R802.1.43.2.2 for lumber.	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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R802.1.4.2.2 ~~R802.1.3.2.2~~ **Lumber.** For each species of wood treated, the effect of the treatment and the method of redrying after treatment and exposure to high temperatures and high humidities on the allowable design properties of fire-retardant-treated lumber shall be determined in accordance with ASTM D 5664. The test data developed by ASTM D 5664 shall be used to develop modification factors for use at or near room temperature and at elevated temperatures and humidity in accordance with ~~an approved method of investigation~~ ASTM D 6841. Each manufacturer shall publish the modification factors for service at temperatures of not less than 80°F (26.7°C) and for roof framing. The roof framing modification factors shall take into consideration the climatological location.	**[Mod 1933]** Provide guidance to user, producers, and enforcers as to appropriate standard to use as the method of investigation for exposure to high temperature and humidity.	Adds reference to ASTM D 6841-03 to section
R802.1.5 Structural glued laminated timbers. Glued laminated timbers shall be manufactured and identified as required in AITC A190.1 and ASTM D3737. **R802.1.6 Wood trusses.** **R802.1.6.1 Truss design drawings.** Truss design drawings, prepared in conformance with Section R802.1.6.1 ~~R802.10.1~~, shall be provided to the building official and approved prior to installation. Truss design drawings shall include, at a minimum, the information specified below. Truss design drawing shall be provided with the shipment of trusses delivered to the jobsite. 1. Design wind speed and exposure category. 2. Slope or depth, span and spacing. 3. Location of all joints.	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in	

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4. Required bearing widths. 5. Design loads as applicable. 5.1. Top chord live load (including snow loads). 5.2. Top chord dead load. 5.3. Bottom chord live load. 5.4. Bottom chord dead load. 5.5. Concentrated loads and their points of application. 5.6. Controlling wind and earthquake loads. 6. Adjustments to lumber and joint connector design values for conditions of use. 7. Each reaction force and direction. 8. Joint connector type and description (e.g., size, thickness or gauge) and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface. 9. Lumber size, species and grade for each member. 10. Connection requirements for: 10.1. Truss to truss girder. 10.2. Truss ply to ply. 10.3. Field splices. 11. Calculated deflection ratio and/or maximum description for live and total load.	Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	

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12. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss design drawing or on supplemental documents. 13. Required permanent truss member bracing location.		
R802.1.6.2 Design. **R802.1.6.3 Bracing.** Trusses shall be braced to prevent rotation and provide lateral stability in accordance with the requirements specified in the construction documents for the building and on the individual truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with TPI/WTCA BCSI 1 ~~HIB~~. **R802.1.6.4 Alterations to trusses.** **R802.1.6.5 Truss to wall connection.** Trusses shall be connected to wall plates by the use of approved connectors having a resistance to design uplift, lateral and shear forces, ~~of not less than 175 pounds (79.45 kg.), and~~ Trusses shall be installed in accordance with the manufacturer's design and specifications. For roof assemblies subject to wind uplift pressures of 20 pounds per square foot (0.958 kN/m2) or greater, as established in Table R301.2(2), adjusted for height and exposure per Table R301.2(3), see section R802.2.9 ~~R802.11~~.	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R802.1.6.3 ~~R802.10.3~~ Bracing. Trusses shall be braced to prevent rotation and provide lateral stability in accordance with	**[Mod 1259rev]** HIB-91 is no longer published and this change merely updates the reference to	Replaces reference to

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the requirements specified in the construction documents for the building and on the individual truss design drawings. In the absence of specific bracing requirements, trusses shall be braced in accordance with ~~TPI/HIB~~ TPI/WTCA BCSI 1.	the most current version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual sections of BCSI 1-03 are also available in English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	HIB-91 with reference to BCSI 1-03 in section
R802.2 Design and construction where wind speed is less than 100 mph. Roof-ceilings of conventional light-frame wood construction shall be designed and constructed in accordance with the provisions of this ~~chapter~~ Section ~~and Figures R606.10(1), R606.10(2) and R606.10(3), or~~ in Alternately, roof-ceilings may be designed and constructed in accordance with AF&PA"s ~~/~~NDS or AF&PA's WFCM. Components of roof-ceilings shall be fastened in accordance with Table R602.2(1) ~~R602.3(1)~~. **R802.2.1 Framing details.** **R802.2.1.1 Ceiling joist and rafter connections.** Ceiling joists and rafters shall be nailed to each other in accordance with Tables R602.2~~3~~(1) and R802.2.3(9) ~~R802.5.1(9)~~, and the assembly shall be nailed to the top wall plate in accordance with Table R602.2~~3~~(1). Ceiling joists shall be continuous or	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will	

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securely joined where they meet over interior partitions and nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to the rafters. Where ceiling joists are not parallel to rafters, subflooring or metal straps attached to the ends of the rafters shall be installed in a manner to provide a continuous tie across the building, or rafters shall be tied to 1-inch by 4-inch (25.4 mm by 102 mm) (nominal) minimum-size crossties. The connections shall be in accordance with Table R602.2~~3~~(1) or connections of equivalent capacities shall be provided. Where ceiling joists or rafter ties are not provided at the top plate, the ridge formed by these rafters shall also be supported by a girder designed in accordance with accepted engineering practice. Rafter ties shall be spaced not more than 4 feet (1219mm) on center.	need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R802.2.1.2 Ceiling joists lapped. Ends of ceiling joists shall be lapped a minimum of 3 inches (76 mm) or butted over bearing partitions or beams and toe nailed to the bearing member. When ceiling joists are used to provide resistance to rafter thrust, lapped joists shall be nailed together in accordance with Table R602.2~~3~~(1) and butted joists shall be tied together in a manner to resist such thrust. **R802.2.2 Allowable ceiling joist spans.** Spans for ceiling joists shall be in accordance with Tables R802.2~~4~~(1) and R802.2~~4~~(2). For other grades and species and for other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters. **R802.2.3 Allowable rafter spans.** Spans for rafters shall be in accordance with Tables R802.2.3(1) ~~R802.5.1(1)~~ through R802.2.3(2) ~~R802.5.1(8)~~. For other grades and species and for	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will	

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other loading conditions, refer to the AF&PA Span Tables for Joists and Rafters. The span of each rafter shall be measured along the horizontal projection of the rafter. **R802.2.3.1 Purlins.** Purlins are permitted to be installed to reduce the span of rafters as shown in Figure R802.2.3.1 ~~R802.5.1~~. Purlins shall be sized no less than the required size of the rafters that they support. Purlins shall be continuous and shall be supported by 2-inch by 4-inch (51 mm by 102 mm) braces installed to bearing walls at a slope not less than 45 degrees from the horizontal. The braces shall be spaced not more than 4 feet (1219 mm) on center and the unbraced length of braces shall not exceed 8 feet (2438 mm).	need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R802.2.4 Bearing. **R802.2.5 Finished ceiling material.** **R802.2.6 Cutting and notching.** **R802.2.6.1 Sawn lumber.** Notches in solid lumber joists, rafters and beams shall not exceed one-sixth of the depth of the member, shall not be longer than one-third of the depth of the member and shall not be located in the middle one-third of the span. Notches at the ends of the member shall not exceed one-fourth the depth of the member. The tension side of members 4 inches (102 mm) or greater in nominal thickness shall not be notched except at the ends of the members. The diameter of the holes bored or cut into members shall not exceed one-third the depth of the member. Holes shall not be closer than 2 inches (51 mm) to the top or bottom of the member, or to any other hole located in the member. Where the member is also notched, the hole shall	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind	

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not be closer than 2 inches (51 mm) to the notch. **Exception:** Notches on cantilevered portions of rafters are permitted provided the dimension of the remaining portion of the rafter is not less than 4-inch nominal (102 mm) and the length of the cantilever do not exceed 24 inches (610 mm). **R802.2.6.2 Engineered wood products.**	speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	
R802.2.7 Lateral support. **R802.2.7.1 Bridging.** **R802.2.8 Framing of openings.** **R802.2.9 Roof tie-down.** **R802.2.9.1 Uplift resistance.** Roof assemblies which are subject to wind uplift pressures of 20 pounds per square foot (0.958 kN/m2) or greater shall have roof rafters or trusses attached to their supporting wall assemblies by connections capable of providing the resistance required in Table R802.2.9.1 ~~R802.11~~.Wind uplift pressures shall be determined using an effective wind area of 100 square feet (9.3m2) and Zone 1 in Table R301.2(2), as adjusted for height and exposure per Table R301.2(3). A continuous load path shall be provided to transmit the uplift forces from the rafter or truss ties to the foundation. **R802.2.10 Blocking.** **R802.3 Design and construction where wind speed is 100 mph or greater.** Roof-ceilings of light-frame wood construction shall be designed and constructed in accordance with the provisions of Section R301.2.1.1 and Section R802.1.	**[Mod 1824]** This modification reorganizes the provisions for wood-frame construction of walls by separating general provisions applicable to all wood construction from that of prescriptive, non-engineered, wood-frame construction from that of engineered wood construction. It also deletes all seismic provisions in accordance with previous Commission policy. The Florida Building Commission has already made the decision to require engineered construction in all areas where the wind speed is 100 mph or greater. This code change proposal recognizes that the ASCE-7 wind map denotes a small area of Florida with a wind speed of less than 100 mph. The Wood Task Group notes that the prescriptive, non-engineered conventional construction of 602.2 will need to be deleted should the Florida Building Commission decide that the minimum wind speed in Florida will be 100 mph. In areas where the wind speed is 100 mph or greater, this section merely directs the user back to R301.2.1.1 and the use of ASCE 7 or AF&PA's WFCM.	Reorganizes the provisions for wood frame construction of ceilings

