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STRUCTURAL TAC - Building

This is only to provide rationale for code change proposals submitted. For final language specific to the 2004 code, more details regarding the sections in the code, and correct wording, please see the 2006 Supplement. Please see the proposed code change modifications for text submitted for consideration by the Florida Building Commission.

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W = Withdrawn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)

Approved 2006 Code Modifications to the 2004 FBC with Rationale - Building

Section/ Chapter	Rationale	Summary
1. A weather-resistant exterior wall envelope shall not be required over concrete or masonry or non-pourous masonry walls designed in accordance with Chapters 19 and 21, respectively.	[Mod 1874r] The purpose of this code change is to require a weather-resistant covering over masonry walls. The hurricanes of 2004 demonstrated that masonry walls, without a proper exterior wall covering, are susceptible to water penetration and infiltration. This code change will preclude the use of applying only a "skim coat" of portland cement that does not meet the actual requirements for stucco. It will also require that paint applied to a bare masonry wall be capable of resisting water penetration and infiltration.	Changes text to require a weather-resistant covering over masonry walls.
1404.9 Vinyl siding. Vinyl Siding and sofitt shall conform to the requirements of ASTM D 3679, <u>ASTM D 4477 and the manufacturer's installation instructions</u>	[Mod 1459r] Adding this additional standards and requirements will enhance the code and assure the general public that the proper materials and installation techniques are being used.	Adds ASTM D 4477 and ASTM D 4756 as standard requirements for vinyl siding
1404.9.1 Vinyl siding. Vinyl siding shall eonform be labeled as conforming to the requirements of ASTM D 3679.	[Mod 1773r] 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 association representing US and Canadian manufacturers of vinyl siding. Since 1998 VSI has sponsored a third-party	Adds requirement for vinyl siding to be certified and labeled by an approved quality control agency

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Section/ Chapter	Rationale	Summary
	program to certify compliance of vinyl	
	siding with ASTM D 3679. This change	
	will be published in the 2006 IBC.	
1405.13 Vinyl siding. Vinyl siding conforming to the requirements of this	[Mod 1460r] Adding this additional	Adds ASTM D
section and complying with ASTM D 3679, and ASTM D 4477 in	standards and requirements will enhance	4477 and
accordance with the manufacturer's installation instructions shall be	the code and assure the general public	ASTM D 4756
permitted on exterior walls of buildings of Type V construction located in	that the proper materials and installation	as standard
areas where the basic wind speed specified in Chapter <u>16</u> does not exceed	techniques are being used.	requirements
100 miles per hour (161 km/h) and the building height is less than or equal		for vinyl
to 40 feet (12 192 mm) in Exposure C. Where construction is located in		siding.
areas where the basic wind speed exceeds 100 miles per hour (161 km/h),		
or building heights are in excess of 40 feet (12 192 mm), tests or		
calculations indicating compliance with Chapter <u>16</u> shall be submitted.		
Vinyl siding shall be secured to the building so as to provide weather		
protection for the exterior walls of the building.		
1503.3 Coping. Parapet walls shall be properly coped or sealed with	[Mod 1632r] This code change was	Adds
noncombustible, weatherproof materials of a width no less than the	recommended to the Commission by the	requirement for
thickness of the parapet wall. Metal coping shall comply with ANSI/SPRI	Hurricane Advisory Committee during	metal coping to
<u>ES-1 or RAS 111.</u>	the expedited code change process held	comply with
	in October, 2005. At the October	ANSI/SPRI
	Commission rule hearing, this code	ES-1
	change was deferred for consideration	
	during the current code change cycle.	
1503.4 Roof drainage. Unless roofs are sloped to drain over roof edges, D	[Mod 1592] Clarifies code and refers to	Adds exception
design and installation of roof drainage systems shall comply with the	Plumbing Chapter 11.	for drainage of
Florida Building Code, Plumbing Chapter 11.		sloped roofs
1503.4.3 Overflow scuppers When other means of drainage of overflow	[Mod 1593] Added the title "Overflow	Adds title to
water is not provided, overflow scuppers shall be placed in walls or parapets not	scuppers" to identify this subsection of	section

Section/ Chapter		Rationale	Summary
roof covering and shall be located as or downspouts or wall and parapet scu	than 4 inches (102 mm) above the finished close as practical to required vertical leaders appers. An overflow scupper shall be sized	the code.	
	alt shingles. Asphalt shingles shall be lance with Section 1507.2.7.1507.2.10.	[Mod 1785r] This change adds a new consensus standard, ASTM D7158 as an alternate test method for wind resistance	Replaces referenced section;
TAS 107 or ASTM D7158 to resis Shingles classified as ASTM D 31 are acceptable for use in the 100-m ASTM D3161 Class F, TAS107 or for use in all wind zones. Asphalt	d in accordance with ASTM D3161, t the basic wind speed per Figure 1609. 61 Class D or ASTM D 7158 Class G high wind zone. Shingles classified as ASTM D 7158 Class H are acceptable	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 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:	Replaces fastening requirements of asphalt shingles; Adds new section and table on wind resistance of asphalt shingles; Also
	e 1507.2.10 re of Asphalt Shingles	1. Scope	adds ASTM D 7158-05 as
Wind Resistance of Asphalt Shingles Maximum Basic Wind Speed MPH (per Figure 1609) Classification ASTM D3161 Class D or ASTM D 71 Class G or TAS 107		accordance with the manufacturer's	new referenced standard in chpt 35
<u>110</u> <u>120</u>	ASTM D3161 Class F or ASTM D 71 Class G or TAS 107 ASTM D3161 Class F or ASTM D 71 Class G or TAS 107	5 ignstructions, and sealed under defined conditions. The method calculates the uplift force exerted on the shingle by the action wind at a specified velocity, and compares that to the mechanical uplift	
130	ASTM D3161 Class F or ASTM D 71	sesistance of the shingle. A shingle is determined to be wind resistant at a	

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Section/ Chapter		Rationale Commission	Summary
140	Class H or TAS 107 ASTM D3161 Class F or ASTM D 71 Class H or TAS 107	specified basic wind speed when the speasured uplift resistance exceeds the ealculated uplift force for that velocity (3-second gust, ASCE 7).	
150	ASTM D3161 Class F or ASTM D 71 Class H or TAS 107	A mandatory wrapper labeling	
Chapter 35: ASTM Standard: D7158-05 Standard Test Method for Wind Resistance of Sealed Asphalt Shingles(Uplift Force/Uplift Resistance Method)		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.	
		Because of Copyright issues with electronic distribution of multiple copies of ASTM Standards, a hard copy of ASTM D 7158 will be provided to the Staff.	
1504.5 Edge securement for low	-slope roofs.	[Mod 1597r] Adds RAS 111 as	Adds RAS 111
installed in accordance with Section	is metal edge securement, except gutters, on 1507, shall be designed in accordance 1 except the basic wind speed shall be	additional resource in determining design criteria.	as an option for determining basic wind speed for edge securement for low-slope roofs
1505.7 Special purpose roofs.		[Mod 1850]There have been several	Deletes
1 1 1	wood shake roofing shall conform with	attempts to determine the exact	"Special
	ements of Section 1507.8 or 1507.9. In	application that this code section refers	purpose roofs"
addition, an underlayment of 0.62 gypsum backing board or gypsum	5-inch (15.9 mm) Type X water-resistant sheathing shall be placed under	to, including contacting the National Roofing Contractors Association and	section in entirety

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Section/ Chapter	Rationale	Summary
minimum nominal 0.5-inch-thick (12.7 mm) wood structural panel solid	various industry groups. Additionally,	
sheathing or 1-inch (25 mm) nominal spaced sheathing.	there is no definition of the term "special	
Sheathing of T men (25 min) nominal spaced sheathing.	purpose roofs" found in the Florida	
	Building Code. Therefore, this code	
	proposal entirely deletes this section.	
1506.5 Nails. Nails shall be corrosion resistant nails conforming to ASTM	[Mod 1599r] This clarification came	Adds new
F 1667. The corrosion resistance shall meet ASTM A 641, Class 1 or an	from 2001 FBC and is needed.	section on nails
equal corrosion resistance by coating, electro galvanization, mechanical		
galvanization, hot dipped galvanization, stainless steel, nonferrous metal		
and alloys or other suitable corrosion resistant material.		
1506.6 Screws Screws shall be corrosion resistant screws conforming to	[Mod 1601] This area needs clarification	Adds new
ANSI/ASME B 18.6.1. The corrosion resistance shall meet ASTM A 641,	and came from 2001 FBC.	section on
Class 1 or an equal corrosion resistance by coating, electro galvanization,		screws
stainless steel, nonferrous metal or other suitable corrosion resistant		
<u>material.</u>		
1506.7 Clips. Clips shall be corrosion resistant clips. The corrosion	[Mod 1602] Clarifies the code and	Adds new
resistance shall be meet 1.50 oz per sq ft (0.458 kg/m²) according to ASTM	comes from 2001 FBC.	section on clips
A 153 or an equal corrosion resistance 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.		
TABLE 1507.2	[Mod 1867] There is no need for this	Deletes
ASPHALT SHINGLE APPLICATION	table because the written sections of the	"Asphalt
	code clearly define the code requirement	Shingle
	for asphalt shingles. As the code has	Application"
	changed, this table has not been updated	Table in its
	and the result is several conflicts	entirety
	between the table and the written	

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Section/ Chapter	Rationale	Summary
	sections of the code. If this table stays in	
	the code, it will have to be updated based	
	on adopted code modifications to the referenced written sections.	
1507.2.9.3 Drip edge. Provide drip edge at eaves and gables of shingle	[Mod 1607rev] Language added is the	Adds
roofs. Overlap to be a minimum of 2 inches (51 mm). Eave drip edges shall	same as proposed language for FRC –	requirements
extend $0.25 \frac{1}{2}$ inch $(6.4 \frac{13}{12})$ mm) below sheathing and extend back on the	R905.2.8.6	for fastening of
roof a minimum of 2 inches (51 mm). Drip edge shall be mechanically	15 00.2.0.0	drip edges to
fastened a maximum of 12 inches (305 mm) o.e. Drip edge at eaves shall		text
be permitted to be installed either over or under the underlayment. If		
installed over the underlayment, there shall be a minimum $\frac{2}{4}$ inches (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 1609 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.		
1507.3.3 Underlayment.	[Mod 1608r] Manual provides detailed	Adds
Unless otherwise noted, required underlayment shall conform to: ASTM D	section on underlayment installation.	compliance
226, Type II; ASTM D 2626; ASTM D 1970 or ASTM D 6380 mineral-		with
surfaced roll roofing. <u>Underlayment shall be applied according to the tile</u>		FRSA/TRI
manufacturer's installation instructions or the recommendations of the		07320 as an
FRSA/TRI 07320.		application
- 1101 A 1111 0 7 0 2 0 1		requirement for
1507.3.3.1 Low-slope roofs.	[Mod 1600] Domovo languago, This	underlayment Deletes "Low-
For roof slopes from 2½ units vertical in 12 units horizontal (21-percent	[Mod 1609] Remove language. This language conflicts with the FRSA/TRI	slope roofs"
slope), up to four units vertical in 12 units horizontal (33-percent slope),	Tile Manual, which is the reference	section in
underlayment shall be a minimum of two layers applied as follows:	document for the FBC.	entirety

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	Section/ Cl		iodifications for text submitted for consideration	Rationale	Summary
		-up-v-		ALWAYIMI	~ unimul y
	Starting at 1	the eave, a 19-i	nch (483 mm) strip of underlayment shall be		
	applied par	allel with the e	ave and fastened sufficiently in place.		
			ch-wide (914 mm) strips of underlayment felt		
			ng successive sheets 19 inches (483 mm) and		
	1 1	fficiently in pla	C ,		
		High-slope roo		[Mod 1610] Remove language. This	Deletes "High-
		C 1	ts vertical in 12 units horizontal (33 percent	language conflicts with the FRSA/TRI	slope roofs"
			ment shall be a minimum of one layer of	Tile Manual, which is the reference	section in
	1 /	,	shingle fashion, parallel to, and starting from the	document for the FBC.	entirety
			(51 mm), fastened only as necessary to hold in	document for the PBC.	Chinety
	place.	appeu 2 menes	(31 mm), fastefied only as necessary to note in		
	piace.			[Mad 1612] Table about a day to three	Reformats
	TI	his table shou	ld be changed to contain 3 columns.	[Mod 1612] Table changed to three	
			•	column format.	Table 1507.4.3
			TABLE 1507.4.3		
POOF COVE			RINGS STANDARDS AND INSTALLATION		
ROOF COVE	RING TYPE	STANDARD	APPLICATION RATE/THICKNESS		
Aluminum		ASTM B 209	0.024 inch minimum thickness for roll-formed panels and 0.019		
			inch minimum thickness for press-formed shingles.		
Aluminum-zinc co	oated steel	ASTM A 792	0.013 inch minimum thickness, AZ 50 (coated minimum		
Copper		ASTM B 370	application rate) 16 oz./sq. ft. for metal sheet roof covering systems;		
Соррег		7151W B 570	12 oz./sq. ft. for preformed metal shingle systems;		
		CDA 4115			
Galvanized steel		ASTM A 653	G-90 zinc-coated, 0.013 inch thick minimum		
Lead-coated copp	er	ASTM B 101			
Hard lead			2 lbs./sq. ft.		