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R802.2.9.1 ~~R802.11.1~~ Uplift resistance. Roof assemblies which are subject to wind uplift pressures of 20 pounds per square foot (0.958 kN/m2) or greater shall have roof rafters or trusses attached to their supporting wall assemblies by connections capable of providing the resistance required in Table R802.11. Wind uplift pressures shall be determined using an effective wind area of 100 square feet (9.3m2) and Zone 1 in Table R301.2(2), as adjusted for height and exposure per Table R301.2(3). A continuous load path shall be provided to transmit the uplift forces from the rafter or truss ties to the foundation. For rafter construction, straps and/or clips shall extend such that the top nail is within 1 inch of the top of the rafter, or shall be wrapped around the top of the rafter with one or more nails installed on the opposite side of the rafter.	**[Mod 1886]** To be able to continue to provide the same level of protection for the health, safety, and welfare of the general public as recently required in Section 2403 of the 2001 Florida Building Code. Palm Beach County has experienced many problems with trying to identify code compliant window assemblies. Without this labeling requirement building department would have a difficult time verifying if that the load resistance of the glass meets or exceeds the job specific design pressure requirements.	Adds text that pertaining to requirements for rafter construction straps and/or clips
TABLE R802.2.9.1 ~~R802.11 A~~ **~~REQUIRED STRENGTH OF TRUSS OR RAFTER CONNECTIONS TO RESIST~~ WIND UPLIFT FORCESa,b,c,e,f** **Roof Bearing Uplift Exposure B** **~~TABLE R802.11 B~~** **Roof Bearing Uplift Exposure C** **Notes ~~to Tables 802.11 A and 802.11 B~~** **1. The uplift loads are pounds per lineal foot of building**	**[Mod 1889r]** Current uplift load table is truncated at 110 mph and requires multiplication by adjustment factors to accommodate exposure C. The proposed tables provides for a broader scope of roof angles and wind loads to allow more efficient design. These same tables provide uplift information to determine uplift reinforcement for masonry construction. **[Mod 1891r]** Current uplift load table is truncated at 110 mph and requires multiplication by adjustment factors to accommodate exposure	Replaces 2 tables on roof bearing uplift for Exposures B and C

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length. For roof uplift connections use the tables for 20 degrees and multiply by 1.33 for framing spaced 16 inches on center and multiply by 2 for framing spaced 24 inches on center. **2. The uplift loads include an allowance for 10 pounds of dead load.** **3. The uplift loads do not account for the effects of overhangs. The magnitude of the above loads shall be increased by adding the overhang loads found in the table. The overhang loads are also based on framing spaced 12 inches on center. The overhang loads given shall be multiplied by the overhang projection and added to the roof uplift value in the table.** **4. Values may be interpolated between 20° and 30°.** **5. Use value for 30° for slopes up to 45°** **6. Negative values indicate uplift.** **7. Use value for 20° for slopes of 20° and less.**	C. The proposed tables provide for a broader scope of roof angles and wind loads to allow more efficient design. These same tables provide uplift information to determine uplift reinforcement for masonry construction.	
R803.2.3 Installation. Wood structural panels used as roof sheathing shall be installed with joints staggered ~~or nonstaggered~~ in accordance with Section R803.2.3.1 ~~Table R602.3(1), or APA E30~~ for wood roof framing or with Table R804.3 for steel roof framing in accordance with the applicability limits established in Section R804.1.1. **R803.2.3.1 Sheathing fastenings.** Wood structural panel sheathing shall be fastened to roof framing with 8d ring-shank nails at 6 inches on center at edges and 6 inches on center at intermediate framing. Ring shank nails shall have the following	**[Mod 1881c]** Implementing this proposed modification will significantly improve the performance of roofs under the impact of hurricane winds. Reducing the potential for damage to roofs is essential to preserving the integrity of the building envelope. Obtaining a significant improvement in performance and doing so at basically minimal to negligible cost increase, provides a rather generous benefit-cost ratio.	Adds section and 4 Exceptions pertaining to sheathing fastenings AF&PA opposition to proposal.

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minimum dimensions: 1. 0.113 inch nominal shank diameter 2. Ring diameter of 0.012 over shank diameter 3. 16 to 20 rings per inch 4. 0.280 inch full round head diameter 5. 2 inch nail length Where roof framing with a specific gravity, $0.42 \leq G < 0.49$ is used, spacing of ring-shank fasteners shall be 4 inches on center in nailing zone 3 for 130 mph or greater design wind speeds in accordance with Figure R803.2.3.1. **Exceptions:** 1. Where roof framing with a specific gravity, $0.42 \leq G < 0.49$ is used, spacing of ring-shank fasteners shall be permitted at 12 inches on center at intermediate framing in nailing zone 1 for any design wind speed and in nailing zone 2 for 110 mph or lower design wind speeds in accordance with Figure R803.2.3.1. 2. Where roof framing with a specific gravity, $G \geq 0.49$ is used, spacing of ring-shank fasteners shall be permitted at 12 inches on center at intermediate framing in nailing zone 1 for any design wind speed and in nailing zone 2 for 120 mph or lower design wind speeds in accordance with Figure R803.2.3.1. 3. Where roof framing with a specific gravity, $G \geq 0.49$ is used, 8d common or 8d hot dipped galvanized box nails at 6 inches on center at edges and 6 inches on center at intermediate	The proposed change is based on a Factor of Safety (FS) of 2.0 for the panel as whole instead of the capacity of individual fasteners. The FS accounts for panel variabilities and adjustments for missing fasteners. It is based on hundreds of true panel tests conducted at Clemson University and Florida International University. Based on the wind load provisions of ASCE 7 the design wind speeds at 33 feet height in Florida range from 100 to 150 miles per hour. These wind speeds are used to calculate design wind loads on a per square foot basis for Exposure C (open exposed areas) and Exposure B (built-up areas). The design process allows for adjustments to be made in calculating design wind pressures for gable roof overhang. Design uplift pressures for roof sheathing on building with roof slopes greater than 2 in 12 will range as indicated by the examples below: Extensive roof sheathing fastening tests at Clemson University (Reinhold 2000 – 2002, McKinley 2001) and at the International Hurricane Center – Florida International University (Reinhold, Alvarez 2003) have compared the Mean Failure Pressure in psf for roof sheathing panels using both the 8d common	

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framing shall be permitted for 100 mph or lower design wind speeds in accordance with Figure R803.2.3.1. 4. Where roof diaphragm requirements necessitate a closer fastener spacing. **FIGURE R803.2.3.1** **ROOF SHEATHING NAILING ZONES**	and the 8d ring shank nails spaced at 6 inches as prescribed by the Florida Building Code. Sheathing consisted of 5/8 inch thick plywood attached to nominal 2x4 Southern Yellow Pine rafters. The results of these tests were as follows: (1) Mean ultimate uplift capacity for panels attached with 8d common nails at 6 inch spacing: 126 pounds per square foot (2) Mean ultimate uplift capacity for panels attached with 8d ring shank nails at 6 inch spacing: 292 pounds per square foot This shows a 131% improvement in performance when 8d ring shank nails are used instead of the currently prescribed 8d common nails. Using data from these tests and a design procedure (Reinhold 2002) to calculate the allowable design uplift pressure for roof sheathing using both types on nails the following results are obtained: (1) For 19/32 inch thick plywood sheathing using 8d common nails at 6 inch spacing: 58 psf	

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	(2) For 19/32 inch thick plywood sheathing using 8d ring shank nails at 6 inch spacing: 150 psf These results show that the currently prescribed 8d common nail would only meet allowable design uplift pressures for some limited roof conditions, roof heights, and only up to wind speeds of 120 mph. In contrast these results show that sheathing attached with the proposed 8d ring shank nail would perform adequately under all roof conditions and heights, from 15 feet up to 40 feet, including gable ends in any exposure category. The change proposed is consistent with the IBHS Guidelines for Hurricane Resistant Construction. This document is based on SSTD 10-99 and the IBHS Guidelines reflect updates to SSTD 10 to allow the use of the prescriptive solutions in higher wind speed areas.	
R903.2.2 Membrane flashings. All membrane flashing shall be installed according to the roof assembly manufacturer's published literature.	**[Mod 1664]** The installation for membrane flashing was taken from the intent of FBCB Section 1507.2.9.1 Base and counter flashing. The FBCR does not provide direction on the installation of membrane flashing. This criterion is to required to ensure the use and installation of membrane flashing is in compliance with the	Adds a new section on membrane flashings.

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	recommendations of the manufacturer. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R903.3 Coping. Parapet walls shall be properly coped or sealed with noncombustible, weatherproof materials of a width no less than the thickness of the parapet wall. Metal coping shall comply with ANSI/SPRI ES-1 or RAS 111.	**[Mod 1641r]** This code change was recommended to the Commission by the Hurricane Advisory Committee during the expedited code change process held in October, 2005. At the October Commission rule hearing, this code change was deferred for consideration during the current code change cycle.	Adds compliance requirements for metal coping
R904.4 Fasteners. **R904.4.1 Nails.** Nails shall be corrosion resistant nails conforming to ASTM F 1667. The corrosion resistance shall meet ASTM A 641, Class I or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, hot dipped galvanization, stainless steel, nonferrous metal and alloys or other suitable corrosion-resistant material. **R904.4.2 Screws.** Wood screws shall be corrosion resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, stainless steel, nonferrous metal or	**[Mod 1669r]** The individual roof covering sections provide specific criteria for fasteners used with that roof covering. This section provides general criteria for fasteners that are not specifically covered. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new sections and sub-sections pertaining to requirements for nails, screws, and clips

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other suitable corrosion resistant material. **R904.4.3 Clips.** Clips shall be corrosion resistant clips. The corrosion resistance shall be meet 1.50 oz per sq ft (0.458 kg/m²) according to ASTM A 153 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, hot dipped galvanization, stainless steel, nonferrous metals and alloys or other suitable corrosion resistant material. Stainless steel clips shall conform to ASTM A 167, Type 304. ~~**R904.4**~~ **R904.5 Product identification.**		
R905.2.2 Slope. Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) up to four units vertical in 12 units horizontal (4:12), or two layers of underlayment complying with ASTM D226 Type I or Type II, ASTM D 4869 Type I or Type II or ASTM D6757 ~~double underlayment application~~ is required in accordance with Section R905.2.7. **R905.2.3 Underlayment.** Unless otherwise noted, required underlayment shall conform with D226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D6757. Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970. **R905.2.7 Underlayment application.** For roof slopes from	**[Mod 1790rc]** This code change encompasses 5 sections, all related to underlayment under asphalt shingles. They have been grouped for better understanding of the proposed code changes. 1. Clarifies the type, and installation and attachment of underlayment(s) under asphalt shingles based on slope. 2. It adds the now common use of "peel and stick" underlayment often recommended by IBHS and FLASH. This addition is also consistent with the 2004 Florida Building Code, Residential. 3. Adds a new ASTM standard for underlayment: ASTM D6757 is a new standard for underlayment	Adds ASTM D 6757 as a compliance option for underlayment; Replaces underlayment application requirements; Deletes R905.2.7.2 in entirety; Adds ASTM D 6757 to Chpt 43 See Mod 1790 for s. R905.26

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two units vertical in 12 units horizontal (17-percent slope), up to four units vertical in 12 units horizontal (33-percent slope), two layers of underlayment complying with ASTM D226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D6757 shall be applied in the following manner: 1. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves. 2. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm). 3. End laps shall be offset by 6 feet (1829 mm) 4. Corrosion resistant fasteners are to be applied along the overlap at a maximum spacing of 36 inches (914 mm) on center. ~~underlayment shall be two layers applied in the following manner. Apply a 19-inch (483 mm) strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened sufficiently to hold in place.~~ For roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater, one layer of underlayment complying with ASTM D226 Type I or Type II, ASTM D 4869 Type I or Type II, or ASTM D6757 shall be applied in the following	felts that contain inorganic fibers 4. Deletes R905.2.7.2 High wind attachment as a separate section and incorporates this attachment in all Florida wind zones. This requirement is typical of current underlayment attachment and the restriction to wind zones greater than 110 mph is no justified. 5. Adds the new underlayment standard (ASTM D 6757) to Chapter 35. (as found on www.astm.org) describes the standard as follows: 1. Scope 1.1 This specification covers (*1*) inorganic fiber-reinforced organic felt underlayment and (*2*) inorganic fiber-based felt for use as underlayment with steep-slope roofing products. The intent of this specification is to provide criteria for producing and evaluating underlayments with a significantly reduced tendency to wrinkle before or after the installation of steep roofing products.	

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manner: 1. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm). 2. End laps shall be offset by 6 feet (1829 mm) 3. Corrosion resistant fasteners are to be applied along the overlap at a maximum spacing of 36 inches (914 mm) on center. ~~underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened sufficiently to hold in place. End laps shall be offset by 6 feet (1829 mm).~~ **R905.2.7.1 Reserved.** **R905.2.7.2 Underlayment and high wind. Reserved.** ~~Underlayment applied in areas subject to high winds [greater than 110 mph (177km/h) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.~~ **Chapter 43:**		

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D6757-05 Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing		
R905.2.5 Fasteners. Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage [0.105 inch (2.67 mm)] shank with a minimum 3/8-inch (9.5 mm) diameter head, ASTM F 1667, of a length to penetrate through the roofing materials and a minimum of ¾ inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than ¾ inch (19.1 mm) thick, the fasteners shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667. **Exception:** If the architectural appearance is to be preserved from below, an alternate method of attachment complying with the wind load requirements of Chapter 16 of the *Florida Building Code*, *Building* may be proposed unless otherwise addressed in Chapter 9. The alternative attachment shall be prepared, signed and sealed by a Florida-registered architect or a Florida-registered engineer, which architect or engineer shall be proficient in structural design.	**[Mod 1670r]** The exception is to recognize an alternate method for installing asphalt shingles where the sheathing is also the interior finish. Where the fastener length would cause the fastener to penetrate the sheathing (interior finish), the interior finish would destroyed or damaged the appearance of the interior finish. This exception provides a method for installing the asphalt shingles without destroying or damaging the interior finish. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds an Exception to section pertaining to asphalt shingle fasteners
R905.2.6 Attachment. ~~Asphalt shingles shall have the minimum number of fasteners required by the manufacturer. For normal application, asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 20 units vertical in 12 units horizontal (20:12), special methods of fastening are~~	**[Mod 1796r]** This change adds a new consensus standard, ASTM D7158 as an alternate test method for wind resistance of asphalt shingles. D7158 quantifies the wind uplift force and the shingle sealant's bond strength and reflects the most up-to-date method for assessing wind performance of asphalt shingles. The resulting	Replaces compliance requirements for asphalt shingles; Adds new section and table on

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~~required. For roofs located where the basic wind speed per Figure R301.2(4) is 110 mph (177 km/h) or greater, special methods of fastening are required. Special fastening methods shall be tested in accordance with ASTM D 3161, modified to use a wind speed of 110 mph (177 km/h), or TAS107.~~ ~~Shingles classified using ASTM D 3161 are acceptable for use in wind zones less than 110 mph. Shingles classified using ASTM D 3161 or TAS107 modified to use a wind speed of 110 mph or TAS107 are acceptable for use in all cases where special fastening is required.~~ Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope, exceeds 21 units vertical in 12 units horizontal (21:12), shingles shall be installed as required by the manufacturer. **R905.2.6.1~~7~~ Wind Resistance of Asphalt Shingles.** Asphalt Shingles shall be classified in accordance with ASTM D3161, TAS 107 or ASTM D7158 to resist the basic wind speed per Figure R301.2 (4). Shingles classified as ASTM D 3161 Class D or classified as ASTM D 7158 Class G are acceptable for use in the 100-mph wind zone. Shingles classified as ASTM D3161 Class F, TAS107 or ASTM D 7158 Class H are acceptable for use in all wind zones. Asphalt shingle wrappers shall indicate compliance with one of the	classifications cover wind zones from 100 mph to 150 mph. The Scope Section of ASTM D7158 (as found on www.astm.org) describes the standard as follows: **1. Scope** 1.1 This test method covers the procedure for calculating the wind resistance of asphalt shingles when applied in accordance with the manufacturer's instructions, and sealed under defined conditions. The method calculates the uplift force exerted on the shingle by the action of wind at a specified velocity, and compares that to the mechanical uplift resistance of the shingle. A shingle is determined to be wind resistant at a specified basic wind speed when the measured uplift resistance exceeds the calculated uplift force for that velocity (3-second gust, ASCE 7). A mandatory wrapper labeling requirement, which is extremely important for code enforcement, has also been added along with a table which depicts the applicable standard and its classification based on the wind map.	wind resistance of asphalt shingles

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required classifications as shown in Table R905.2.6.1 ~~R905.2.7~~. Table R905.2.6.1 ~~R905.2.7~~ Wind Resistance of Asphalt Shingles **Chapter 43:** Add new ASTM Standard: D7158-05 Standard Test Method for Wind Resistance of Sealed Asphalt Shingles(Uplift Force/Uplift Resistance Method)		
R905.2.8.1 Base and counter flashing. Base and counter flashing shall be installed as follows: 1. In accordance with manufacturer's installation instructions, or **2.** A continuous metal minimum 4 inch by 4 inch "L" flashing shall be set in approved flashing cement and set flush to base of wall and over the underlayment. Both horizontal and vertical metal flanges shall be fastened 6 inches (152 mm) on center with approved fasteners. All laps shall be a minimum of 4 inches (102 mm) fully sealed in approved flashing cement. Flashing shall start at the lower portion of roof to insure water-shedding capabilities of all metal laps. The entire edge of the horizontal flange shall be sealed covering all nail penetrations with approved flashing cement and membrane. Shingles will overlap the horizontal flange and shall be set in approved flashing cement.	**[Mod 1673r]** The section was reorganized to clearly indicate that there are two options for base and counter flashing. The size of the continuous flashing has been added. The reference to the table for flashing material has been added. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Upgrades the prescriptive requirements for base and counter flashing
R905.2.8.2 Valleys. Valley linings shall be installed in accordance with manufacturer's installation instructions before	**[Mod 1674c]** The commentary statements defining open valley and closed valley are	

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applying shingles. Valley linings of the following types shall be permitted: 1. For open valley ~~(valley lining exposed)~~ lined with metal, the valley lining shall be at least 16 ~~24~~ inches (406 ~~610~~ mm) wide and of any of the corrosion-resistant metals in Table R903.1. 2. For open valleys, valley lining of two plies of mineral surface roll roofing, complying with ASTM D 6380 Class M or ASTM D 3909 ~~249~~, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide. 3. For closed valleys ~~(valley covered with shingles)~~, valley lining of one ply of smooth roll roofing complying with ASTM D 6380 Class S ~~224 Type II or Type III~~ and at least 36 inches (914 mm) wide or valley lining as described in Items 1 or ~~and~~ 2 above shall be permitted. Specialty underlayment complying with ASTM D 1970 may be used in lieu of the lining material.	removed. The width of the valley lining has been changed from 24 inches to 16 inches. This will make the width requirement the same as FBCB Section 1507.2.9.2 Valleys. ASTM D 249 and ASTM D 244 have been withdrawn by ASTM. The underlayment ASTM that replaces ASTM D 229 and ASTM D 224 is ASTM D 6380. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the Florida Building Code, Residential.	
R905.2.8.6 Drip edge. ~~Drip edge shall be provided at eaves and gables of shingle roofs, and overlapped a minimum of 2 inches (51 mm). Eave drip edges shall extend ¼ inch (6.4 mm) below sheathing and extend back on the roof a minimum of 2 inches (51 mm). Drip edge shall be mechanically fastened a maximum of 12 inches (305 mm) on center~~. Provide drip edge at eaves and gables of shingle roofs. Overlap to be a minimum of 3 inches (76 mm). Eave drip edges shall extend ½ inch (13 mm) below sheathing and extend back on the roof a minimum of 2 inches (51 mm).	**[Mod 1675]** The section was taken from FBCB Section 1507.2.9.3 Drip edge. The overlap was increase from 2 inches to 3 inches to decrease the problem of water intrusion. Drip edge extension below the sheathing has been increased from ¼ inch to ½ inch. This increase was based on criteria for drip edge installed in the high-velocity hurricane zones. The reference to the attachment of drip edges has been moved to the end of the section and the criteria for high-velocity	Upgrades the prescriptive requirements for drip edge