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	Section/ Chapter R				Rationale	Summary	
Soft lead			3 lbs./sq. ft.				
Prepainted steel		ASTM A 755					
Terne (tin) and ter stainless	rne-coated			lbs. per double base box, field painted accordance with manufacturer's installation			
	For SI: 1 oun	ce per square fo	ot = 0.0026 kg/m^2 ,				
	1 inch	n = 25.4 mm, 1 po					
	1507.6.4 Material standards. Mineral-surfaced roll roofing shall conform to ASTM D 224, ASTM 249, ASTM D 371 ASTM D 6380 Class M or Class WS or ASTM D Chapter 35: D6380-03 Standard Specification for Asphalt Roll Roofing (Organic				[Mod 1788rev] This code change merely replaces a withdrawn ASTM Standards (ASTM D224, D 249 and D 371) with the new standard –ASTM D 6380 as described on the ASTM website (www.astm.org)	Deletes ASTM D 224, ASTM D 249, and ASTM D 371 from "Material standards" and adds ASTM D 6380; Also adds ASTM D 6380-03 to Chpt 35	
	Table 1507.		IGLE AND SHA	KE INSTALLATION	[Mod 1616rev] New Table. Removing cold climate sections.	Adds new table—"Wood Shingle and	
ROOF ITEM		WOOD SHI	NGLES	WOOD SHAKES		Shake	
<u>slope</u>	slopes	shingles shall be in of three units vertintal (3:12) or great	cal in 12 units	Wood shakes shall be installed on slopes of four units vertical in 12 units horizontal (4:12) or greater.		Installation"	
requirement		-					
mperate climate	or space	ced sheathing. Who	to roofs with solid ere spaced ing boards shall not	Shakes shall be applied to roofs with solid or spaced sheathing. Where spaced sheathing is used, sheathing boards			

S	Section/ Chapter		Rationale	Summary
	be 4 less than 1" × 4" nominal dimensions and shall be spaced on center equal to the weather exposure to coincide with the placement of fasteners.	shall not be less than 1" × 4" nominal dimensions and shall be spaced on center equal to the weather exposure to coincide with the placement of fasteners. When 1" × 4" spaced sheathing is installed at 10 inches, boards must be installed between the sheathing boards.		
eas where the average temperature in Janu °F or less or where to sossibility of ice form the eaves causing a up of water.	there ming	Solid sheathing is required.		
<u>/ment</u>	No requirements.	Interlayment shall comply with ASTM D 226, Type 1.		
ayment				
perate climate	Underlayment shall comply with ASTM D 226, Type 1.	Underlayment shall comply with ASTM D 226, Type 1.		
eas where the average temperature in Janu F or less or where to sossibility of ice form the eaves causing a sup of water.	two layers of underlayment cemented there together or of a self adhering polymer- ming modified bitumen sheet shall extend	An ice shield that consists of at least two layers of underlayment cemented together or of a self-adhering polymer-modified bitumen sheet shall extend from the eave's edge to a point at least 24 inches inside the exterior wall line of the building.		
ation_	<u> </u>	<u>'</u>		
chment	Fasteners for wood shingles shall be corrosion resistant with a minimum penetration of 0.75 inch into the sheathing. For sheathing less than 0.5 inch thick, the fasteners shall extend through the sheathing.	Fasteners for wood shakes shall be corrosion resistant with a minimum penetration of 0.75 inch into the sheathing. For sheathing less than 0.5 inch thick, the fasteners shall extend through the sheathing.		

	Section/ Chapter	Section/ Chapter		Summary
<u>steners</u>	Two per shingle.	Two per shake.		
<u>posure</u>	Weather exposures shall not exceed those set forth in Table 1507.8.6	Weather exposures shall not exceed those set forth in Table 1507.9.7		
<u>thod</u>	Shingles shall be laid with a side lap of not less than 1.5 inches between joints in courses, and no two joints in any three adjacent courses shall be in direct alignment. Spacing between shingles shall be 0.25 to 0.375 inch.	Shakes shall be laid with a side lap of not less than 1.5 inches between joints in adjacent courses. Spacing between shakes shall not be less than 0.375 inch or more than 0.625 inch for shakes and tapersawn shakes of naturally durable wood and shall be 0.25 to 0.375 inch for preservative taper sawn shakes.		
shing	In accordance with Section 1507.8.7.	In accordance with Section 1507.9.8.		
	For SI: 1 inch = 25.4 mm, °C = [(°F) - 32]/1.8.			
	1507.11.2 Material standards. Modified bitumen roof coverings shall correct ASTM D 6162, ASTM D 6163, ASTM D 6223 and or ASTM D 6298.	[Mod 1617] Corrects the code to reflect that modified bitumen roof coverings need to meet only one of the listed standards.	Revises text to allow modified bitumen coverings to meet only one of the listed standards	
	1510.3 Recovering versus replacement. New installed without first removing all existing lay the following conditions occur: 1. Where the existing roof or roof covering deteriorated to the point that the existing roadequate as a base for additional roofing. 2. Where the existing roof covering is wood asbestos-cement tile. 3. Where the existing roof has two or more covering.	yers of roof coverings where any of g is water soaked or has pof or roof covering is not od shake, slate, clay, cement or	[Mod 1620] Change code so that roof systems may not be installed over wood shake roofs.	Adds an additional condition for recovering or replacing roof coverings; Deletes Exception 2 of section

Section/ Chapter	Rationale	Summary
4. When blisters exist in any roofing, unless blisters are cut or scraped open and remaining materials secured down before applying additional roofing. 5. Where the existing roof is to be used for attachment for a new roof system and compliance with the securement provisions of 1504.1 can not be met.		
Exceptions: 1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.		
2. Metal panel, metal shingle, and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1510.4.		
1521.11 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 Chapter 16 (High-Velocity Hurricane Zones) 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 1286] Clarification. The intention of the Code is not adequately expressed.	Adds requirement for fastening of recover roofing assemble anchor or base sheet
1603.1.4 Wind design data. The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral-force-resisting system of the building:	[Mod 1441r] The requirement for the original design professional to produce a components and cladding pressure is	Deletes the requirement to list

Section	on/ Chapter	Rationale	Summary
 Basic wind speed (3-second gust), miles per hour (km/hr). Wind importance factor, IW, and building classification from Table 1604.5 or Table 6-1, ASCE 7 and building classification in Table 1-1, ASCE 7. Wind exposure, if more than one wind exposure is utilized, the wind exposure and applicable wind direction shall be indicated. The applicable enclosure classifications and, if designing with ASCE 7, internal pressure coefficient. Components and cladding. The design wind pressures in terms of psf (kN/m2) to be used for the design selection of exterior components. 		impractical. To provide a relatively accurate and practical design pressure for future components and cladding, several factors would need to be known such as the effective area, location of installation, height of installation, and so forth. Otherwise, each set of plans will require a complete reproduction of ASCE design pressure tables or copies of the FBC simplified design pressure tables and diagrams. Secondly, requiring a design professional to be responsible for a design that specifically says "not specifically designed by the registered design professional" calls into account practice laws that would question this type of requirement.	components and cladding design pressures
j. Scr	e 1604.3 Deflection Limits, adds to notes at bottom of table: een surfaces shall be permitted to include a maximum of 25% solid ble finishes.	[Mod 1907] Not provided.	Adds new footnote to Table 1604.3
be an latera conne	8.2 Concrete and masonry walls. Concrete and masonry walls shall chored to floors, roofs and other structural elements that provide a support for the wall. Such anchorage shall provide a positive direct ection capable of resisting the horizontal forces specified in this er but not less than a minimum strength design horizontal force of	[Mod 1443] This code section is borrowed from the International Building Code, of the same section number and is directly related to prescribed minimum requirements for	Adds language pertaining to calculation of lateral forces on concrete

Section/ Chapter	Rationale	Summary
280 plf (4.10 kN/m) of wall, <u>unless the lateral force has otherwise been</u>	buildings situated in an earthquake zone.	and masonry
<u>calculated by the Engineer of Record</u> . Walls shall be designed to resist	In examining the original section in the	walls
bending between anchors where the anchor spacing exceeds 4 feet (1219	International Building Code it has been	
mm). Required anchors in masonry walls of hollow units or cavity walls	noticed that the words "substituted for	
shall be embedded in a reinforced grouted structural element of the wall.	'E'", in sentence two of the section is	
See Sections 1609.6.5 for wind design requirements.	missing from the FBC version. The 'E'	
	stands for earthquake. Currently the	
	FBC doesn't deal with earthquake loads,	
	and 'E' isn't a part of the load cases or	
	combinations. I believe it is important to	
	have a minimum lateral load that walls	
	need to be anchored against, however the	
	code comes across as being arbitrary and	
	causing undue costs in some buildings,	
	where a licensed Engineer is providing	
	certification of the design. If Designers	
	are required to specify anchorage, say	
	from a masonry wall to a pre-engineered	
	roof truss, having the FBC require that	
	the tie-down anchors be sufficient for	
	both uplift and lateral load of 280	
	pounds-per-foot, could, in some cases	
	require twice as many anchors as would	
	otherwise be necessary. I believe that	
	when a Florida licensed structural	
	engineer is certifying that the design is in	
	conformance with ASCE7 wind code,	
	then an arbitrary lateral load should not	

Section/ Chapter	Rationale	Summary
	be dictated by the FBC. Only if an engineer is not submitting signed and sealed drawings in a project, should the FBC indicate the minimum lateral load to be resisted. In addition, if it is the intent of the FBC to provide for a minimum lateral load (wind load), it should be expressed as a service load and not a strength design load. A strength design load requires conversion to service load in order to use standard manufacturer's published capacity tables of anchors and tie downs. Conversion from strength to service design can be done, but it is not the standard practice and is not typically understood by those who would be forced to do it (persons that are not licensed engineers). Unfortunately the FBC Commentary doesn't provide technical background to where this number is derived. Perhaps it could be demonstrated in the future and read better as a rational minimum requirement.	
Figure 1609	[Mod 1923r] The basic wind speed map,	Deletes
Delete Notes 4 and 5.	Figure 1609 is not the 50-year design	footnotes 4 and
	wind speed map. The map is based on	5 and changes
4) Mountainous terrain, gorges, ocean promontories, and special wind	500 year return period wind speeds	title of Figure

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Section/ Chapter	Rationale	Summary
regions shall be examined for unusual wind conditions.	divided by the square root of 1.5 which	
109.010 01.011 00 01.01111.00 101 01.010 01.010 101.010 101.010 101.010 101.010 101.010 101.010 101.010 101.01	was the expected load factor. The actual	
5) Wind speeds are American Society of Civil Engineers Stanard (ASCE 7-	basic design wind speeds shown in the	
98) 50-100-year peak gusts.	map already include factors that account	
ye) ee tee yem pemi gunis.	for return period related risks.	
	Consequently, this section is not needed	
	for wind.	
1609.1.1 Determination of wind loads. Wind loads on every building or	[Mod 1908] The proposal simply adds a	Adds
structure shall be determined in accordance with Section 6 of ASCE 7.	reference to the appropriate section to	additional
Wind shall be assumed to come from any horizontal direction and wind	obtain design information not contained	Exception to
pressures shall be assumed to act normal to the surface considered.	in Chapter 16.	section
Exceptions: (1 through 9 unchanged.)		
10. Wind loads for screened enclosures shall be determined in accordance		
with Section 2002.4.		
Section 1609.1.1, Exception 3:	[Mod 1875] The IBHS Guideline for	Replaces
	Hurricane Resistant Residential	SBCCI SSTD
3. Subject to the limitations of Sections 1609.1.1.1, 1609.1.4, and 1609.3,	Construction represents an update of the	10 with IBHS
the provisions of SBCCI SSTD-10 IBHS Guideline for Hurricane	SBCCI SSTD 10 document that	Guideline for
Resistant Residential Construction 2005 shall be permitted for	accomplishes several goals. It extends	Hurricane
applicable Group R2 and R3 buildings for a basic wind speed of 130	the range of areas covered by the	Resistant
140 mph (58 63 m/s) or less in Exposure B and 110 mph (49 m/s) or	document to areas with design wind	Residential
less in Exposure C in accordance with Figure 1609 and Section 1609.4.	speeds less than 140 mph in exposure B.	Construction
Provisions for design wind speeds of 140 mph (63 m/s) in the	It updates the document so that it is now	2005
Guideline shall also be permitted for buildings for a basic wind speed	based on 3-second gust wind speeds	
of 120 mph (53 m/s) or less in Exposure C in accordance with Figure	instead of fastest mile wind speeds and	
1609 and Section 1609.4 and provisions for design wind speeds of 120	uses the same wind speed basis and maps	

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mph (54 m/s) in the Guideline shall be permitted for buildings for a	as those used in the FRC 2004. It	
basic wind speed of 100 mph (45 m/s) or less in Exposure C in	improves provisions related to the	
accordance with Figure 1609 and Section 1609.4.	attachment of roof sheathing, shutters in	
accordance with Figure 1009 and Section 1009.4.	masonry walls and strapping of rafters to	
Section 1609.1.1.1 Applicability:	reflect the results on more recent	
Section 1005.1.1.1 Applicability.	research. It updates the reference	
1609.1.1.1 Applicability. The provisions of SSTD 10 <u>IBHS Guideline for</u>	standards used in the document to those	
Hurricane Resistant Residential Construction 2005, the AF&PA Wood	used in the FBC 2004 and FRC 2004. It	
Frame Construction Manual for One- and Two-Family Dwellings, High	incorporates better references to wall and	
Wind Edition,	fenestration provisions that should lead	
White Edition,	to improved performance in hurricanes.	
Section 2308.2.1:	By extending the life of this document it	
Section 2300.2.1.	provides small volume builders with an	
2308.2.1 Basic wind speed greater than 100 mph (3-second gust).	alternative method for constructing	
Where the basic wind speed exceeds 100 mph (3-second gust), the	hurricane resistant homes.	
provisions of either the AF&PA Wood Frame Construction Manual for	narroune resistant nomes.	
One- and Two-Family Dwellings (WFCM) or the SBCCI Standard for		
Hurricane-Resistant Residential Construction (SSTD-10) IBHS Guideline		
for Hurricane Resistant Residential Construction 2005, are permitted to be		
used.		
WIND-BORNE DEBRIS REGION.	na	
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 mean high water line.		