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Drip edge at eaves shall be permitted to be installed either over or under the underlayment. If installed over the underlayment, there shall be a minimum 4 ~~2~~ inch (51 mm) width of roof cement installed over the drip edge flange. Drip edge shall be mechanically fastened a maximum of 12 inches (305 mm) on center. Where the basic wind speed per Figure R301.2(4) is 110 mph (177 km/h) or greater or the mean roof height exceeds 33 feet (10 058 mm), drip edges shall be mechanically fastened a maximum of 4 inches (102 mm) on center,	hurricane zones has been added for building with a mean roof height greater than 33 feet and for building in regions where the wind speed is 110 mph or greater. To reduce the problem with water intrusion when a drip edge is installed over the underlayment the application of roof cement has been increased from 2 inches to 4 inches. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R905.3 Clay and concrete tile. ~~The installation of clay and concrete shall comply with the provisions of this section. Clay roof tile shall comply with ASTM C1167.~~ The installation of clay and concrete shall be in accordance with recommendations of FRSA/TRI 07320 Manual.	**[Mod 1676]** The FBCR 2004 uses the FRSA/RTI manual provides the details for the installation of clay and concrete roof tiles. This places the reference in the initial section for clay and concrete roof tiles. The reference to ASTM C 1167 is in FBCR Section R905.3.4 Clay tile so it is not necessary to repeat it in this section. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Replaces the installation compliance requirements for clay and concrete tile

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R905.3.3 Underlayment. ~~Unless otherwise noted,~~ required underlayment shall conform with ASTM D 226, Type II; ASTM D 2626; ASTM D 1970 or ASTM D 6380 mineral surfaced roll roofing and shall be installed in accordance with FRSA/TRI 07320 Manual….	**[Mod 1677]** Clarify that the underlayment is to be installed to comply with FRSA/RTI manual. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Provides compliance requirements with FRSA/TRI 07320 for underlayment
R905.3.3.2 High slope roofs. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be a minimum of one layer of underlayment felt applied shingle fashion, parallel to and starting from the eaves and lapped 2 inches (51 mm), fastened ~~sufficiently~~ only as necessary to hold in place.	**[Mod 1678]** Editorial change to define what is "sufficiently in place". This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Upgrades prescriptive requirements for high slope roofs
R905.3.4 Clay Tile. Clay roof tile shall comply with ASTM C 1167.	**[Mod 1679]** The section heading has been clarified to identify that the section applies to clay tiles. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Clarifies section heading

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~~**R905.3.7.4**~~ **R905.3.7.1 Hip and ridge tiles.** Hip and ridge tiles shall be installed in accordance with FRSA/TRI 07320 Manual.	**[Mod 1680r]** Hip and ridge tiles have specific requirements to minimize the loss of these tiles under high wind speeds. The FRSA/RTI manual has been updated to provide the installation requirements for this tile. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new section on hip and ridge tiles
R905.4.3 Underlayment. Underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 1970. Underlayment shall be installed in accordance with the manufacturer's installation instructions. **Exception**: Detached accessory structures that contain no conditioned floor area.	**[Mod 1681]** Provide code criterion for the installation of underlayment. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds installation compliance requirement for underlayment
R905.4.4 Material standards. ~~Metal roof shingle roof coverings of galvanized steel shall be 0.013 inch (0.378 mm) minimum thickness. Metal roof shingle roof coverings of aluminum shall be of 0.024 inch (0.610 mm) minimum thickness.~~ Metal roof shingle roof coverings shall comply with Table	**[Mod 1682r]** The FBCR 2004 only recognizes two metals for metal roof shingles, galvanized steel and aluminum. This table was taken from FBCB Table 1507.4.3 Material standards for metal roof panels. The table was changed from two columns to three columns by dividing the column "Standard Application Rate/Thickness"	Adds compliance requirements and a new table for metal roof shingles

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R905.4.4. **TABLE R905.4.4** **METAL ROOF Coverings**	in Table 1507.4.3 into two columns "Standard" and "Application Rate/Thickness". This makes the FBCR and the FBCB compatible and recognizes more than two materials for metal roof shingles. The Standard, ASTM B 370 and CDA 4115, for copper was added. These two standards are in Table R905.10.3. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R905.4.6 Flashing. Roof valley flashing shall be ~~provided of~~ corrosion-resistant metal of the same material as the roof covering or shall comply with the standards in Table R905.10.3. The valley flashing shall extend at least 8 inches (203 mm) from the center line each way and shall have a splash diverter rib not less than ¾ inch (19.1 mm) high at the flow line formed as part of the flashing. Sections of flashing shall have an end lap of not less than 4 inches (102 mm). The metal valley flashing shall have a 36-inch-wide (914 mm) underlayment directly under it consisting of one layer of underlayment running the full length of the valley, in addition to underlayment required for metal roof shingles.	**[Mod 1684]** Editorial change. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Editorial change
R905.5.4 Material standards. Mineral-surfaced roll roofing shall conform to ASTM D 6380 Class M or Class WS ~~224~~, ~~D~~	**[Mod 1685r]** ASTM D 244 and ASTM D 249 have been withdrawn by ASTM. The	Replaces reference to

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~~249~~, ~~D 371~~ or D 3909.	underlayment ASTM that replaces ASTM D 229 and ASTM D 224 is ASTM D 6380. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	ASTM D 224 and ASTM D 249 with reference to ASTM D 6380 for mineral-surfaced roll roofing
R905.6.3 Underlayment. Underlayment shall comply with ASTM D 226, Type II. Underlayment shall be installed in accordance with the manufacturer's installation instructions.	**[Mod 1687]** Provide code criterion for the installation of underlayment. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds installation compliance requirements for underlayment to text
R905.6.6 ~~**R905.6.7**~~ **Flashing.** Flashing and counter flashing shall be made with sheet metal. Valley flashing shall be a minimum of 16 ~~15~~ inches (406 mm ~~381 mm~~) wide. Valley and flashing metal shall be a minimum thickness as provided in Table R903.2.3 ~~Table R903.1~~ nonferrous metal or stainless steel.	**[Mod 1689r]** The valley flashing was increased from 15 inches to 16 inches to be consistent with the valley flashing requirements for other roof coverings. The reference to valley and flashing material thickness is being updated to Table R903.2.3. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee	Upgrades prescriptive requirements for flashing

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	reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R905.7.5 ~~Application~~ Attachment. ~~Wood shingles shall be installed according to this chapter and the manufacturer's installation instructions. Wood shingles shall be laid with a side lap not less than 1½ inches (38 mm) between joints in courses, and no two joints in any three adjacent courses shall be in direct alignment. Spacing between shingles shall not be less than ¼ inch to 3/8 inch (6.4 mm to 9.5 mm). Weather exposure for wood shingles shall not exceed those set in Table R905.7.5. Fasteners for wood shingles shall be corrosion-resistant with a minimum penetration of ½ inch (12.7 mm) into the sheathing. For sheathing less than ½ inch (12.7 mm) in thickness, the fasteners shall extend through the sheathing. Wood shingles shall be attached to the roof with two fasteners per shingle, positioned no more than 3/4 inch (19.1 mm) from each edge and no more than 1 inch (25.4 mm) above the exposure line.~~ Attachment in accordance with Table R905.7.5 shall be used for roofs with a mean roof height of 40 feet or less and in regions with a basic wind speed of 100 mph or less. **TABLE R905.7.5** **WOOD SHINGLE AND SHAKE INSTALLATION**	**[Mod 1690]** The attachment requirements in the FBCR are being deleted to use the attachment requirements in FBCB Table 1507.8. These installation requirements are for installations below 40 feet mean roof height and where the basic wind speed is 100 mph or less. The requirements in Table 1507.8 have been revised as follows: 1. Deck slope requirements are not included since these are addressed in Section R905.7.2 Deck slope. 2. The deck requirements based on temperature are not included since these temperatures do not apply in Florida. 3. The underlayment requirements based on temperature are not included since these temperatures do not apply in Florida. 4. The length of fasteners used on sheathing less than ½ inch is to be of sufficient length to penetrate the sheathing at least ⅜ inch. This clarifies the intent of penetrating the sheathing. 5. The row on "method" is not included since this information is included in the row for fasteners.	Replaces section pertaining to application with section on attachment of wood shingles; Also adds new table on wood shingle and shake installation

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	6. The row on "flashing" is not included since this information is included in Section R905.7.7 Flashing. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R905.7.6 Attachment for wind speed greater than 100 mph. Wood shingles installed in accordance with Table R905.7.5 and the requirements of R905.7.6 has an allowable uplift resistance of 45 psf. The installation of wood shingles shall be limited to roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof listed in Table R301.2(2). **R905.7.6.1 Fasteners.** **R905.7.6.1.1 Nails.** Nails to attach the wood shakes shall be 3d stainless steel ring shank nails. The nails shall have sufficient length to penetrate through the wood shakes and shall penetrate through the sheathing. **R905.7.6.1.2 Screws.** Screws to attach the battens to the framing shall be No. 8 by 2-½ inches (64 mm) long corrosion resistant wood screws. Wood screws shall be corrosion	**[Mod 1691r]** The Cedar Shake and Shingle Bureau provided UL test report dated August 24, 2004 for the installation of wood shingles. Based on this test report the allowable uplift resistance using a safety factor of 2 is 45 psf. The information above describes the installation used to obtain this allowable uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new sections and sub-sections pertaining to wood shingles

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resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, stainless steel, nonferrous metal or other suitable corrosion resistant material. **R905.7.6.1.3 Wood battens.** 1 x 4 wood battens shall be attached to the wood joists with 2 screws per joist. The first batten ~~was~~ shall be located 6 inches (152 mm) from the outer edge of the wood joist. Second batten shall be spaced 1-¼ inches (32 mm) from the first batten. The remaining battens shall be spaced a maximum 2 inches (51 mm) apart, except the last one which shall be spaced no greater than ¾ inches (19 mm) from the previous batten. **R905.7.6.1.4 Shingles.** Shingles shall be attached to the battens with 2 nails for each shingle placed 1 1/2 inch (38 mm) above the exposure line. The nails shall be ¾ to 1 inch (19 to 25 mm) from the shingle edges.		
R905.7.7 ~~R905.7.5~~ Application. Wood shingles shall be installed according to this chapter and the manufacturer's installation instructions. ~~Wood shingles shall be laid with a side lap not less than 1½ inches (38 mm) between joints in courses, and no two joints in any three adjacent courses shall be in direct alignment. Spacing between shingles shall not be less than ¼ inch to 3/8 inch (6.4 mm to 9.5 mm).~~ Weather exposure for wood shingles shall not exceed those set in Table R905.7.7 ~~Table R905.7.5. Fasteners for wood shingles shall be~~	**[Mod 1692]** The deleted requirements included in Table R905.7.5 and in Section R905.7.6 This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Revises installation requirements for wood shingles

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~~corrosion-resistant with a minimum penetration of ½ inch (12.7 mm) into the sheathing. For sheathing less than ½ inch (12.7 mm) in thickness, the fasteners shall extend through the sheathing. Wood shingles shall be attached to the roof with two fasteners per shingle, positioned no more than 3/4 inch (19.1 mm) from each edge and no more than 1 inch (25.4 mm) above the exposure line.~~ **TABLE R905.7.7** **WOOD SHINGLE WEATHER EXPOSURE AND ROOF SLOPE**		
~~R905.7.6 Valley flashing~~ ~~R905.7.6~~ R905.7.8 Flashing. ~~Roof flashing shall be not less than No. 26 gage [0.019 inches (0.48 mm)] corrosion-resistant sheet metal and shall extend 10 inches (254 mm) from the centerline each way for roofs having slopes less than 12 units vertical in 12 units horizontal (100-percent slope), and 7 inches (178 mm) from the centerline each way for slopes of 12 units vertical in 12 units horizontal and greater. Sections of flashing shall have an end lap of not less than 4 inches (102 mm).~~ At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be provided in accordance with the manufacturer's installation instructions, and where of metal, shall not be less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal.	**[Mod 1693r]** Section R905.7.6 is the first sentence from the FBCB Section 1507.8.7 and Section R905.7.8.1 is the remainder of FBCB Section 1507.8.7. The reference to Table R903.2.3 is added to coordinate the flashing. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Replaces section on valley flashing with section on flashing; Adds new section on valley flashing
R905.8.2 Deck slope. Wood shakes shall only be used on slopes of ~~three~~ four (4) units vertical in twelve (12) units horizontal (33-percent slope) or greater.	**[Mod 1694]** The Cedar Shake and Shingle Bureau recommended that the roof slope for wood shakes to limits to 4:12 or greater. This code change has been reviewed by the	Upgrades prescriptive requirements for wood shakes' deck

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Section/ Chapter	Rationale	Summary
	Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	slope
~~**R905.8.4 Interlayment.**~~ ~~Interlayment shall comply with ASTM D 226, Type I.~~	**[Mod 1695]** The requirement for interlayment is in Table R905.7.5. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Deletes section R905.8.4 in entirety
R905.8.4 Attachment. Attachment in accordance with Table R905.7.5 shall be used for roofs with a mean roof height of 40 feet or less and in regions with a basic wind speed of 100 mph or less.	**[Mod 1696]** The prescriptive installation instruction in Table R905.7.5 is provided for building with a mean roof height of 40 feet of less and in regions with a basic wind speed of 100 mph or less. The requirements in Table R905.7.5 were taken from FBCB Table 1507.8. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new section on attachment compliance requirements
R905.8.7 Attachment for wind speed greater than 100 mph.	**[Mod 1698r]** The Cedar Shake and Shingle	Adds new

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Wood shakes installed in accordance with Table R905.7.5 and the requirements of R905.8.7 have an allowable uplift resistance of 90 psf. The installation of wood shakes shall be limited to roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof listed in Table R301.2(2) **R905.8.7.1 Fasteners.** **R905.8.7.1.1 Nails.** Nails to attach the wood shakes shall be 6d stainless steel ring shank nails. The nails shall have sufficient length to penetrate through the wood shakes and shall penetrate through the sheathing. **R905.8.7.1.2 Screws.** Screws to attach the battens to the framing shall be No. 8 by 2-½ inches long corrosion resistant wood screws. Wood screws shall be corrosion resistant screws conforming to ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641, Class 1 or an equal corrosion resistance by coating, electro galvanization, mechanical galvanization, stainless steel, nonferrous metal or other suitable corrosion resistant material. **R905.8.7.2 Wood battens.** 1 x 6 wood battens shall be attached to the wood joists with 2 screws per joist. The first batten was located 6 inches from the outer edge of the wood joist. Second batten shall be spaced 1-¼ inches from the first batten. The remaining battens shall be spaced a maximum 2	Bureau provided UL test report dated August 24, 2004 for the installation of wood shingles. Based on this test report the allowable uplift resistance using a safety factor of 2 is 90 psf. The information above describes the installation used to obtain this allowable uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	section and sub-sections of attachment of wood shakes for higher wind resistance

Section/ Chapter	Rationale	Summary
inches apart, except the last one which shall be spaced no greater than ¾ inches from the previous batten. **R905.8.5.3 Shakes.** Shakes shall be attached to the battens with 2 nails for each shake placed 1½ inch above the exposure line. The nails shall be ¾ to 1 inch from the shake edges.		
R905.8.8 ~~R905.8.6~~ Application. Wood shakes shall be installed according to this chapter and the manufacturer's installation instructions. Wood shakes shall be laid with a side lap not less than 1½ inch (38 mm) between joints in adjacent courses. Spacing between shakes in the same course shall be 1/8 inch to 5/8 inch (3.2 mm to 15.9 mm) for shakes and tapersawn shakes of naturally durable wood and shall be ¼ inch to 3/8 inch (6.4 mm to 9.5 mm) for preservative tapersawn shakes. Weather exposure for wood shakes shall not exceed those set forth in Table R905.8.8 ~~Table R905.8.6~~. ~~Fasteners for wood shakes shall be corrosion-resistant, with a minimum penetration of ½ inch (12.7 mm) into the sheathing. For sheathing less than ½ inch (12.7 mm) in thickness, the fasteners shall extend through the sheathing. Wood shakes shall be attached to the roof with two fasteners per shake, positioned no more than 1 inch (25.4 mm) from each edge and no more than 2 inches (51 mm) above the exposure line.~~ **TABLE R905.8.8 ~~TABLE R905.8.6~~** **WOOD SHAKE WEATHER EXPOSURE AND ROOF SLOPE**	**[Mod 1699]** The requirements for corrosion resistant fasteners, minimum penetration, number of fasteners, etc. is now located in Table R905.7.5, This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Renumbers section and table; Deletes text in section pertaining to wood shake fasteners

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Section/ Chapter	Rationale	Summary
R905.8.10 Flashing ~~R905.8.8 Valley flashing~~. ~~Roof valley flashing shall not be less than No. 26 gage [0.019 inches (0.48 mm)] corrosion-resistant sheet metal and shall extend at least 11 inches (279 mm) from the centerline each way. Sections of flashing shall have an end lap of not less than 4 inches (102 mm).~~ At the juncture of the roof and vertical surfaces, flashing and counter flashing shall be provided in accordance with the manufacturer's installation instructions, and where of metal, shall not be less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal. **R905.8.10.1 Valley flashing.** Valley flashing shall extend at least 11 inches (279 mm) from the centerline each way and have a splash diverter rib not less than 1 inch (25 mm) high at the flow line formed as part of the flashing. Sections of flashing shall have an end lap of not less than 4 inches (102 mm). For roof slopes of four (4) units vertical in twelve (12) units horizontal (33-percent slope) and over, the valley flashing shall have a 36-inch-wide (914 mm) underlayment of one layer of ASTM D 226 Type I underlayment running the full length of the valley, in addition to other required underlayment per Table 903.2.3 Valley flashing and flashing metal shall be a minimum thickness as provided in Table R903.2.3 for nonferrous metal or stainless steel.	**[Mod 1700]** Section R905.8.10 is the first sentence from the FBCB Section 1507.9.8 and Section R905.8.10.1 is the remainder of FBCB Section 1507.8.7. The roof slope has been corrected from 3:12 to 4:12. The underlayment has been identified as ASTM D 226 to comply with Table R905.7.5 and the requirements for the interlayment. The reference to Table R903.2.3 is added to coordinate the flashing. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Replaces section on valley flashing with section on flashing; Adds new section on valley flashing
R905.10.3 Material standards. Metal-sheet roof covering systems that incorporate supporting structural members shall be designed in accordance with the *Florida Building Code, Building*. Metal-sheet roof coverings installed over structural	**[Mod 1702]** Table R905.10.3 is being replaced with Table R905.4.4. These tables have the same standards and application rate/thickness.	Replaces reference to Table R905.10.3 with