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1600 1 4 P	Acation of an animae. In using hours, debuie accione a fi	[Mod 1732] Will garaged a stantage	Editori-1
	otection of openings. In wind-borne debris regions, exterior	[Mod 1723r] Will provide clarity and	Editorial
	receives positive pressure in the lower 60 feet (18.3 m) in	consistency with ASCE 7-02	changes by
_	all be assumed to be openings and the balance of glazed		staff
•	he rest of the building shall be assumed to be zero unless such		
	receives positive pressure is impact resistant or protected with		
-	sistant covering meeting the requirements of SSTD 12, ASTM		
	ASTM E 1996, or Miami-Dade TAS 201, 202 and 203		
referenced th	erein as follows:		
1.	Glazed openings located within 30 feet (9.1 m) of grade		
	shall meet the requirements of the Large Missile Test.		
2.	Glazed openings located more than 30 feet (9.1 m) above		
	grade shall meet the provisions of the Small Missile Test.		
3.	Storage sheds that are not designed for human habitation		
	and that have a floor area of 720 square feet (67 m2) or less		
	are not required to comply with the mandatory windborne		
	debris impact standards of this code.		
4.	Openings in sunrooms, balconies or enclosed porches		
	constructed under existing roofs or decks are not required to		
	be protected provided the spaces are separated from the		
	building interior by a wall and all openings in the separating		
	wall are protected in accordance with Section 1609.1.4		
	above. Such spaces shall be permitted to be designed as		
	either partially enclosed or enclosed structures.		
Exceptions:			
1. Wood	d structural panels with a minimum thickness of 7/16 inch		
(11.1	mm) and maximum panel span of 8 feet (2438 mm) shall be		
perm	itted for opening protection in one- and two-story buildings.		
	s shall be precut to cover the glazed openings with attachment		

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hardware provided. Attachments shall be designed to resist the components and cladding loads determined in accordance with the provisions of Section 1609.6.5. Attachment in accordance with Table 1609.1.4 is permitted for buildings with a mean roof height of 33 feet (10 058 mm) or less where wind speeds do not exceed 130 mph (57.2 m/s).		
1. Wood structural panels with a minimum thickness of 7/16 inch (11.1 mm) and maximum panel span of 8 feet (2438 mm) shall be permitted for opening protection in one- and two-story buildings. Panels shall be precut to cover the glazed openings with attachment hardware provided. Attachments shall be designed to resist the components and cladding loads determined in accordance with the provisions of Section 1609.6.1.2. Attachment in accordance with Table 1609.1.4 is permitted for buildings with a mean roof height of 33 feet (10 058 mm) or less where wind speeds do not exceed 130 mph (57.2 m/s).		
2. Buildings in Category I as defined in Table 1604.5, including production greenhouses as defined in Section 1602.		
1609.2 Definitions. Revise the following definitions as stated below. Remaining definitions unchanged		
BUILDING, SIMPLE DIAPHRAGM. A building which complies with all of the following conditions: 1. enclosed building,		

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 mean roof height, h, less than or equal to 60 feet (18 m), mean roof height, h, does not exceed least horizontal dimension, building has an approximately symmetrical cross section, building has no expansion joints or structural separations within the building, wind loads are transmitted through floor and roof diaphragms to the 		
- vertical lateral-force-resisting systems, and 7. if the building has moment-resisting frames, roof slopes do not exceed 30 percent.		
BUILDING, SIMPLE DIAPHRAGM. A building in which wind loads are transmitted through floor and roof diaphragms to the vertical lateral-force-resisting systems.		
EFFECTIVE WIND AREA. The area used to determine GCp. For component and cladding elements, the effective wind area in Tables 1609.6B and 1609.6C is the span length multiplied by an effective width that need not be less than one third the span length. For cladding fasteners, the effective wind area shall not be greater than the area that is tributary to an individual fastener.		
EFFECTIVE WIND AREA. The area used to determine GCp. For component and cladding elements, the effective wind area in Tables 1609.6.2.1(2) and 1609.6.2.1(3) is the span length multiplied by an effective width that need not be less than one-third the span length. For cladding fasteners, the effective wind area shall not be greater than the area that is tributary to an individual fastener.		

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1609.4 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. When applying the simplified wind load method		
of Section 1609.6, a single exposure category shall be used based upon the		
most restrictive for any given wind direction.		
1. Exposure A. Large city centers with at least 50 percent of the		
buildings having a height in excess of 70 feet (21.3 m). 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 one-half 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 caused by the		
building or structure being located in the wake of adjacent buildings		
shall be taken into account.		
1. Exposure A. This exposure category is 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 of exposure.		

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3. Exposure C. Means, except in the high-velocity hurricane zone, that		
area which lies within 1,500 feet (46 m) of the coastal construction		
control line, or within 1,500 feet (46 m) of the mean high tide line,		
whichever is less. On barrier islands, exposure category 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 (9144 mm) extending more than 1,500		
feet (457.2 m) 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 regulating 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) or 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 hurricane-prone regions) for a		
distance of at least 1 mile (1.61 km). Shorelines in Exposure D		

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times the height of the hill or 1 mile (1.6 km), whichever is less. 1609.6.1 Scope. The procedures in Section 1609.6 shall be permitted to be used for determining and applying wind pressures in the design of enclosed		
buildings with flat, gabled and hipped roofs and having a mean roof height not exceeding the least horizontal dimension or 60 feet (18 288 mm), whichever is less, subject to the limitations of Sections 1609.6.1.1 and 1609.6.1.2. If a building qualifies only under Section 1609.6.1.2 for design of its components and cladding, then its main wind force-resisting system shall be designed in accordance with Section 1609.1.1.		
Exception: The provisions of Section 1609.6 shall not apply to buildings sited on the upper half of an isolated hill or escarpment meeting all of the following conditions:		
The hill or escarpment is 60 feet (18 288 mm) or higher if located in Exposure B or 30 feet (9144 mm) or higher if located in Exposure C.		
 The maximum average slope of the hill exceeds 10 percent. The hill or escarpment is unobstructed upwind by other such topographic features for a distance from the high point of 50 times the height of the hill or 1 mile (1.61 km), whichever is less. 		
1609.6.1.1 Reserved.		
1609.6.1.1 Main wind force-resisting systems. For the design of main wind force- resisting systems, the building must meet all of the following conditions:		
1. The building is a simple diaphragm building as defined in Section		

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1609.2.		
2. The building is not classified as a flexible building as defined in Section 1609.2.		
3. The building does not have response characteristics making it subject to across wind loading, vortex shedding, instability due to galloping or flutter; and does not have a site location for which channeling effects or buffeting in the wake of upwind obstructions warrant special consideration.		
4. The building structure has no expansion joints or separations.		
5. The building is regular shaped and has an approximately symmetrical cross section in each direction with roof slopes not exceeding 45 degrees (0.78 rad.).		
1609.6.1.2 Reserved.		
1609.6.1.2 Components and cladding. For the design of components and cladding, the building must meet all of the following conditions:		
1. The building does not have response characteristics making it subject to across wind loading, vortex shedding, instability due to galloping or flutter; and does not have a site location for which channeling effects or buffeting in the wake of upwind obstructions warrant special consideration.		
2. The building is regular shaped with roof slopes not exceeding 45 degrees (0.78 rad.) for gable roofs, or 27 degrees (0.47 rad.) for hip roofs.		
1609.6.2 Wind pressures.		
1609.6.2 Design procedure.		

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1. The basic wind speed, V, shall be determined in accordance with Section 1609.3. The wind shall be assumed to come from any horizontal direction.		
2. An importance factor Iw shall be determined in accordance with Section 1609.5.		
3. An exposure category shall be determined in accordance with Section 1609.4.		
4. A height and exposure adjustment coefficient, , shall be determined from Table 1609.6.2.1(4).		
1609.6.2.1 Structural members, cladding, fasteners and systems providing for the structural integrity of the building shall be designed for the loads from Table 1609.6A, Table 1609.6B and Table 1609.6C using Figure 1609, multiplied by the appropriate height and exposure coefficient from Table 1609.6D and the importance factor from Table 1604.5.		
1609.6.2.1 Main wind force-resisting system.		
Simplified design wind pressures, ps, for the main wind force-resisting systems represent the net pressures (sum of internal and external) to be applied to the horizontal and vertical projections of building surfaces as shown in Figure 1609.6.2.1. For the horizontal pressures (Zones A, B, C, D), ps is the combination of the windward and leeward net pressures. ps shall be determined from Equation 16-34).		
$\underline{p_s} = \lambda I_w p_{s30}$ (Equation 16-34) where:		
where.		

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λ = Adjustment factor for building height and exposure from		
Table 1609.6.2.1(4).		
$\underline{I_w} = \underline{Importance factor as defined in Section 1609.5}$		
p_{s30} = Simplified design wind pressure for Exposure B, at $h = 30$		
feet (9144 mm), and for $I_w = 1.0$, from Table 1609.6.2.1(1).		
1609.6.2.1.1 Minimum pressures.		
The load effects of the design wind pressures from Section 1609.6.2.1 shall not be less than assuming the pressures , p_s , for Zones A, B, C and D all		
equal to +10 psf (0.48 kN/m ²), while assuming Zones E, F, G, and H all		
equal to 0 psf.		
1609.6.2.2		
Members that act as both part of the main wind-force-resisting system and		
as components and cladding shall be designed for each separate load case.		
1609.6.2.2 Components and cladding.		
Net design wind pressures, p _{net} , for the components and cladding of		
buildings represent the net pressures (sum of internal and external) to be		
applied normal to each building surface as shown in Figure 1609.6.2.2. The		
net design wind pressure, p _{ne} t, shall be determined from Equation 16-35:		
$p_{net} = \lambda I_w p_{net30} $ (Equation 16-35)		
$\underline{p_{net} = \lambda I_w p_{net30}} $ (Equation 16-35)		
where:		
λ = Adjustment factor for building height and exposure from Table		
<u>1609.6.2.1(4).</u>		

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		•
$\underline{I_w}$ = Importance factor as defined in Section 1609.5.		
p_{net30} =Net design wind pressure for Exposure B, at $h = 30$ feet (9144 mm),		
and		
for $I_w = 1.0$, from Tables 1609.6.2.1(2) and 1609.6.2.1(3).		
<u>1609.6.2.2.1 Minimum pressures.</u>		
The positive design wind pressures, p_{net} , from Section 1609.6.2.2 shall not		
be less than $+10 \text{ psf} (0.48 \text{ kN/m2})$, and the negative design wind pressures,		
p_{net} , from Section 1609.6.2.2 shall not be less than -10 psf (-0.48 kN/m ²).		
1609.6.2.3 Load case. Members that act as both part of the main wind		
force-resisting system and as components and cladding shall be designed		
for each separate load case.		
*		
1609.6.3 Edge strips and end zones.		
The width of the edge strips (a), as shown in Figure 1609.6C, shall be 10		
percent of the least horizontal dimension or 40 percent of the eave height,		
whichever is less but not less than either 4 percent of the least horizontal		
dimension or 3 feet (914 mm). End zones as shown in Figure 1609.6B shall		
be twice the width of the edge strip (a).		
1609.6.4 Main wind force resisting system (MWFRS).		
All elements and connections of the MWFRS shall be designed for vertical		
and horizontal loads based on the combined leeward and windward wall		
pressures and roof pressures determined from Table 1609.6A. Pressures		
shall be applied in accordance with the loading diagrams shown in Figure		

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1609.6A to the end zone and interior zone as shown in Figure 1609.6B.		
The building shall be designed for all wind directions. For buildings having		
flat roofs, a ridge line normal to the wind direction shall be assumed at the		
midlength dimension of the roof for all directions considered. Each corner		
shall be considered in turn as the windward corner.		
1609.6.4.1 Overhang loads.		
The pressures to be used for the effects of roof overhangs on		
MWFRS shall be taken from Table 1609.6A and include the effect		
of the wind on both the bottom and top surfaces.		
1609.6.5 Components and cladding.		
Pressure for wind loading actions on components and cladding shall be		
determined from Table 1609.6B for enclosed portions of the building and		
Table 1609.6C for overhangs, based on the effective area for the element		
under consideration. The pressures in Table 1609.6C include internal		
pressure. The pressure shall be applied in accordance with the loading		
diagrams in Figure 1609.6C.		
1609.6.5.1 Garage doors.		
Pressures from Table 1609.6E. for wind loading actions on garage doors		
for buildings designed as enclosed shall be permitted.		
1609.1.4 Protection of openings. In wind-borne debris regions, exterior	[Mod 1084] ANSI/DASMA 115 is an	Adds reference
glazing that receives positive pressure in the lower 60 feet (18.3 m) in	industry standard, recognized by ANSI,	to
buildings shall be assumed to be openings and the balance of glazed	specifically for the wind-borne debris	ANSI/DASMA
openings in the rest of the building shall be assumed to be zero unless such	resistance testing of garage doors and	115 Standard
glazing that receives positive pressure is impact resistant or protected with	rolling doors.	(for garage and
an impact resistant covering meeting the requirements of SSTD 12, ASTM		rolling doors)

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E 1886 and ASTM E 1996, ANSI/DASMA 115 (for garage doors and	The test method and acceptance criteria	in language
rolling doors) or Miami-Dade TAS 201, 202 and 203 referenced therein as	-	
· · · · · · · · · · · · · · · · · · ·	described have been proven to be equal	pertaining to
follows:	to, or greater than, all other existing	protection of
	standards that may be applicable to such	openings in
1. Glazed openings located(remainder of section unchanged)	products, based on actual usage of the	1609.1.4 and as
	document in testing and the resultant	a Referenced
In addition, please add the following to Chapter 43, Referenced Standards,	field performance of the products.	Standard in
under DASMA:		Chapter 43
ANICI/DACMA 115 05 Ctan dand Mada d Car Tastina Carras Danna and		
ANSI/DASMA 115-05, Standard Method for Testing Garage Doors and		
Rolling Doors: Determination of Structural Performance Under Missile		
Impact and Cyclic Wind Pressure	57.5 1.400 47.771 C.1.: 1	. 11
1609.1.4 Protection of openings. In wind-borne debris regions, exterior	[Mod 1884] The purpose of this code	Adds a
glazing that receives (no change to remainder of paragraph)	change is primarily to require	requirement for
	permanently mounted hardware when	using
Exception:	using wood structural panel shutters for	permanently
	window protection for new construction.	mounted
1. Wood structural panels with a minimum thickness of 7/16 inch (11.1	It is our belief that using wood structural	hardware when
mm) and a maximum span of 8 feet (2438 mm) shall be permitted for	panels as window protection in the	using wood
opening protection in one- and two-story buildings. Panels shall be precut	manner currently prescribed by the code,	structural panel
so that they shall be attached to the framing surrounding the opening	is basically an emergency option for	shutters for
containing the product within to cover the glazed openings with attachment	protection of existing buildings where	window
hardware provided. Panels shall be predrilled as required for the anchorage	the homeowner or building owner does	protection for
method and all required hardware shall be provided. Attachment shall be	not have some permanent shutter system	new
designed to resist the components and cladding loads determined in	in place.	construction
accordance with the provisions of Section 1609.6.5, with permanent		
corrosion resistant attachment hardware provided and anchors permanently	While the code requires the panels to be	
<u>installed on the building</u> . Attachment in accordance with Table 1609.1.4,	precut and the attachment hardware	

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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 33 feet (10,058 mm) or less where wind speeds do not exceed 140 130 mph (57.2 m/s) 2. (no change) TABLE 1609.1.4 WIND-BORNE DEBRIS PROTECTION FASTENING SCHEDULE FOR WOOD STRUCTURAL PANELS SI: 1 inch = 25.4 mm, 1 foot = 305 mm. 1. This table is based on a maximum wind speed of 130 mph (58 m/s) and mean roof height of 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.	provided, there are potentially many logistical problems with homeowners or building owners actually installing the panels as required by the code. It's not clear that the homeowners or building owners 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 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	

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	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.	
(proposal also contains modification for the same change to section R301.2.1.2) 1609.1.4 Protection of openings. In wind-borne debris regions, exterior glazing that receives positive pressure in the lower 60 feet (18.3 m) in buildings shall be assumed to be openings and the balance of glazed openings in the rest of the building shall be assumed to be zero unless such glazing that receives positive pressure is impact resistant or protected with an impact resistant covering meeting the requirements of SSTD 12, ASTM E 1886 and ASTM E 1996, or Miami-Dade TAS 201, 202 and 203 referenced therein as follows: 1. Glazed openings located within 30 feet (9.1 m) of grade shall meet the requirements of the Large Missile Test. 2. Glazed openings located more than 30 feet (9.1 m) above grade shall meet the provisions of the Small Missile Test.	[Mod 1914rev] 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 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	Adds requirement for hurricane protection of openings

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3. Storage sheds that are not designed for human habitation and that have a floor area of 720 square feet (67 m2) or less are not required to comply with the mandatory windborne debris impact standards of this code. 4. Openings in sunrooms, balconies or enclosed porches constructed under existing roofs or decks are not required to be protected provided the spaces are separated from the building interior by a wall and all openings in the separating wall are protected in accordance with Section 1609.1.4 above. Such spaces shall be permitted to be designed as either partially enclosed or enclosed structures.	results.	
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, Building Section 1609 for which the specimen is to be tested.		
1609.3 Basic wind speed. The basic wind speed in miles per hour, for the development of windloads, shall be determined from Figure 1609. 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 1922] None of the special wind regions exist in Florida nor are they shown on the map.	Deletes "special wind regions" reference in text
FIGURE 1609.6A APPLICATION OF MAIN WIND FORCE RESISTING SYSTEM LOADS FOR SIMPLE DIAPHRAGM BUILDS	[Mod 1729] Will provide clarity and consistency with ASCE 7-02	Editorial change by staff

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WINDWARD ROOF VERTICAL WINDWARD ROOF VERTICAL WINDWARD ROOF	WARD ROOK	
TRANSVERSE ELEVATION	LONGITUDI	
Add the following Figure: FIGURE 1609.6.2.1 MAIN WIND FORCE LOADING DIAGRAM		

change modifications for text submitted for considerations for text submitted for text su		
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() () () () () () () () () ()		
(H) (E) (H) (H) (E) (H) (E) (H) (E) (H) (H) (H) (E) (H) (H) (H) (H) (H) (H) (H) (H) (H) (H		
End Zone	90	
Reference Comer		
Corner		
Transverse		
Y Y	-	
For Cl. 4 foot - 204 0 ram 4 degree - 0.0474 rad		
For SI: 1 foot = 304.8 mm, 1 degree = 0.0174 rad. Notes:		
1. Pressures are applied to the horizontal and vertical projections for Exposure B, at $h = 30$		
feet, for Iw = 1.0. Adjust to other exposures and heights with adjustment factor.		
2. The load patterns shown shall be applied to each corner of the building in turn as the		
reference corner.		
3. For the design of the longitudinal MWFRS, use $\theta = 0^{\circ}$, and locate the Zone E/F, G/H boundary at the mid-length of the building.		
4. Load Cases 1 and 2 must be checked for $25^{\circ} < \theta = 45^{\circ}$. Load Case 2 at 25° is provided		
only for interpolation between 25° to 30°.		
5. Plus and minus signs signify pressures acting toward and away from the projected		
surfaces, respectively.		
6. For roof slopes other than those shown, linear interpolation is permitted.		
7. The total horizontal load shall not be less than that determined by assuming $pS = 0$ in Zones B and D.		
<u>Zuries D anu D.</u>		

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•		ľ
8. The zone pressures represent the following:		
Horizontal pressure zones — Sum of the windward and leeward net (sum of internal and		
external) pressures on vertical projection of:		
A – End zone of wall C – Interior zone of wall		
B – End zone of roof D – Interior zone of roof		
<u>Vertical pressure zones — Net (sum of internal and external) pressures on horizontal</u>		
projection of:		
E – End zone of windward roof G – Interior zone of windward roof		
F – End zone of leeward roof H – Interior zone of leeward roof		
9. Where Zone E or G falls on a roof overhang on the windward side of the building, use		
EOH and GOH for the pressure on the horizontal projection of the overhang. Overhangs on		
the leeward and side edges shall have the basic zone pressure applied.		
10. Notation:		
a: 10 percent of least horizontal dimension or 0.4h, whichever is smaller, but not less than		
either 4 percent of least horizontal dimension or 3 feet.		
<u>h</u> : Mean roof height, in feet (meters), except that eave height shall be used for roof angles		
<u>< 10°.</u>		
<u>θ</u> : Angle of plane of roof from horizontal, in degrees.		
FIGURE 1609.6B MAIN WIND FORCE LOADING DIAGRAM	[Mod 1738] Will provide clarity and	Editorial
	consistency with ASCE 7-02	change by staff

change mounications for text submitted for considerat		
Section/ Chapter	Rationale	Summary
1		
4 LONGITUDINAL		
4 LONGITODINAL		
, / /] \		
4E LONGITUDINAL		
2 INTERIOR ZONE		
ROOF		
END- ZONE		
1 LONGITUDINAL		
20		
1E LONGITUDINAL 1E		
WIND DIRECTION		
RANGE		
Add the fellowing Plane		
Add the following Figure:		
FIGURE 1609.6.2.1		
MAIN WIND FORCE LOADING DIAGRAM		

change modifications for text submitted for consideration		T a
Section/ Chapter	Rationale	Summary
(H)		
	4	
	4	
	1	
End Zone	4	
	3	
C muring		
	1	
Reference Reference		
Reference Corner		
Transverse Longitudi	1	
	4	
For SI: 1 foot = 304.8 mm, 1 degree = 0.0174 rad.		
Notes:		
1. Pressures are applied to the horizontal and vertical projections for Exposure B, at $h = 30$ feet, for $lw = 1.0$. Adjust to other exposures and heights with adjustment factor .		
2. The load patterns shown shall be applied to each corner of the building in turn as the		
reference corner.		
3. For the design of the longitudinal MWFRS, use $\theta = 0^{\circ}$, and locate the Zone E/F, G/H		
boundary at the mid-length of the building.		
4. Load Cases 1 and 2 must be checked for $25^{\circ} < \theta = 45^{\circ}$. Load Case 2 at 25° is provided		
only for interpolation between 25° to 30°.		
5. Plus and minus signs signify pressures acting toward and away from the projected		
surfaces, respectively.		

Section/ Chapter	Rationale	Summary
6. For roof slopes other than those shown, linear interpolation is permitted.		
7. The total horizontal load shall not be less than that determined by assuming $pS = 0$ in		
Zones B and D.		
8. The zone pressures represent the following:		
Horizontal pressure zones — Sum of the windward and leeward net (sum of internal and		
external) pressures on vertical projection of:		
A – End zone of wall C – Interior zone of wall		
B – End zone of roof D – Interior zone of roof		
<u>Vertical pressure zones — Net (sum of internal and external) pressures on horizontal</u>		
projection of:		
E – End zone of windward roof G – Interior zone of windward roof		
F – End zone of leeward roof H – Interior zone of leeward roof		
9. Where Zone E or G falls on a roof overhang on the windward side of the building, use		
EOH and GOH for the pressure on the horizontal projection of the overhang. Overhangs on		
the leeward and side edges shall have the basic zone pressure applied.		
10. Notation:		
a: 10 percent of least horizontal dimension or 0.4h, whichever is smaller, but not less than		
either 4 percent of least horizontal dimension or 3 feet.		
h: Mean roof height, in feet (meters), except that eave height shall be used for roof angles		
< 10°.		
<u>θ</u> : Angle of plane of roof from horizontal, in degrees.		
FIGURE 1609.6C COMPONENT AND CLADDING LOADING	[Mod 1737] Will provide clarity and	Editorial
DIAGRAMS	consistency with ASCE 7-02	change by staff

Section/ Chapter	Rationale	Summary
(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c		
8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Add the following Figure: FIGURE 1609.6.2.2 COMPONENT AND CLADDING PRESSURE		

anala	Cummore
onale	Summary

Section/ Chapter	Rationale	Summary
 5. Notation: a: 10 percent of least horizontal dimension or 0.4h, whichever is smaller, but not less than either 4 percent of least horizontal dimension or 3 feet. h: Mean roof height, in feet (meters), except that eave height shall be used for roof angles <10°. Θ: Angle of plane of roof from horizontal, in degrees. 		
TABLE 1609.6A MAIN WIND FORCE RESISTING SYSTEM WIND LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET LOCATED IN EXPOSURE B Note 1	[Mod 1743] Will provide clarity and consistency with ASCE 7-02	Editorial change by staff
TABLE 1609.6.2.1(1) SIMPLIFIED DESIGN WIND PRESSURE (MAIN WIND FORCE- RESISTING SYSTEM), ps30 (Exposure B at $h = 30$ feet with $I_W = 1.0$) (psf)		

ctior	n/ Chap	oter									Rationale	Summary
BASIC	ROOF	ROOF	5					ZO	NES			
PEED (mph)	ANGLE (degrees)	RISE IN	LOAD	Α	Horizontal B	Pressures	D	E	Vertical F	ressures		
	0 to 5°	Flat	1	31.1	-16.1	20.6	-9.6	-37.3	-21.2	-26.0		
	10°	2	1	35.1	-14.5	23.3	-8.5	-37.3	-22.8	-26.0		
	15°	3	1	39.0	-12.9	26.0	-7.4	-37.3	-24.4	-26.0		
140	20°	4	1	43.0	-11.4	28.7	-6.3	-37.3	-26.0	-26.0		
	25°	6	1 2	39.0	6.3	28.2	6.4	-17.3 -6.6	-23.6 -12.8	-12.5 -1.8		
	30° to 45°	7 to 12	1 2	35.0 35.0	23.9 23.9	27.8 27.8	19.1 19.1	2.7 13.4	-21.2 -10.5	0.9 11.7		
	0 to 5°	Flat	1	35.7	-18.5	23.7	-11.0	-42.9	-24.4	-29.8		
	10°	2	1	40.2	-16.7	26.8	-9.7	-42.9	-26.2	-29.8		
	15°	3	1	44.8	-14.9	29.8	-8.5	-42.9	-28.0	-29.8		
150	20°	4	1	49.4	-13.0	32.9	-7.2	-42.9	-29.8	-29.8		
	25°	6	1 2	44.8	7.2	32.4	7.4	-19.9 -7.5	-27.1 -14.7	-14.4 -2.1		
	30° to 45°	7 to 12	1 2	40.1 40.1	27.4 27.4	31.9 31.9	22.0 22.0	3.1 15.4	-24.4 -12.0	1.0 13.4		
	0 to 5°	Flat	1	45.8	-23.8	30.4	-14.1	-55.1	-31.3	-38.3		
	10°	2	1	51.7	-21.4	34.4	-12.5	-55.1	-33.6	-38.3		
	15°	3	1	57.6	-19.1	38.3	-10.9	-55.1	-36.0	-38.3		
170	20°	4	1	63.4	-16.7	42.3	-9.3	-55.1	-38.3	-38.3		
	25°	6	1 2	57.5	9.3	41.6	9.5	-25.6 -9.7	-34.8 -18.9	-18.5 -2.6		
	30° to 45°	7 to 12	1 2	51.5 51.5	35.2 35.2	41.0 41.0	28.2 28.2	4.0 19.8	-31.3 -15.4	1.3 17.2		
			l inch = 2 0.44 m/s,	l pound j		foot = 4			4 rad, 1 r	nile per	[Mad 1744] Will may ide elemity and	Editorial
CO	MPONI	W	ND CL. TTH A EET LO	ADDIN MEAN	G WIN	D LOA	HT O	7	UILDI	NG	[Mod 1744] Will provide clarity and consistency with ASCE 7-02	change by s