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Section/ Chapter	Rationale	Summary
decking shall comply with Table R905.4.4 ~~Table R905.10.3~~. **~~TABLE R905.10.3~~** **~~METAL ROOF COVERINGS STANDARDS AND INSTALLATION~~**	This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	reference to Table R905.4.4 in section pertaining to metal-sheet roof covering systems; Also deletes Table R905.10.3 in entirety
R905.10.4 Attachment. Metal roofing shall be installed in accordance with this chapter and the manufacturer's installation instructions. Metal roofing fastened directly to steel framing shall be attached by approved fasteners. The following fasteners shall be used: 1. Galvanized fasteners shall be used for galvanized roofs. 2. Hard copper or copper alloy or ~~three hundred~~ 300 series stainless steel fasteners shall be used for copper roofs. 3. Aluminum-zinc coated fasteners are acceptable for aluminum-zinc coated roofs. **4.** Stainless steel fasteners are acceptable for metal roofs.	**[Mod 1703]** Editorial change. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Editorial change
R905.10.5 Application. Metal roof panels shall be installed in accordance with this chapter and the manufacturer's installation instructions. The installations instruction shall state the allowable uplift resistance for the attachment system. The installation of metal roof panels shall be limited to roofs where the allowable uplift resistance is equal to or greater than the design uplift pressure for the roof	**[Mod 1704r]** The change will require that the manufacturer's installation instructions provide sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind uplift forces for various wind speeds and mean	Adds new section on installation requirements for metal roof panels

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listed in Table R301.2(2).	roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the design to be based on FBCB Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R905.10.6 Underlayment. Underlayment shall be installed as per manufacturer's installation guidelines.	**[Mod 1705]** Provide code criterion for the installation of underlayment. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new section pertaining to underlayment installation requirements
R905.11.3 Application. Modified bitumen roof shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the modified bitumen roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).	**[Mod 1706r]** The change will require that the manufacturer's installation instructions provide sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind	Adds prescriptive requirements to section on the installation of a modified

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Section/ Chapter	Rationale	Summary
	uplift forces for various wind speeds and mean roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the design to be based on FBCB Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	bitumen roof
R905.12.3 Application. Thermoset single-ply roof shall be installed according to this chapter and the manufacturer's installation instructions. <u>The approved allowable uplift resistance for the thermoset single-ply membrane roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).</u>	**[Mod 1707r]** The change will require that the manufacturer's installation instructions provide sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind uplift forces for various wind speeds and mean roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the design to be based on FBC Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance.	Adds prescriptive requirements to section on the installation of a thermoset single-ply roof

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Section/ Chapter	Rationale	Summary
	This code change has been reviewed by the Florida Build Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Residential Code*.	
R905.13.3 Application. Thermoplastic single-ply roof shall be installed according to this chapter and the manufacturer's installation instructions. The approved allowable uplift resistance for the thermoplastic single-ply roof shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2) ~~Section R901.4.1~~.	**[Mod 1708r]** The change will require that the manufacturer's installation instructions provide sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind uplift forces for various wind speeds and mean roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the design to be based on FBCB Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the Florida Building Code, Residential.	
R905.14.3 Application. Foamed in place roof insulation shall be installed in accordance with this chapter and the	**[Mod 1709r]** The change will require that the manufacturer's installation instructions provide	Adds prescriptive

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Section/ Chapter	Rationale	Summary
manufacturer's installation instructions. A liquid-applied protective coating that complies with Section R905.15 shall be applied no less than 2 hours nor more than 72 hours following the application of the foam. <u>The approved allowable uplift resistance for the sprayed polyurethane foam roofing shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).</u>	sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind uplift forces for various wind speeds and mean roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the design to be based on FBCB Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	requirements to section on foamed in place roof insulation
R905.15.3 Application. Liquid-applied roof coatings shall be installed according to this chapter and the manufacturer's installation instructions. <u>The approved allowable uplift resistance for the liquid-applied coatings shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).</u>	**[Mod 1710r]** The change will require that the manufacturer's installation instructions provide sufficient information for the permit applicant and the Building Official can verify the allowable uplift resistance with the uplift resistance in Table R901.4.1. Table R901.4.1 provides the wind uplift forces for various wind speeds and mean roof heights. This is prescriptive requirements so that the attachment of the roof covering can be quickly verified. The section also allows the	Adds prescriptive requirements to section on liquid-applied roof coatings

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Section/ Chapter	Rationale	Summary
	design to be based on FBCB Section 1609 since Table R901.4.1 uses only Zone 3 (corners) to determine the required uplift resistance. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	
R907.1 General. Reroofing shall be done in accordance with the *Florida Existing Building Code*.	**[Mod 1712]** The FBCR does not provide any criteria for reroofing. The *Florida Existing Building Code* has the criteria. This cross reference will insure that the reroofing is in compliance with the codes adopted in Florida. This code change has been reviewed by the Florida Building Commission – Roofing Subcommittee. The Roofing Subcommittee reviewed the proposed code change to upgrade the prescriptive provisions of Chapter 9 of the *Florida Building Code, Residential*.	Adds new section on compliance requirements on re-roofing
G2404.10 (301.7) Fuel types. Fuel-fired appliances shall be designed for use with the type of fuel gas to which they will be connected and the altitude at which they are installed. Appliances that comprise parts of the installation shall not be converted for the usage of a different fuel, except where approved and converted in accordance with the manufacturer's	**[Mod 1614r]** This change will make the Residential Code consistent with the Florida Building Code, Fuel Gas 301.7. TAC Action: Move it to the fuel gas part of the Residential code. Renumber G2404.4 -G2404.9.	

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Section/ Chapter	Rationale	Summary
instructions or the serving gas supplier. The fuel gas input rate shall not be increased or decreased beyond the limit rating for the altitude at which the appliance is installed.	Leave M1304.1 as is.	
G2422.1.4 (411.1.4) Outdoor appliance connectors. Outdoor gas hose connectors are permitted to connect portable outdoor gas-fired equipment. An equipment shutoff valve, a listed quick-disconnect device, or a listed gas convenience outlet shall be installed where the connector is attached to the supply piping and in such a manner as to prevent the accumulation of foreign matter. Lengths shall not exceed 12 feet (3658 mm) and the connection shall only be made in the outdoor area where the equipment is to be used.	**[Mod 1665]** This change will make the Residential Code consistent with the Florida Building Code, Fuel Gas 411.1.4. Modification # 776	
P2503.7.2 Testing. Reduced pressure principle backflow preventers, double check valve assemblies, double-detector check valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation ~~and at least once every three years~~.	**[Mod 1196c]** Cross connections are a daily event whether intentional and unintentional. Anyone with a garden hose can create one. Backflow prevention devices have been installed to protect the public from the reverse flow of water, caused from either backpressure or backsiphonage. Annual inspections and testing of backflow preventers coincides with the industry standard, manufacturers O & M Manual, the International Plumbing Code and national practice. Water purveyors are liable for water quality in the drinking water system. Improving the Florida Building Code Plumbing Volume helps protect the integrity of the public utilities potable water distribution system. The EPA recognizes the	

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<tr><td>Section E3302 See Table E3302, Cross References Defining Electrical Requirements of the Florida Building Code.
Table E3302 <s>Cross Reference:</s>
Cross References Defining Electrical Requirements of the Florida Building Code.

Florida Building Code 2004
Chapter 27
Electrical Systems
Cross Reference
Florida Building Code – Building

*This table is provided only as a tool to assist the construction industry as a general guide. User should review all sections of the code in order to determine specific applicable electrical requirements.

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</td><td>[Mod 1247r] The index points out other electrical requirements throughout the Florida building codes.</td><td>Section revised by staff.</td></tr>
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STRUCTURAL TAC - Residential

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STRUCTURAL TAC - Residential

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Chapter 27

Electrical Systems
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305	Alteration-Level 3	1102	Requirements	
Chapter 4	Repairs	Chapter 12	Compliance Alternatives	
401	General	1201	General	
408	Electrical			
		Chapter 14	Referenced Standards	
Chapter 5	Alterations Level 1			
508	Electrical	Appendix B	Standard for Rehabilitation	
Chapter 6	Alterations Level 2			
608	Electrical			
Chapter 8	Change of Occupancy			
808	Electrical			
811	Other Requirements			

STRUCTURAL TAC - Residential

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Section/ Chapter		Rationale	Summary
Chapter 9	Additions		
901	General		
904	Smoke Alarms in Occupancy Groups R-3 and R-4		

Florida Building Code 2004
Electrical Systems
Cross Reference

Florida Building Code - Mechanical

Section		**Section**	
		912	Infrared Radiant Heaters
Chapter 3	General Regulations	917	Cooking Appliances
301	General	918	Forced-Air Warm-Air Furnaces
		924	Stationary Fuel Cell Power Plants
306	Access and Service Space	927	Residential Electric Duct Heaters
		928	Vented Residential Floor Furnaces
Chapter 5	Exhaust Systems		
502	Required Systems	Chapter 10	Boilers, Water Heaters and
503	Motors and Fans		Pressure Vessels
504	Clothes Dryer Exhaust	1001	General
509	Fire Suppression Systems	1004	Boilers
513	Smoke Control Systems	1006	Safety and Pressure Relief Valves
			And Controls
Chapter 6	Duct Systems		
601	General	Chapter 11	
602	Plenums	1104	System Application Requirements
606	Smoke Detection System Control	1105	Machinery Room, General Requirements
607	Ducts and Air Transfer Openings	1106	Machinery Room, Special Requirements
Chapter 8	Chimneys and Vents	Chapter 15	Referenced Standards
801	General		

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Section/ Chapter			Rationale	Summary
804	Direct-Vent, Integral Vent and Mechanical Draft System			
	Florida Building Code 2004			
	Florida Building Code - Plumbing			
Chapter 6	Water Supply and Distribution	Part II	Design Criteria	
601	General	I.	Control Valves	
612	Well Pumps and Tanks used for Private Potable Water Systems	Part IV	Materials	
		H.	Low Voltage Wiring	
Chapter 11	Storm Drainage	I.	Irrigation Controllers	
1113	Sumps and Pumping Systems	J.	Pumps and Wells	
Chapter 13	Referenced Standards	Part V.	Installation	
		E.	Low Voltage Wire Installation	
Appendix F	Proposed Construction Building Codes For Turf and Landscape Irrigation Systems	F.	Hydraulic Control Tubing	
	Florida Building Code 2004			
	Florida Building Code - Fuel Gas			
Chapter 2	Definitions	Chapter 6	Specific Appliances	
		627	Air Conditioning Equipment	
Chapter 3	General Regulations	630	Infrared Radiant Heaters	
306	Access and Service Space			
309	Electrical	Chapter 7	Gaseous Hydrogen Systems	
310	Electrical Bonding	703	General Requirements	
		706	Location of Gaseous Hydrogen Systems	
Chapter 4	Gas Piping Installations			
413	Compressed natural Gas Motor Vehicle Fuel- Dispensing Stations	Chapter 8	Referenced Standards	