		Section	on/ Chapter							Rati	ional	le		Sı	ummary
	ZONE	3	EFFECTIVE WIND AREA (ft 2)		BASI	C WINE	SPEED	V (mph	- 3-sec	ond gu	ust)				
					85		90	1	100		11	0			
Roof ≥0 to 10	1		10	10.0	-13.0	10.0	-14.6	10.0	-18.0) 1	0.0	-21.8			
to 10 Degrees	1		20	10.0	-12.7	10.0	-14.2	10.0	-17.5	10.	0	21.2			
	1	İ	50	10.0	12.2	10.0	-13.7	10.0	-16.9	10.	0	20.5			
	1	j	100	10.0	-11.9	10.0	-13.3	10.0	-16.5	10.	.0	19.9			
	2		10	10.0	-21.8	10.0	-24.4	10.0	-30.2	10.	.0	36.5			
	2		20	10.0	-19.5	10.0	-21.8	10.0	-27.0	10.	0	32.6			
	2	İ	50	10.0	-16.4	10.0	18.4	10.0	-22.7	10.	0	27.5			
	2	İ	100	10.0	-14.1	10.0	-15.8	10.0	-19.5	10.	0	23.6			
	3	İ	10	10.0	32.8	10.0	-36.8	10.0	-45.4	10.	0	55.0			
	3	İ	20	10.0	-27.2	10.0	-30.5	10.0	-37.6	10.	0	45. 5			
	3	j	50	10.0	-19.7	10.0	22.1	10.0	-27.3	10.	0	33.1			
	3		100	10.0	-14.1	10.0	-15.8	10.0	-19.5	10.	0 -	23.6			
Roof > 10 to 30	1		10	10.0	-11.9	10.0	-13.3	10.4	-16.5	12.	5 -	19.9			
to 30 Degrees	1		20	10.0	-11.6	10.0	-13.0	10.0	-16.0	11.	4	19.4			

		Section/ Chapter							R	ationa	le		Summary
	1	50	10.0	-11.1	10.0	-12.5	10.0	-15.4		10.0	-18.6		
	1	100	10.0	-10.8	10.0	-12.1	10.0	-14.9		10.0	-18.1		
	2	10	10.0	-25.1	10.0	-28.2	10.4	-34.8		12.5	-42.1		
;	2	20	10.0	-22.8	10.0	-25.6	10.0	-31.5		11.4	-38.2		
;	2	50	10.0	-19.7	10.0	-22.1	10.0	-27.3		10.0	-33.0		
:	2	100	10.0	-17.4	10.0	- 19.5	10.0	-24.1		10.0	-29.1		
:	3	10	10.0	-25.1	10.0	-28.2	10.4	34.8		12.5	-42.1		
	3	20	10.0	-22.8	10.0	-25.6	10.0	-31.5		11.4	-38.2		
;	3	50	10.0	-19.7	10.0	-22.1	10.0	-27.3		10.0	-33.0		
	3	100	10.0	-17.4	10.0	-19.5	10.0	-24.1		10.0	-29.1		
of 30 4 5 rees	1	10	11.9	-13.0	13.3	-14.6	16.5	-18.0		19.9	-21.8		
	1	20	11.6	-12.3	13.0	-13.8	16.0	-17.1		19.4	-20.7		
	1	50	11.1	-11.5	12.5	-12.8	15.4	-15.9		18.6	-19.2		
	1	100	10.8	-10.8	12.1	-12.1	14.9	-14.9		18.1	-18.1		
	2	10	11.9	-15.2	13.3	-17.0	16.5	-21.0		19.9	-25.5		

		Section/ Chapter							R	ationa			Summary
	2	20	11.6	-14.5	13.0	-16.3	16.0	-20.1		19.4	-24.3		
	2	50	11.1	-13.7	12.5	-15.3	15.4	-18.9		18.6	-22.9		
	2	100	10.8	-13.0	12.1	-14.6	14.9	-18.0		18.1	-21.8		
	3	10	11.9	-15.2	13.3	-17.0	16.5	-21.0		19.9	-25. 5		
	3	20	11.6	-14.5	13.0	-16.3	16.0	-20.1		19.4	-24.3		
	3	50	11.1	-13.7	12.5	-15.3	15.4	-18.9		18.6	-22.9		
	3	100	10.8	-13.0	12.1	-14.6	14.9	-18.0		18.1	21.8		
Wall	4	10	13.0	-14.1	14.6	-15.8	18.0	-19.5		21.8	-23.6		
	4	20	12.4	-13.5	13.9	-15.1	17.2	-18.7		20.8	-22.6		
	4	50	11.6	-12.7	13.0	-14.3	16.1	-17.6		19.5	-21.3		
	4	100	11.1	-12.2	12.4	-13.6	15.3	-16.8		18.5	-20.4		
	5	10	13.0	-17.4	14.6	19.5	18.0	-24.1		21.8	-29.1		
	5	20	12.4	-16.2	13.9	-18.2	17.2	-22.5		20.8	-27.2		
	5	50	11.6	-14.7	13.0	-16.5	16.1	-20.3		19.5	-24.6		
	5	100	11.1	-13.5	12.4	-15.1	15.3	-18.7		18.5	-22.6		

		Section/ Chapter							F	Ration	ale	Summary
		(con	tinued)									
	ZONE 3	EFFECTIVE WIND AREA (ft 2)		BA	SIC WI	ND SPEE	D V (m	oh - 3-se	coı	nd gust))	
				120		130		140			150	
loof	1	10	10.5	-25.9	12.4	-30.4	14.3	-35.3		16.5	-40.5	
> 0 > 10	1	20	10.0	-25.2	11.6	-29.6	13.4	-34.4		15.4	-39.4	
grees	1	50	10.0	-24.4	10.6	-28.6	12.3	-33.2		14.1	-38.1	
	1	100	10.0	-23.7	10.0	-27.8	11.4	32.3		13.0	-37.0	
	2	10	10.5	-43.5	12.4	-51.0	14.3	-59.2		16.5	-67.9	
	2	20	10.0	-38.8	11.6	-45.6	13.4	-52.9		15.4	-60.7	
	2	50	10.0	-32.7	10.6	-38.4	12.3	-44.5		14.1	-51.1	
	2	100	10.0	-28.1	10.0	-33.0	11.4	-38.2		13.0	43.9	
	3	10	10.5	-65.4	12.4	-76.8	14.3	-89.0		16.5	102.2	
	3	20	10.0	-54.2	11.6	-63.6	13.4	-73.8		15.4	84.7	
	3	50	10.0	39.3	10.6	-46.2	12.3	-53.5		14.1	-61.5	
	3	100	10.0	28.1	10.0	-33.0	11.4	38.2		13.0	-43.9	
loof	1	10	14.9	-23.7	17.5	27.8	20.3	32.3		23.3	-37.0	
-10 -30	1	20	13.6	-23.0	16.0	27.0	18.5	-31.4		21.3	36.0	
grees	1	50	11.9	-22.2	13.9	-26.0	16.1	-30.2		18.5	34.6	
_	1	100	10.5	-21.5	12.4	-25.2	14.3	29.3		16.5	33.6	
	2	10	14.9	-50.1	17.5	-58.7	20.3	-68.1		23.3	78.2	
	2	20	13.6	-45.4	16.0	-53.3	18.5	-61.8		21.3	71.0	
	2	50	11.9	-39.3	13.9	-46.1	16.1	-53.5		18.5	61.4	
	2	100	10.5	34.7	12.4	40.7	14.3	47.2		16.5	-54.2	
	3	10	14.9	-50.1	17.5	-58.7	20.3	-68.1		23.3	78.2	
	3	20	13.6	-45.4	16.0	-53.5	18.5	-61.8		21.3	71.0	
	3	50	11.9	39.3	13.9	46.1	16.1	-53.5		18.5	61.4	
	3	100	10.5	34.7	12.4	40.7	14.3	47.2		16.5	-54.2	

		Section/ Chapter							Rat	ionale	Summar	y
of	1	10	23.7	-25.9	27.8	-30.4	32.3	-35.3	37.0	40.5		
15	1	20	23.0	24.6	27.0	-28.9	31.4	-33.5	36.0	38.4		
i 5 rees	1	50	22.2	22.8	26.0	-26.8	30.2	31.1	34.6	35.7		
	1	100	21.5	-21.5	25.2	-25.2	29.3	29.3	33.6	33.6		
	2	10	23.7	-30.3	27.8	-35.6	32.3	-41.2	37.(47.3		
İ	2	20	23.0	29.0	27.0	-34.0	31.4	39.4	36.(45.3		
	2	50	22.2	27.2	26.0	-32.0	30.2	37.1	34.6	42.5		
	2	100	21.5	25.9	25.2	-30.4	29.3	35.3	33.€	40.5		
Ĩ	3	10	23.7	-30.3	27.8	-35.6	32.3	41.2	37.(47.3		
	3	20	23.0	29.0	27.0	-34.0	31.4	39.4	36.(45.3		
	3	50	22.2	27.2	26.0	-32.0	30.2	37.1	34.6	42.5		
	3	100	21.5	25.9	25.2	-30.4	29.3	35.3	33.€	40.5		
	4	10	25.9	-28.1	30.4	-33.0	35.3	-38.2	40.5	43.9		
	4	20	24.7	-26.9	29.0	-31.6	33.7	-36.7	38.7	42.1		
	4	50	23.2	-25.4	27.2	-29.8	31.6	-34.6	36.2	39.7		
	4	100	22.0	24.2	25.9	-28.4	30.0	-33.0	34./	1 -37.8		
	5	10	25.9	34.7	30.4	-40.7	35.3	47.2	40.5	5 -54.2		
	5	20	24.7	-32.4	29.0	-38.0	33.7	44.0	38.7	-50.5		
	5	50	23.2	-29.3	27.2	-34.3	31.6	39.8	36.2	45.7		
ĺ	5	100	22.0	-26.9	25.9	31.6	30.0	-36.7	34./	42.1		
	<u> </u>	For SI: 1 square foot = 0.0929 m ₂ , 1 mph = 1. For effective areas or wind speeds between otherwise use the load associated with the lower effective area. 2. Table values shall be adjusted for height a in Table 1609.6D. 3. See Figure 1609.6C for location of zones. 4. Plus and minus signs signify pressures act	0.447 m/s, 1 n those given nd exposure l	psf = 47 above th	88 N/m 2 re load m	- ay be inte adjustme	rpolated		<u> </u>			

Section/ Chapter	Rationale	Summary
TABLE 1609.6.2.1(2)		
NET DESIGN WIND PRESSURE (COMPONENT AND CLADDING), pnet30 (Exposure B at h= 30 feet with Iw = 1.0) (psf)		

Sect	tion/	Chapte		0		mca											tion				Summary
		EFFECTIVE				7.7		E	BASIC V	VIND SI	PEED V	(mph-	3-3ecc	ond gua	t)		18				
	ZONE	WIND AREA		35		00	- 1	00		10		20		30	14	40	- 1	50	1	70	
	11	10	5.3	-13.0	5.9	-14.6	7.3	-18.0	8.9	-21.8	10.5	-25.9	12.4	+30.4	14.3	-35.3	16.5	-40.5	21.1	-52.0	
	- 11	20	5.0	-12.7	5.6	-14.2	6.9	-17.5	8.3	-21.2	9.9	-25.2	11.5	-29.6	13.4	-34.4	15.4	-39.4	19.8	-50.7	
	1	50	4.5	-12.2	5.1	-13.7	6.3	-16.9	7.6	-20.5	9.0	-24.4	10.5	-28.6	12.3	-33.2	14.1	-38.1	18.1	-48.9	
97	1	100	4.2	-11.9	4.7	-13.3	5.8	-16.5	7.0	-19.9	8.3	-23.7	9.8	-27.8	11.4	-32.3	13.0	-37.0	16.7	-47.6	
ě	2	10	5,3	-21.8	5.9	-24.4	7.3	-30.2	8.9	36.5	10.5	-43.5	12.4	-51.0	14.3	-59.2	16.5	-67.9	1000	-87.2	
ě	2	20	5.0	-19.5	5.6	-21.8	6.9	-27.0	8.3	-32.6	9.9	-38.8	11.5	-45.6	13.4	-52.9	15.4	-60.7	19.8	-78.0	
2	2	50	4.5	-16.4	5.1	-18.4	6.3	-22.7	7.6	-27.5	9.0	-32.7	10.5	-38.4	12,3	-44.5	14.1	-51.1	18.1	-65.7	
Roof 0 to 7 degrees	2	100	4.2	14.1	4.7	15.8	5.8	19.5	7.0	23.6	8.3	28.1	9.8	33.0	11.4	38.2	13.0	43.0	16.7	56.4	
8	0	10	5.3	-32.8	5.9	-36.8	7.3	45.4	8.9	55.0	10.5	-65.4	12.4	-76.8	14.3	-89.0	16.5	-102.2	1000	-131.3	
	0	20	5.0	-27.2	5.6	-30.5	6.9	-37.6	8.3	45.5	9,9	-54.2	11.5	-63.6	13.4	-73.8	15.4	-84.7	19.8	-108.7	
			4.5	19.7	1	22.1		27.3		33.1	9.0	39.3	10.5		12.3	ll .		1		78.9	
	3	60	4.2		5.1		6.3	10.5	7.6					46.2		53.5	14.1	61.5	18.1		
-	3	100		14.1	4.7	15.8	5.8		7.0	23.6	8.3	28.1	9.8	33.0	11.4	38.2	13.0	43.9	16.7	56.4	
	1	10	7.5	-11.9	8.4	-13.3	10.4	-16.5	12.5	-19.9	14.9	-23.7	17.5	-27.8	20.3	-32.3	23.3	-37.0	30.0	47.6	
	- 1	20	6.8	-11.6	7.7	-13.0	9.4	-16.0	11.4	-19.4	13.6	-23.0	16.0	-27.0	18.5	-31.4	21.3	-36.0	27.3	-16.3	
90	1	50	6.0	-11.1	6.7	-12.5	8.2	-15.4	10.0	-18.6	11.9	-22.2	13.9	-26.0	16.1	-30.2	18.5	-34.6	23.8	-44.5	
degrees	1	100	5.3	-10.8	5.9	-12.1	7.3	-14.9	8.9	-18.1	10.5	-21.5	12.4	-25.2	14.3	-29.3	16.5	-33.6	21.1	-43.2	
de	2	10	7.5	-20.7	8.4	-23.2	10.4	-28.7	12.5	-34.7	14.9	-41.3	17.5	-48.4	20.3	-56.2	23.3	-64.5	30.0	-82.8	
0 27	2	20	6.8	-19.0	7.7	-21.4	9.4	-26.4	11.4	31.9	13.6	-38.0	16.0	+44.6	18.5	-51.7	21.3	-59.3	27.3	-76.2	
>7 to 27	2	50	6.0	-16.9	6.7	-18.9	8.2	-23.3	10.0	-28.2	11.9	-33.6	13.9	-39.4	16.1	-45.7	18.5	-52.5	23.8	-67.4	
900 1	2	100	5.3	-15.2	5.9	-17.0	7.3	-21.0	8.9	-25.5	10.5	-30.3	12.4	-35.6	14.3	-41.2	16.5	-47.3	_	-60.8	
ŭ	3	10	15	-30.6	8.4	-34 3	10.4	-42.4	12.5	-513	14.9	-61.0	17.5	-/1.6	20.3	-83.1	23.3	-95.4	30:0	-122.5	
	3	20	6.8	-28.6	1.7	-32.1	9.4	-39.6	11.4	47.9	13.6	-57.1	16.0	-67.0	18.5	+77.7	21.3	-89.2	27.3	-114.5	
	9	50	6.0	-26.0	6.7	-29.1	8.2	-36.0	10.0	43.5	11.9	-51.8	13.9	-60.8	16.1	-70.5	18.5	-81.0	23.8	-104.0	
	3	100	53	-24 ()	50	-26.9	7.3	-33.2	8.9	-40.2	10.5	-47.9	12.4	-56.2	14 3	-65 1	16.5	-74 X	21.1	-96.0	
	1	10	11.9	-13.0	13.3	-14.6	16.5	-18.0	19.9	-21.8	73.7	-25.9	218	-30.4	32.3	-35 3	37.0	-40.5	4/6	-52.0	
	1	20	11.6	-12.3	13.0	-13.8	16.0	-17.1	19.4	-20:7	23.0	-24.6	27.0	-28.9	31.4	-33.5	36.0	-38.4	46.3	-49.3	
	1	50	11.1	-11.5	12.5	+12.8	15.4	-15.9	18.6	-19.2	22.2	-22 X	26.0	-26.X	30.2	-31.1	34.6	-35.7	44.5	-45.X	
cegraes	1	100	10.8	-10.8	12.1	-12.1	14.9	-14 9	18.1	-18.1	21.5	-21.5	25.2	-25.2	29.3	-29.3	330	-33 h	43.2	-432	
ceg	2	10	11.9	-15.2	13.3	-17.0	16.5	-21.0	19.9	-25.5	23.7	-303	27.8	-35.6	32.3	-412	37.0	-4/3	4/6	-60.8	
50	2	20	11.6	-14.5	13.0	-16.3	16.0	-20.1	19.4	-24.3	23.0	-29.0	27.0	+34.0	31.4	-39.4	36.0	-45.3	46.3	-58.1	
>27to	z	50	TLE	-13.7	12.5	-15.5	15.4	-18.9	18.0	-22.9	22.2	-27.2	26.9	-32.0	30.2	-37.1	34.0	42.5	44.5	-54.0	
^	2	100	10.8	-13.0	12.1	-14.6	14.9	-18.0	18.1	-21.8	21.5	-25.9	25.2	-30.4	29.3	-35.3	33.6	40.5	43.2	-52.0	
Roof	3	10	11.9	-15.2	13.3	-17.0	16.5	-21.0	19.9	-25.5	23.7	-30.3	27.5	-35.6	32.3	-41.2	37.0	-47.3	47.6	-60.8	
	3	20	11.6	-14.5	13.0	-16.3	16.0	-20.1	19.4	-24.3	23.0	-29.0	27.0	-34.0	31.4	-39.4	36.0	-45.3	46.3	-58.1	
	3	50	11.1	-13.7	12.5	-15.3	15.4	-18.9	18.6	-22.9	22.2	-27.2	26.0	-32.0	30.2	-37.1	34.6	-42.5	44.5	-54.6	
	3	100	10.8	-13.0	12.1	-14.6	14.9	-18.0	18.1	-21.8	21.5	-25.9	25.2	-30.4	29.3	-35.3	33.6	40.5	43.2	-52.0	
	4	10	13.0	-14.1	14.6	-15.8	18.0	-19.5	21.8	-23.6	25.9	-28.1	30.4	-33.0	35.3	-38.2	40.5	-43.9	52.0	-56.4	
	4	20	12.4	-13.5	13.9	-15.1	17.2	-18.7	20.8	-22.6	24.7	-26.9	29.0	-31.6	33.7	-36.7	38.7	-42.1	49.6	-54.1	
	4	50	11.6	-12.7	13.0	-14.3	16.1	-17.6	19.5	-21.3	23.2	-25.4	27.2	-29.8	31.6	-34.6	36.2	-39.7	46.6	-51.0	
	4	100	11.1	-12.2	12.4	-13.6	15.3	-16.8	18.5	-20.4	22.0	-24.2	25.9	-28.4	30.0	-33.0	34.4	-37.8	44.2	-48.6	
_	4	500	9.7	-10.8	10.9	-12.1	13.4	-14.9	16.2	-18.1	19.3	-21.5	22.7	-25.2	26.3	-29.3	30.2	-33.6	38.8	-43.2	
//a				-17.4	14.6		18.0	-24.1	21.8	-29.1	25.9	-34.7	30.4	-40.7	35.3	-47.2	40.5	-54.2	52.0	-69.6	
	5	10	13.0					-24.1										-34.2			
	5	20	12.4	-16.2	13.9	-18.2	17.2		20.8	-27.2	24.7	-32.4	29.0	-38.0	33.7	-44.0	38.7		49.6	-64.9	
	5	50	11.6	-14.7	13.0	-16.5	16.1	-20.3	19.5	-24.6	23.2	-29.3	27.2	-34.3	31.6	-39.8	36.2	-45.7	46.6	-58.7	
	5	100	11.1	-13.5	12.4	-15.1	15.3	-18.7	18.5	-22.6	22.0	-26.9	25.9	-31.6	30.0	-36.7	34.4	-42.1	44.2	-54.1	

		Section/ Chapter				101 101 0	<u> </u>	Ration		Dunuing Commission.	Summary
		PRESSURES FOR A BU	MPONEN' ILDING V	ABLE 1609.6C ONENT AND CLADDING DESIGN WIND NG WITH MEAN ROOF HEIGHT OF 30 'ED IN EXPOSURE B (psf) BASIC WIND SPEED V (mph - 3 second g						Il provide clarity and a ASCE 7-02	Editorial change by staff
	ZONI			BASI	C WIND SI	PEED V (mp	oh - 3-second	gust)			
		WIND AREA (ft 2)	90	100	110	120	130	140	150		
Roof	2	10	-21.0	-25.9	-31.4	-37.3		-50.8	-58.3		
≥ 0 to 10	2	20	-20.6	-25.5	-30.8	-36.7	-43.0	<u> 19.9</u>	-57.3		
Degrees	2	50	-20.1	-24.9	-30.1	-35.8	-42.0	-4 8.7	-55. 9		
	2	100	-19.8	-24.4	-29.5	-35.1		-47.8	-54.9		
	3	10	-34.6	-42.7	-51.6	-61.5	-72.1	-83.7	-96.0		
	3	20	-27.1	-33.5	-40.5	-48.3	-56.6	-65.7	-75.4		
	3	50	-17.3	-21.4	-25.9	-30.8	-36.1	-41.9	-48.1		
	3	100	-10.0	-12.2	-14.8	-17.6	-20.6	-23.9	-27.4		
Roof	2	10	-27.2	-33.5	-40.6	-48.3	-56.7	-65.7	-75.5		
> 10 to 30	2	20	-27.2	-33.5	-40.6	-48.3	-56.7	-65.7	-75.5		
Degrees	2	50	-27.2	-33.5	-40.6	-48.3	-56.7	-65.7	-75.5		
	2	100	-27.2	-33.5	-40.6	-48.3	-56.7	-65.7	-75.5		
	3	10	-45. 7	-56.4	-68.3	-81.2	-95.3	-110.	-126.		
	3	20	4 0.5	-50.0	-60.5	-72.0	-84.5	-98.0	-112.		
	3	50	-33.6	-41.5	-50.2	-59.7	-70.1	-81.3	-93.3		
	3	100	-28.4	-35.1	-42.4	-50.5	-59.3	-68.7	-78.9		
Roof	2	10	-24.7	-30.5	-36.9	-43.9	-51.5	-59.8	-68.6		
> 30 to 45	2	20	-24.0	-29.6	-35.8	-42.6	-50.0	-58.0	- 66.5		
egrees	2	50	-23.0	-28.4	34.3	-40.8	-47.9	-55.6	-63.8		
	2	100	-22.2	-27.4	-33.2	-39.5	-46.4	-53.8	-61.7		

	Section	n/ Chapter						Ra	tionale	Summary
3		10	-24.7	-30.5	-36. 9	-43. 9	-51.5	-59.8	-68.6	
3		20	-24.0	-29.6	-35.8	-42.6	-50.0	-58.0	-66.5	
3		50	-23.0	-28.4	-34.3	-40.8	-47.9	-55.6	-63.8	
3		100	-22.2	-27.4	-33.2	-39.5	-46.4	-53.8	-61.7	
	NOTE: I	psf = 47.88 N/m ₂ , 1 ft For effective areas betw issociated with the low	veen those give er effective are	n above the l	oad may be	interpolated,	otherwise us	se		
	ROO	F OVERHANG N				RE (COM	IPONENT	<u>r</u>		
				<u>AND</u>						