STRUCTURAL TAC - Residential

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Section/ Chapter	Rationale	Summary
~~**Section**~~ **E3303 Bonding Metal Framing Members:** **E3303.1 Metal framing members.** Metal framing members shall be bonded to the equipment grounding conductor for the circuit that may energize the framing and be sized in accordance with the National Electric Code Table 250.122. For the purpose of this section, a grounded metal outlet box attached to the framing shall be permitted.	**[Mod 1245]** This year an appliance installer died from electrocution due to an energized metal framing member that came in contact with the metal duct that was connected to the appliance. Bonding of the metal framing members is necessary to counter-act this possibility.	Staff edits.
43 **TPI** Truss Plate Institute ~~583 D'Onofrio Drive, Suite 200~~ 218 N. Lee Street, Suite 312 ~~Madison, WI 53719~~ Alexandria, VA 22314 Standard reference number — Title — Referenced in code section number ~~HIB—91 Commentary and recommendations for Handling, Installing and Bracing Metal Plate Connected Wood Trusses (excluding Chapter 13.2~~ Building Component Safety Information (BCSI 1-03) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses [A joint publication with the Wood Truss Council of America (WTCA)]. . . . . R4409.1.4.9, R4409.6.17.2.4.1, 4409.6.17.2.4.3, R501.11.2, R802.	**[Mod 1100]** HIB-91 is no longer published and this change merely updates the reference to the most current version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual sections of BCSI 1-03 are also available in English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	Updates reference from HIB-91 to BSCI 1-03; Also updates TPI's address

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10.3 TPI 1—02 National Design Standard for Metal-plate-connected Wood Truss Construction R502.11.1, R502.11.2, R802.10.2,		
43 ASTM Add: D 6841-03 Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-Retardant-Treated-Lumber. …… R802.1.3.2.2	**[Mod 1932r]** Bring code into line with industry practices.	Adds ASTM D 6841-03 as a referenced standard
43 **1. Change Chapter 35 of Florida Building Code, Building to read as follows:** **ACI American Concrete Institute** **38800 Country Club Drive** **Farmington Hills, MI 48331** **530/530.1-~~02~~ 05** Building Code Requirements for Masonry Structures and Specifications for Masonry Structures & Commentaries **2. Change 2107.2.3 as follows:** 2107.2.3 ACI 530/ASCE 5/TMS 402, Section 2.1.10.7.1.1, lap splices. The minimum length of lap splices for reinforcing bars in tension or compression, l_{ld}, shall be ~~calculated by Equation 21-~~	**[Mod 1828r]** The new masonry code represents considerable improvement with respect to strength design resulting in more efficient use of masonry materials.	Updates year of standard for ACI 530/530.1

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~~2, but shall not be less than 15 inches (380 mm).~~ $l_{ld} = 0.002 d_b f_s$ (Equation 21-2) For SI: $l_{ld} = 0.29 d_b f_s$ but not less than 12 inches (305 mm). In no case shall the length of the lapped splice be less than 40 bar diameters. where: d_b = Diameter of reinforcement, inches (mm). f_s = Computed stress in reinforcement due to design loads, psi (MPa). ~~$l_{ld} = \frac{0.16 d_b^2 f_y \gamma}{K\sqrt{f'_m}}$~~ ~~For SI: $l_{ld} = \frac{1.95 d_b^2 f_y \gamma}{K\sqrt{f'_m}}$~~ ~~where:~~ ~~db = Diameter of reinforcement, inches (mm).~~ ~~fy = Specified yield stress of the reinforcement or the anchor bolt, psi (MPa).~~ ~~f'm = Specified compressive strength of masonry at age of 28 days, psi (MPa).~~ ~~lld = Minimum lap splice length, inches (mm).~~ ~~K = The lesser of the masonry cover, clear spacing between adjacent reinforcement or five times db, inches (mm).~~ ~~= 1.0 for No. 3 through No. 5 reinforcing bars. 1.4 for No. 6 and No. 7 reinforcing bars. 1.5 for No. 8 through No. 9 reinforcing bars.~~ In regions of moment where the design tensile stresses		

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in the reinforcement are greater than 80 percent of the allowable steel tension stress *Fs*, the lap length of splices shall be increased not less than 50 percent of the minimum required length. Other equivalent means of stress transfer to accomplish the same 50 percent increase shall be permitted to be used. **3. Change 2108.3 to 2108.3.1 and insert new section 2108.3 to read as follows:** 2108.3 ACI 530/ASCE 5/TMS 402, Section 3.3.3.3. Modify Section 3.3.3.3 as follows: The required development length of reinforcement shall be determined by Eq. (3-15), but shall not be less than 12 in. (305 mm) and need not be greater than 72 d_b. **4.** The section numbers are changed in the new ACI 530/ASCE 5/TMS 402 and need to be dictatorially adjusted where the Building Code refers to specific sections in the standard		
43 **ASTM D 3679—~~01c~~05 Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding . . . . . Table R703.4**	**[Mod 1770r]** This change simply brings the Code up to date with the latest manufacturing standard. The 05 standard provides a higher level of requirements than the 01 standard including a raised minimum wind performance threshold from 90 mph to 110 mph. Of course, the product is designed to a higher level of wind requirements where required in specific parts of Florida.	Updates year of standard for ASTM D 3679
R4402.7.8.10 Mortar or adhesive set tiles applied at an incline from ~~4½~~ 6:12 up to and including 7:12 shall have the first	**[Mod 1269]** This Code Modification will allow the language of FRC R4402.7.8.10 to	

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course of tile (this applies to pan only on two-piece barrel tile) mechanically fastened with not less than one fastener per tile. As an alternate, the first course of tile shall be applied in mortar over a single layer of minimum 20 gauge galvanized wire mesh with openings of not less than ½ inch (12.7 mm) or greater than 1½ inches (38 mm) with minimum exposure of 12 inches (305 mm) which is mechanically attached to the deck through the underlayment with approved fasteners and tin-cap when back nailing the cap sheet. Additionally, for roof inclines of 6:12 up to and including 7:12, every third tile of every fifth course, shall be mechanically fastened with not less than one fastener per tile. For roof inclines above 7:12, in addition to the mortar or adhesive, all tiles shall be mechanically fastened with not less than one fastener per tile. Apply approved flashing cement to seal all tile fastener penetrations, for all roof inclines.	conform to the language and intent of FBC 1518.8.10 and RAS 120 Note #12 bringing uniformity to the Code.	
R4402.8.16 Waterproofing. Waterproofing systems may be installed in lieu of an approved roof system over sloped or horizontal decks specifically designed for pedestrian and/or vehicular traffic, whether the deck is above occupied or unoccupied space. In new construction the minimum deck slope shall be ¼ : 12. **R4402.8.16.1** The waterproofing system must possess a current and valid product approval. **R4402.8.16.2** If an overburden or wearing surface is not to be installed, the waterproofing system must be approved by the manufacturer for use in vehicular	**[Mod 1278]** Currently there is no guidance regarding the waterproofing of plaza decks, balconies, terraces and parking garages in the Florida Building Code. Nonetheless, installation of waterproofing systems is specified for a growing number of buildings being constructed within the jurisdiction. These systems are distinctly different from roofing systems and in many cases the use of materials other than conventional roof materials are utilized. Unlike roofing systems, waterproofing systems must perform in most cases for the lifetime of the structure, withstand hydrostatic pressure, resist	

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and/or pedestrian traffic locations. **R4402.8.16.3** The waterproofing assembly must possess a Class A, Class B, or Class C fire rating as required herein. **R4402.8.16.4** If any portion of the waterproofing membrane is to remain exposed, the waterproofing system shall be ultra-violet resistant. **R4402.8.16.5** Flashings must be installed according to the waterproofing manufacturer's published specifications and in compliance with the material and attachment standards of RAS 111. **R4402.8.16.6** The waterproofing system shall be flood tested in accordance with ASTM D 5957. **R4402.8.16.6.1** The flood test shall take place after installation of the waterproofing membrane and prior to the installation of any above membrane components, wearing surface or overburden. **R4402.8.16.6.2** An approved testing lab shall provide written verification to the Building Official confirming that the flood test was performed along with the results, prior to final inspection.	root penetration, and be compatible with herbicides, pesticides and fertilizers. By referencing waterproofing in the building code the installation will achieve identity, provide for reasonable limitations and provide for regulatory oversight.	