Sectio	n/ Chap							Rationale		ling Commis	Summary
<u>(</u>	CLADD	ING), pnet30	(Exposure	e B at h= 30	feet with I	$\mathbf{w} = 1.0$) (p	<u>sf)</u>				
		EFFECTIVE			BASIC \	WIND SPEED V	(mph-3-sec	ond gust)			
	ZONE	WIND AREA (sq. ft.)	90	100	110	120	130	140	150	170	
	2	10	-21.0	-25.9	-31.4	-37.3	-43.8	-50.8	-58.3	-74.9	
se l	2	20	-20.6	-25.5	-30.8	-36.7	-43.0	-49.9	-57.3	-73.6	
7 degrees	2	50	-20.1	-24.9	-30.1	-35.8	-42.0	-48.7	-55.9	-71.8	
7 de	2	100	-19.8	-24.4	-29.5	-35.1	-41.2	-47.8	-54.9	-70.5	
0 to	3	10	-34.6	-42.7	-51.6	-61.5	-72.1	-83.7	-96.0	-123.4	
Roof	3	20	-27.1	-33.5	-40.5	-48.3	-55.6	-65.7	-75.4	-96.8	
Œ	3	50	-17.3	-21.4	-25.9	-30.8	-35.1	-41.9	-48.1	-61.8	
	3	100	-10.0	-12,2	-14.8	-17.6	-20.6	-23.9	-27.4	-35.2	
	2	10	-27.2	-33.5	-40.6	-48.3	-55.7	-65.7	-75.5	-96.9	
se s	2	20	-27.2	-33.5	-40.6	-48.3	-55.7	-65.7	-75.5	-96.9	
degrees	2	50	-27.2	-33.5	-40.6	-48.3	-55.7	-65.7	-75.5	-96.9	
27 d	2	100	-27.2	-33.5	-40.6	-48.3	-55.7	-65.7	-75.5	-96.9	
7 to	3	10	-45.7	-56.4	-68.3	-81.2	-95.3	-110.6	-126.9	-163.0	
Λ.	3	20	-41.2	-50.9	-61.6	-73.3	-85.0	-99.8	-114.5	-147.1	
Roof	3	50	-35.3	-43.6	-52.8	-62.8	-73.7	-85.5	-98.1	-126.1	
	3	100	-30.9	-38.1	-46.1	-54.9	-64.4	-74.7	-85.8	-110.1	
	2	10	-24.7	-30.5	-36.9	-43.9	-51.5	-59.8	-68.6	-88.1	
898	2	20	-24.0	-29.6	-35.8	-42.6	-50.0	-58.0	-66.5	-85.5	
degrees	2	50	-23.0	-28.4	-34.3	-40.8	-47.9	-55.6	-63.8	-82.0	
45	2	100	-22.2	-27.4	-33.2	-39.5	-45.4	-53.8	-61.7	-79.3	
2	3	10	-24.7	-30.5	-36.9	-43.9	-51.5	-59.8	-68.6	-88.1	
> 27	3	20	-24.0	-29.6	-35.8	-42.6	-50.0	-58.0	-66.5	-85.5	
Roof	3	50	-23.0	-28.4	-34.3	-40.8	-47.9	-55.5	-63.8	-82.2	
-	3	100	-22.2	-27.4	-33.2	-39.5	-45.4	-53.8	-61.7	-79.3	
	foot = 304 7.9 N/m2.	4.8 mm, 1 degr	ree = 0.0174 rs	ad, 1 mile per l	nour = 0.45 m	s, 1 pound per	square				

Section/ Chapter			Rationale	0	Summary
Note: For effective areas between those given above, the load is personnerwise use the load associated with the lower effective area.	mitted to be interpo	olated,			
TABLE 1609.6D ADJUSTMENT FACTOR FOR BUILDING HEIGHT λ)	HT AND EXP	OSURE, (Will provide clarity and rith ASCE 7-02	Editorial change by staff
MEAN ROOF HEIGHT		EXPOSURE			
(feet)	B	C	Ð		
15	1.00	1.21	1.47		
20	1.00	1.29	1.55		
25	1.00	1.35	1.61		
30	1.00	1.40	1.66]	
35	1.05	1.45	1.70]	
40	1.09	1.49	1.74]	
45	1.12	1.53	1.78]	
50	1.16	1.56	1.81]	
55	1.19	1.59	1.84]	
60	1.22	1.62	1.87]	
For SI: 1 foot = 304.8 mm. a. All table values shall be adjusted for other exposures and heights coefficients. NOTE: All tables values shall be adjusted for other exposures and habove coefficients.				_	

Section/ Chapter			Ratio	ie Florida Building Commiss nale		Summary
ADJUSTMENT FACTOR FO	ABLE 1609.6.2.1(4) OR BUILDING HEIGHT A	ND EXPOSURE, ()				
MEAN ROOF HEIGHT		EXPOSURE				
(feet)	B	c		D 1.47		
15	1.00	1.21		1.47		
20	1.00	1.29		1.55		
25 30	1.00	1.40		1.61		
35	1.05	1.45		1.66		
40	1.09	1.49				
				1.74		
45	1.12	1.53		1.78		
50	1.16	1.56		1.81		
55	1.19	1.59		1.84		
60 For SI: 1 foot = 304.8 mm.	1.22	1.62	<u>_</u>	1.87		
a. All table values shall be adjusted for coefficients.	r other exposures and heights by mu	ltiplying by the above				
<u>coefficients.</u>						
1609.6.5.1 Garage doors <u>ar</u> 1609.6E for wind loading ac buildings designed as enclos	tions on garage doors and r		includ forma	1085] Table 1609.6E, as curreled in the Florida Building Cotted for both garage doors and	de, is	Adds language to include rolling doors to
1609.1.4 Protection of open	ings. In wind-borne debris	rolling doors. Common rolling door parameters include 8'x8', 10'x10' and			section 1609.5.1 and to	
glazing that receives positive buildings shall be assumed to	be openings and the balar	with u	4' doors mounted on building up to 10 degrees roof slope, as		title of Table 1609.6E	
openings in the rest of the buglazing that receives positive an impact resistant covering	e pressure is impact resistar	nt or protected with	provid	ded for in the Table.		

Section/ Chapter	Rationale	Summary
E 1886 and ASTM E 1996, ANSI/DASMA 115 (for garage doors and		
rolling doors) or Miami-Dade TAS 201, 202 and 203 referenced therein as		
follows:		
1609.2.2.2 6.5.1 Garage doors and rolling doors. Pressures from Table		
1604.6.2.1(5) Table 1609.E for wind loading actions on garage doors and		
rolling doors for buildings designed as enclosed shall be permitted.		
Table 1609.6E		
GARAGE DOOR AND ROLLING DOOR WIND LOADS FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET		
LOCATED IN EXPOSURE B (psf)		
(remainder of table unchanged)		
(Termaniaer of table unemangea)		
Table 1609.6E <u>1609.2.1(5)</u>		
GARAGE DOOR AND ROLLING DOOR WIND LOADS FOR A		
BUILDING WITH A MEAN ROOF HEIGHT OF 30 FEET		
LOCATED IN EXPOSURE B (psf)		
[Remainder of table unchanged.]		
	[Mod 1747] Editorial change to be	Editorial
	consistent with the code format with	change by
	regards to standard reference. Year	staff; Deletes
	edition is included in Chapter 35.	year edition of
		ASCE 7 on
		map key

Wind-borne Debris Region Designated area Areas within 1 mile of the coastal mean high water line		
Areas within 1 mile of the coast Areas within 1500 feet of the coastal mean high		
Areas within 1500 feet of the coastal mean high		1
the coastal mean high		
water line		
Basic Wind Speed		
Values are nominal design, 3-second gust, wind speeds in miles per hour (mph) at 33 feet (10 m) above ground for Exposure C Category.		
This map is accurate to the county. Local governments establish specific wind speed/wind-borne debris lines using physical landmarks such as major roads, canals, rivers, and shorelines.		
Islands and coastal areas outside the last contour shall use the last wind-speed contour of the coastal area.		
ng	5	57

This is only to provide rationale for code change proposals submitted. For final language specific to the 2004 code, more details regarding the sections in the code, and correct wording, please see the 2006 Supplement. Please see the proposed code change modifications for text submitted for consideration by the Florida Building Commission.

Section/ Chapter	Rationale	Summary
1618.9 Load Combination. The safety of structures shall be checked using	[Mod 1182] ASCE 7 Section 2.4.3	Revises
provisions of 2.3 and 2.4 of ASCE 7 with commentary.	mentioned in exception refers to ASCE	referenced
Exception: Increases in allowable stress shall be permitted in accordance	7- 98. Applicable standard now is ASCE	section of
with ACI 530/ASCE 5/TMS 402 provided the load reduction factor of 0.75	7- 02, therefore Section 2.4.3 must be	ASCE 7 and
of combinations 4 and 6 of ASCE 7 Section 2.4.3 1 shall not be applied.	revised to the correct reference to	adds text
	Section 2.4.1. The added <u>factor of 0.75</u>	
	and combination 4 and 6 of clarifies the	
	intent.	
1620.3 All buildings and structures shall be considered to be in Exposure	[Mod 1193] Section 1620.3 refers to	Revises
Category C as defined in Section 6.5.6.43 of ASCE 7.	Section 6.5.6.1 of ASCE 7- 98. New	referenced
_	Applicable Standard is ASCE 7- 02,	section of
	therefore reference must be revised to	ASCE 7 in text
	the correct Section 6.5.6.3 of ASCE -	
	02.	
1624.2 Wind effects. Where the pressure on the foundation from wind is	[Mod 1175] The combined effects of	Deletes both
less than 25 percent of that resulting from dead or other live loads, wind	two or more variable loads with dead	sections
pressure may be neglected in the footing design.	load is accurately specified with a	entirely
1624.2.1 Where this percentage exceeds 25 percent, foundations shall be so	reduction factor of 0.75 in load	
designed that the pressure resulting from the combined dead, live and wind	combination 6 of Section 2.4.1 of	
loads shall not exceed the allowable soil-bearing values or allowable loads	American Society of Civil Engineers	
per pile by more than 25 percent.	Standard ASCE 7- 02. Section 1624.2,	
	which permits wind pressure to be	
	neglected for the design of footing, if it	
	is less than 25 % of dead or other live	
	loads is not required in the code.	
	Similarly Section 1624.2.1, which	
	specifies 25 % increase in allowable	
	bearing pressure for combined dead, live	

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Section/ Chapter	Rationale	Summary
1714.5.2.1 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/NWWDA 101/I.S. 2 or 101/I.S. 2/NAFS or AAMA/WDMA/CSA 101/I.S. 2/A440 or TAS 202 (HVHZ shall comply with TAS 202 utilizing ASTM E 1300-98 or ASTM E 1300-02 or Section 2404). Glass Strength: Products tested and labeled as conforming to AAMA/NWWDA 101/I.S.2 or 101/I.S.2/NAFS or AAMA/WDMA/CSA 101/I.S. 2/A440 or TAS 202 shall not be subject to the requirements of Sections 2403.2 or 2403.3 or 2404.1. Determination of load resistance of glass for specific loads of products not tested and certified in accordance with s. 1714.5.2.1 shall be designed and labeled to comply with ASTM E 1300.in accordance with Section 2404. The label shall designate the type and thickness of glass or glazing material.	and wind loads and 25% increase in allowable loads per pile is not required in the code. Deletion of these two sections will avoid duplication and confusion. [Mod 1852rev] 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 the window assemble meet or exceeds the actual design pressure requirements.	Adds reference to ASTM E 1300 and requirement for label
1714.5.2.1.Testing and labeling. Exterior windows and glass doors shall be tested by an approved independent testing laboratory, and shall be	[Mod 1167rc] Provides approved and tested products for homeowners, which	Adds ASTM F 588 and ASTM

Section/ Chapter	Rationale	Summary
labeled with an approved label identifying the manufacturer, performance characteristics and approved product certification agency, testing laboratory, evaluation entity or Miami-Dade Product Approval 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/I.S. 2/A440 or TAS202 (HVHZ shall comply with TAS 202 utilizing ASTM F1300 or section 2404)	choose to use mulled units in their dwelling. It also simplifies the local and statewide Product approval Process.	F 842 as referenced standards for forced entry requirements for testing and labeling of
with TAS 202 utilizing ASTM E1300 or section 2404). Glass Strength: Determination of load resistance of glass for specified loads of products tested and certified in accordance with Section 1714.5.2.1. shall be designed to comply with ASTM E 1300 in accordance with section 2004.		exterior glazing. See Mod 1852.
Mullions, other than mullions which are an integral part of a window or glass door assembly tested and labeled in accordance with Section 1714.5.2.1 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 eriteria cited in Sections 1714.5.5.2, 1714.5.5.3 and 1714.5.5.4.		
1714.5.5.1.1 Engineered Mullions. Mullions qualified by accepted engineering practice shall comply with the performance criteria in Sections 1714.5.5.2, 1714.5.5.3 and 1714.5.5.4. 1714.5.5.1.2 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 1714.5.5.2, 1714.5.5.3 and 1714.5.5.4.		

Section/ Chapter	Rationale	Summary
1714.5.5.1.3 Mullions tested in an assembly. Mullions qualified by a		
test of an entire assembly in accordance with AAMA 450 shall comply		
with Sections 1714.5.5.2 and 1714.5.5.4		
1714.5.3 Exterior Door Assemblies. Exterior door assemblies not covered	[Mod 1086] Separating out sectional	Adds ASTM E
by Section 1715.4.2 or Section 1714.5.3.1 shall be tested for structural	garage doors from Section 1714.5.3 was	330 Procedure
integrity in accordance with ASTM E330 Procedure A, at a load of 1.5	not intended to exclude testing to ASTM	A as a
times the required design pressure load. The load shall be sustained for 10	E 330 for such doors.	referenced
seconds with no permanent deformation of any main frame or panel	D 11: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	standard and
member in excess of 0.4 percent of its span after the load is removed.	Rolling doors have also been included in	guidelines for
High-velocity hurricane zones shall comply with TAS 202. After each	the scope of Section 1714.5.3.1 because	compliance
specified loading, there shall be no glass breakage, permanent damage to fasteners, hardware parts, or any other damage which causes the door to be	testing of those products is similar to provisions applying to sectional garage	
inoperable.	doors.	
тюрегаоте.	40018.	
The minimum test sizes and minimum design pressures shall be as	A code requirement for ASTM E 330	
indicated in Table 1714.5.3.	based testing of "a load 1.5 times the	
	required design pressure load sustained	
The unit sizes tested shall qualify all units smaller in width and/or height of	for 10 seconds" is needed because	
the same operation type and be limited to cases where frame, panels and	ASTM E 330 does not include this	
structural members maintain the same profile as tested.	specific requirement.	
1714.5.3.1 Sectional garage doors <u>and rolling doors</u> shall be tested for	Acceptance criteria in ANSI/DASMA	
determination of structural performance under uniform static air pressure	108 reflect criteria the garage door	
difference in accordance with ANSI/DASMA 108, ASTM E 330 Procedure	industry has successfully used for many	
A, or TAS 202. For products tested in accordance with ASTM E 330,	years, and should be applicable to testing	
testing shall include a load of 1.5 times the required design pressure load	in accordance with ASTM E 330	
sustained for 10 seconds, and acceptance criteria shall be in accordance	because that standard does not have such	

This is only to provide rationale for code change proposals submitted. For final language specific to the 2004 code, more details regarding the sections in the code, and correct wording, please see the 2006 Supplement. Please see the proposed code change modifications for text submitted for consideration by the Florida Building Commission.