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R4402.10.11 If the recover roofing assembly is mechanically attached through either a base sheet or insulation layer, the attachment assembly shall be field tested for fastener withdrawal resistance, in compliance with TAS 105, and laboratory tested for pull-over resistance to insure compliance with wind uplift requirements set forth in Section R4403 of this code. Test results shall be submitted with the uniform roofing permit application. Recover roofing assembly anchor sheet or base sheet shall not be mechanically fastened directly to existing gravel roof unless all gravel is completely removed.	**[Mod 1288]** Clarification. The intention of the Code is not adequately expressed.	Adds requirements for recover roofing assembly anchor/base sheet
~~R4403.7.36.2~~ **R4403.7.3.6.2** Intermediate rails, balusters and panel fillers shall be designed for a uniform horizontal load of not less than 25 pounds per square foot (1197 Pa) over the gross area of the guard, including the area of any openings in the guard, of which they are a part without restriction by deflection. Reactions resulting from this loading need not be added to the loading specified ~~in R4403.7.4.6.1~~ **R4403.3.6.1** in designing the main supporting members of guards.	**[Mod 1357]** This is a glitch modification to correct the section reference number from R4403.7.36.2 to R4403.7.6.2 on the printed volume of the code and to correct the cross reference from R4403.7.4.6.1 to R4403.7.3.6.1 on both publications, CD and hard copy, versions of the code.	Editorial change to correct section numbering
~~R4403.7.4.7~~ **R4403.7.3.7** Areas in all occupancies from which the public is excluded requiring such protection may be provided with vertical barriers having a single rail midway between a top rail and the walking surface	**[Mod 1361]** This is a glitch modification to correct the section reference number from R4403.7.4.7 to R4403.7.3.7 on the CD and hard versions of the code.	Editorial change to correct section number.
~~R4403.7.4.8~~ **R4403.7.3.8** The last sentence of the first paragraph in Section 4.4.2 of ASCE 7 is hereby deleted.	**[Mod 1364]** This is a glitch modification to correct the section reference number from R4403.7.4.8 to R4403.7.3.8 on the CD and hard versions of the code.	Editorial change.
R4403.7.8 Load Combination. The safety of structures shall be checked using provisions of 2.3 and 2.4 of ASCE 7 with	**[Mod 1203]** ASCE 7 Section 2.4.3 mentioned in exception refers to ASCE 7- 98. Applicable	Revises the referenced

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commentary. **Exception**: Increases in allowable stress shall be permitted in accordance with ACI 530/ASCE 5/TMS 402 provided the load reduction factor of 0.75 of combinations 4 and 6 of ASCE 7 Section 2.4.~~3~~ 1 shall not be applied.	standard now is ASCE 7- 02, therefore Section 2.4.3 must be revised to the correct reference to Section 2.4.1. The added factor of 0.75 and combination 4 and 6 of clarifies the intent.	section of ASCE 7
R4403.9.3 All buildings and structures shall be considered to be in Exposure Category C as defined in Section 6.5.6.~~1~~3 of ASCE 7.	**[Mod 1202]** Section R4403.9.3 refers to Section 6.5.6.1 of ASCE 7- 98. New Applicable Standard is ASCE 7- 02, therefore reference must be revised to the correct Section 6.5.6.3 of ASCE - 02.	Revises the referenced section of ASCE 7
R4407.5.1 Standards. The provisions of ACI 530- ~~95~~ and 530.1- /ASCE 5-~~95~~ and 6, Building Code Requirements and Specification for Masonry Structures and the commentar~~y~~ies on Building Code Requirements and Specification for Masonry Structures, are hereby adopted as a minimum; however requirements of the standards shall not supersede the specific requirements of this section.	**[Mod 1194r]** The reference to 1995 edition of ACI 530/ASCE 5 was incorrect and reference to the Specification and the Commentary on Specification for Masonry Structures was missing, therefore this modification is required.	Updates referenced year of ACI 530 and corrects typographical errors
R4409.1.4.9 Truss Plate Institute ~~583 D'Onofio Drive, Madison, WI 53719 TPI~~ 218 N. Lee Street, Suite 312, Alexandria, VA 22314 *1. National Design Standard for Metal Plate Connected Wood Truss Construction (Excluding Chapter 2).* **2.** ~~Commentary and Recommendations for Handling, Installing and Bracing Metal Plate Connected Wood Trusses. (Excluding Chapter 13.2) HIB-91~~ Building Component Safety Information (BCSI 1-03) Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses [A joint publication with the Wood Truss Council of America (WTCA)]	**[Mod 1263rev]** HIB-91 is no longer published and this change merely updates the reference to the most current version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual	Replaces reference to HIB-91 with reference to BCSI 1-03 and corrects TPI's address

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	sections of BCSI 1-03 are also available in English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	
R4408.9.2.5.2 Nails at gable ends shall be hand driven 8d ring shank or power driven 8d ring shank nails of the following minimum dimensions: (a) 0.113 inch (2.9 mm) nominal shank diameter, (b) ring diameter of 0.012 inch (0.3 mm) over shank diameter, (c) 16 to 20 rings per inch, (d) 0.280 inch (7.1 mm) full round head diameter, (e) 23/8 inch (60.3 mm) nail length or as an alternative hand driven 10d common nails [(0.148 inch (3.8 mm) diameter by 3 inches (76 mm) long with 0.312 inch (7.9 mm) diameter full round head)] or power driven 10d nails of the same dimensions [0.148 inch (3.8 mm) diameter by 3 inches (76 mm) long with 0.312 inch (8 mm) diameter full round head]. Nails of a smaller diameter or length may be used only when approved by an architect or professional engineer and only when the spacing is reduced accordingly. Other products with unique fastening methods may be substituted for these nailing requirements as approved by the building official and verified by testing. **R4408.9.2.5.3** Other products with unique fastening methods may be substituted for these nailing requirements as approved by the building official and verified by testing.	**[Mod 1735]** Editorial change to correct section misnumbering	Editorial change to correct typographical errors
R4409.6.17.2.4.1 All trusses shall be erected in accordance with	**[Mod 1261r]** HIB-91 is no longer published and	Replaces

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~~Truss Plate Institute *Manual Commentary and Recommendations for Handling & Bracing Metal Plate Connected Wood Trusses* (HIB-91)~~ TPI/WTCA BCSI 1 in addition to any requirements indicated on the approved permit document	this change merely updates the reference to the most current version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual sections of BCSI 1-03 are also available in English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	reference to HIB-91 with reference to BCSI 1-03 and corrects TPI's address
R4409.6.17.2.4.3 Temporary bracing shall be required during the erection of roof trusses to keep the trusses in a true plumb position and to prevent toppling of the trusses during erection, until the roof sheathing is applied. The provisions for temporary bracing shown in ~~HIB-91~~ TPI/WTCA BCSI 1 shall be used for this bracing or a professional engineer or architect shall design the temporary bracing system. The ultimate responsibility to see this bracing is installed properly during the erection process lies with the permit holder. This bracing is extremely important for the protection of life and property during the erection process. Temporary truss bracing shall always be required.	**[Mod 1262r]** HIB-91 is no longer published and this change merely updates the reference to the most current version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references common to the International Residential Code (IRC) have been accepted by the ICC in the 2004/2005 code change cycle (RB-145) and will be included in the 2006 IRC. Copies of BCSI 1-03 were sent to DCA in February 2004 for review. The individual sections of BCSI 1-03 are also available in	Replaces reference to HIB-91 with reference to BCSI 1-03

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	English/Spanish. They are designed for use by the erection/installation contractor. It is not the intent of these recommendations that they are superior to the project architect or engineer's bracing design specifications.	
R. 4410.2.3.2.1 Operative windows and door assemblies shall be tested in accordance with ~~TAS 202 and~~ ANSI/AAMA/~~MWWDA/~~NWWDA 101/IS2-97, NAFS-02 or TAS 202 ~~and the forced entry prevention requirements of the Architectural Manufacturers Association (AAMA), 1302.5 and 1303.~~ *Commission language*: **R4410.2.3.2.1** Operative windows and door assemblies shall be tested in accordance with TAS 202 and ANSI/AAMA/MWWDA/NWWDA 101/I.S. 2~~-97~~, or 101/I.S. 2/NAFS or AAMA/WDMA/CSA 101/I.S. 2/A440 or TAS 202 and the forced entry prevention requirements of the Architectural Manufacturers Association (AAMA), 1302.5 and 1303.5.	**[Mod 1164r]** Editorial change	Adds AAMA NAFS-02 ~~and the AAMA & ASTM forced entry~~ standards to section on operative window and door assemblies
R4410.2.4.1 Where there is a drop of 4 feet (1219 mm) or more on the far side of fixed glazed panel 24 inches (610 mm) or more in width, the bottom of which is less than 36 inches (914 mm) above the near side walking surface, safeguards as set forth in Section ~~R4403.7.4~~ **R4403.7.3** shall be provided.	**[Mod 1368]** This is a glitch modification to correct the cross reference number from R4403.7.4. to R4403.7.3. on the CD and hard versions of the code.	Editorial change to correct referenced section number
R4410.2.5.1 Where there is a drop of more than 4 feet (1219 mm) on the far side of such windows and the sill is less than 36 inch (914 mm) above the near side walking surface, safeguards shall be provided to prevent the fall of persons when such	**[Mod 1371]** This is a glitch modification to correct the cross reference number from R4403.7.4 to R4403.7.3 in section R4410.2.5.1 on the CD and hard versions of the code.	

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windows are open as set forth in Section ~~R4403.7.4~~. **R4403.7.3** Exceptions: 1. Where the vent openings are 12 inches (305 mm) or less in least dimension and are restricted in operation to reject objects as required for safeguard in Section ~~R4403.7.4~~. **R4403.7.3** 2. Slats or grille work constructed to comply with Standard OSHA-1910, set forth in Section ~~R4403.7.4~~ **R4403.7.3** of this code, or other construction approved by the building official, may be provided in lieu of other safeguards.		
R4412.1.3.1.4 Foam plastic not meeting the requirements of this section may be specifically approved on the basis of approved tests such as, but not limited to, ~~a tunnel test in accordance with ASTM E 84,~~ FM procedure 4880, UL Subject 1040, ~~ASTM E 152 or the room test procedure described in SPI Bulletin PPICC 401~~ NFPA 286, or UL 1715, or fire tests related to actual end-use configuration and shall be performed on the finished foam plastic assembly in the maximum thickness intended for use. Assemblies tested shall included seams, joints and other typical details used in the installation of the assembly and shall be tested in the manner intended for use. ~~. The specific approval may be based on the end use, quantity, location and similar considerations where such tests would not be applicable or practical.~~	**[Mod 1831]** The major change here is the removal of ASTM E84 as a "Specific Approval" test and other withdrawn fire test standards. This section is intended to allow testing of foam plastic insulation in intermediate and full-scale tests reflecting actual end use configurations which would preclude the use of ASTM E84, commonly viewed as a small scale test. Additional language strengthening this section includes requirements that the tested assembly include "seams, joints, and other typical details used in the installation of the assembly".	

\\structural tac approved with rationale_residential