Section/ Chapter	Rationale	Summary
with ANSI/DASMA 108. HVHZ shall comply with TAS 202.	criteria.	
1714.5.3.3.1	[Mod 1242] Requiring compliance to	Adds
Glazed curtain wall, window wall and storefront systems shall be tested in	AAMA 501 as stated in section	additional
accordance with the requirements of this section and the requirements of	1714.5.3.3.1 was meant to achieve	testing
the American Architectural Aluminum Manufacturers Association	compliance of glazed curtain wall,	requirement
(AAMA) Standard 501, HVHZ shall comply with 2411.3.2.1.1.	window wall and storefront systems with	1
	the intend of the code which, guarantees	
	the health, safety and welfare of the	
	general public. It was not intended,	
	however, to raise the cost of commercial	
	buildings by requiring mandatory field-	
	testing. The proposed change will	
	maintain the nationally recognized	
	modus, whereby; the number and type of	
	field tests is defined by contractual	
	conditions between the commercial	
	project developer and the fenestration	
	product supplier.	
2002.2.1 Definitions	[Mod 1906r] The proposal is a	Adds
PRIMARY MEMBER. Structural framing members providing structural	companion to the changes made to Table	definitions for
support to other members and/or surfaces of a structure including, but not	2002.4 addressing items formerly	"primary
limited to beams, posts, columns, joists, structural gutters, headers, purlins	addressed in the notes to the table and	member",
etc.	within the table.	"secondary
SECONDARY MEMBERS. Structural framing members which do not		members", and
provide basic support for the entire structure, generally including, but not		"structural
limited to, such members as kickplate rails, chair rails, roof or wall panels,		members";
etc.		Deletes and
STRUCTURAL MEMBERS. Members or sections that provide support		replaces text in

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Section	n/ Chapter	<u> </u>									Rationale	Summary
of to a	n assembly ar	nd/or resist applied loads.										2002.4
2002.3	.2 Screen den	sity sha	all be a	maxii	num o	f 20X2	0 mesl	n.				
	Design. Struc											
	ed to support 1											
	ue is less thar											
	ers supporting											
	of two orthogo			_			_					
	. Each primar	-										
	ad applied ver					-		of any	<u>Y</u>			
membe	er, not occurri	ng sim				nd load	<u>d.</u>					
DECI	GN WIND PRI	CCTIDI		BLE 20		SCDEI	enien e	NCI O	CHDEC		[Mod 1919] The table being modified is	Revises Table
DESI							77{1,2,		SUKES		a Florida Specific amendment based on	2002.4
							Wind		(mph)		research done by Dr. Timothy Reinhold,	
		100		110		120		130	(F)	14	P.E. and sponsored by the Aluminum Association of Florida, a contractor	
Load	Wall	Expo	sure C	ategor	v (B or	C) De	sign P	ressure	e (psf)			
Case	Surface	1 -					- 0		(1)		organization. In the aftermath of the	
		СB	BC	СB	BC	CB	BC	CB	BC	CI	storms of 2004 the Aluminum Association of Florida (AAF) as well as	
\mathbf{A}^4	Windward	12	8	14	10	17	12	19	14	23	many others questioned the large number	
	and		<u>17</u>	13	18	15	21	18	<u>25</u>	21	of sereen effclosure failures where the	
	leeward						_				reported wind speeds did not even	
	walls											
	(flow thru)										approach the basic design wind speeds. We discovered a vast disparity in the	
	and										engineering being used to erect such	
	windward										structures. One jurisdiction did a	
	wall (non										comparison of plans it had on file and	
	flow thru)										comparison or plans it had on the and	

Section	/ Chapter										Rationa	le			Summary
A ⁴	L/W = 0-1 Horizontal Pressure on Windward Surfaces Windward and leeward walls (flow thru) and windward windward windward windward windward pressure on Leeward Surfaces	13 10	9 13	16 10	11 <u>14</u>	19 <u>13</u>	14 17	22 14	16 <u>19</u>		span of engineer allowing the same To deal engineer AAPspall 23gir aluminu grown to develop for alum modifica recomm group or gro	feet fand signal a spar with the sing of metric a ground inum settions tendation to the continum settions the signal a spar with the sign	or a mogned as in except by a ewide alumin lawon to tures. up of esensus tructure or Tablons of the ers (2 inues to the ers (2)	ed plans allowing a ember from one nd sealed plans cess of 20 feet for another engineer. disparity in the lum structures the kshop and invited o be designing. The workshop has ngineers design provisions es. The e 2002.4 are his consensus 0 to 30 engineers). o meet under the	
B ⁵	Windward: Nongable Roof	16	12	20	14	24	17	28	20	32	23	37	26		
B ⁵	Windward:	22	16	27	19	32	23	28	27	44	31	50	36		

Sectio	n/ Chapter										Ration	ale			Summary
	Gable		Ī												
	Roof														
All ⁶	Roof	4	3	5	4	6	4	7	5	8	6	9	7	1	
	screen	<u>3</u>	<u>5</u>	<u>4</u>	<u>5</u>	<u>4</u>	<u>6</u>	<u>5</u>	<u>7</u>	<u>6</u>	8	<u>7</u>	9		
	Vertical	_	-		-			-	-				-		
	Pressure –														
	Screen														
	Surfaces														
	Burraces													†	
All ⁶	Roof Solid	12	9	15	11	18	13	21	15	24	17	28	20	†	
	Vertical	10	14	11	15	13	18	<u>15</u>	21	17	24	20	28		
	Pressure –	10	1.	11	15	13	10	15	21	1/	2.	20	20		
	Solid														
	Surfaces														
Press 2. Mi 1609 2. Lo roof l multi	lues have been re ures include impe nimum design pr	e to scre (10 m) o	factors of the shall be been Prese or less. It table by	determing 10 psf (ssures are are the fact	ned in ad 479 Pa) oply to e en enclo	ccordand in accordance enclosure sures of pressure	ce with 'rdance we with a fifterences given	Table 16 vith Secons n mean 6 other shall be	604.5. tion enclosure heights, adjusted	<u>e</u>					
	r Load Case A Fl														
simul	taneously to both	the up	wind an	d down	wind se i	reen wa l	ls acting	; in the	same						
	tion. For the non-							hall be	analyzec	1					
	e load applied ac							. 1	C (1						
	r Load Case B the n enclosure is the									,					
~ ~ ~ ~ -															

Section/ Chapter	Rationale	Summary
		Adds a definition for sunrooms.

Section/ Chapter	Rationale	Summary
	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.	
Increases in allowable unit stresses as set forth for wind loads in Section 1613 shall be applicable to aluminum structural members except that allowable unit stresses thus increased shall not exceed 75 percent of the minimum yield strength. Delete s. 2003.7.1 including exception	[Mod 1142r] Reference to Section 1613 is wrong which is for High Velocity Hurricane Zone Deflection. Original reference in Florida Building Code 2001 was to Section 1621 High Velocity Hurricane Zone Allowable Stress Increase which has been deleted in 2004 Code. The correct reference must be to Section 2.3 of Aluminum Design Manual ADM-1	Replaces reference to FBC Building Section 1613 with Section 2.3 of "Allowable Stress Design Specifications for Aluminum Structures of Aluminum Design Manual ADM-1"
2121.1.6 Minimum No. 9 gauge horizontal joint reinforcing <u>at every</u> <u>alternate course (16 inches spacing)</u> , ladder type for reinforced masonry and truss type for all others shall be provided. This reinforcement shall extend 4 inches (102 mm) into tie columns or be tied to structural columns with approved methods where structural columns replace the tie columns.	[Mod 1369] The spacing for the horizontal reinforcement was missing. Standard for the industry is to provide horizontal reinforcement at least at every alternate course. By adding the spacing it completes the requirement.	Adds spacing requirement to text

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2121.2.3.2 3. Beam block shall be reinforced with one # 7 bar in the top and one # 7 bar in the top bottom of the pour.	[Mod 1344] This is a simple correction of an error. Correct reinforcement should be one #7 at top and one # 7 at bottom instead of both # 7 bars at the top.	Editorial change
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 ealculated by Equation 21-2, but shall not be less than 15 inches (380 mm). $l_{ld} = 0.002d_bf_s \qquad (Equation 21-2)$ For SI: $l_{ld} = 0.29d_bf_s$ 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: $d_b = \text{Diameter of reinforcement, inches (mm)}.$ $f_s = \text{Computed stress in reinforcement due to design loads, psi (MPa)}.$ $\frac{0.16d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $db = \frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ where: $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $\frac{1.95d_b^2 f_y \gamma}{K\sqrt{f_m}}$ $1.$	[Mod 1828c] The new masonry code represents considerable improvement with respect to strength design resulting in more efficient use of masonry materials.	Updates standard.
K = The lesser of the masonry cover, clear spacing between adjacent		

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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.		
<u>In regions of moment where the design tensile stresses</u>		
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		
<u>increase shall be permitted to be used.</u>		
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 . 2108.3 2108.3.1		
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		
2211.2.1 Design shear determination. Where allowable stress design	[Mod 1183] The factor of safety and	Adds a factor
(ASD) is used, the allowable shear value shall be determined by dividing	resistance factors were left out of the	of safety to
(1102) is used, the anomatic shear value shall be determined by dividing	10010 tulico 1001010 were left out of the	or surety to

This is only to provide rationale for code change proposals submitted. For final language specific to the 2004 code, more details regarding the sections in the code, and correct wording, please see the 2006 Supplement. Please see the proposed code change modifications for text submitted for consideration by the Florida Building Commission.

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the nominal shear value, shown in Tables 2211.2(1) and 2211.2(2)— by a factor of safety (omega) which shall be taken as 2.50. Where load and resistance factor design (LRFD) is used, the design shear value shall be determined by multiplying the nominal shear value, shown in Tables 2211.2(1) and 2211.2(2)—by a resistance factor (phi) which shall be taken as 0.55.	2004 Florida Building Code.	allowable shear value.
2214.3 The following standards, as set forth in Chapter 35 of the code, are hereby adopted. 1. American Institute of Steel Construction, AISC: a. Manual of Steel Construction, Allowable Stress Design ASD, AISC-, including Supplement No.1 to the Specification for Structural Steel Buildings, 2001	[Mod 1141] Supplement No.1 was adopted by AISC on December 17, 2001 and is a part of AISC Manual, many people in construction industry are still not aware of this supplement. Purpose of this modification is to inform the public.	Adds "Supplement No.1 to the Specification for Structural Steel Buildings, 2001" as a reference for steel construction in HVHZ
2303.2.2.2 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	[Mod 1476] 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 compliance with ASTM D 6841 as a requirement

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take into consideration the climatological location.		
TABLE 2304.9.1—continued FASTENIING SCHEDULE	[Mod 1742] Editorial change to clarity and enhance the Code	Editorial change by staff
For SI: 1 inch = 25.4 mm. a. Common or box nails are permitted to be used except where otherwise stated. b. Nails spaced at 6 inches on center at edges, 12 inches at intermediate supports except 6 inches at supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing. c. Common or deformed shank. d. Common. e. Deformed shank. f. Corrosion-resistant siding or casing nail. g. Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports.	and chilance the Code	to refer to correct section reference
h. Corrosion-resistant roofing nails with $^{7}/_{16}$ -inch-diameter head and $1^{1}/_{4}$ -inch length for $^{1}/_{2}$ -inch sheathing and $1^{3}/_{4}$ -inch length for $^{25}/_{32}$ -inch sheathing.		
i. Corrosion-resistant staples with nominal $^7/_{16}$ -inch crown and 1 $^1/_{8}$ -inch length for $^1/_{2}$ -inch sheathing and 1 $^1/_{2}$ -inch length for $^{25}/_{32}$ -inch sheathing. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked). j. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.		
k. Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports. I. For roof sheathing applications, 8d nails are the minimum required for wood structural panels.		
m. Staples shall have a minimum crown width of $^{7}/_{16}$ inch. n. For roof sheathing applications, fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.		
 o. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports for subfloor and wall sheathing and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing. p. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports. q. For wind speed regions between 110-140 mph/Exposure B, minimum roof sheathing shall be as indicated. 		

Section/ Chapter	Rationale	Summary
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 1258] 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.	Replaces reference to HIB-91 with reference to BCSI 1-03 and corrects address for TPI
2319.17.2.4.1 All trusses shall be erected in accordance with Truss Plate Institute Manual Commentary and Recommendations for Handling & Bracing Metal Plate Connected Wood Trusses (HIB-91) TPI/WTCA BCSI	[Mod 1256] HIB-91 is no longer published and this change merely updates the reference to the most current	Replaces reference to HIB-91 with
1-03 in addition to any requirements indicated on the approved permit document.	version of truss installation guidelines. The BCSI 1-03 information has been updated and is presented in a more graphical format. The references	reference to BCSI 1-03

Section/ Chapter	Rationale	Summary
(proposes same change for R4409.6.17.2.4.3) 2319.17.2.4.3 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 or 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.	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. [Mod 1099rev] 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	Replaces reference to HIB-91 with reference to BCSI 1-03

Section/ Chapter	Rationale	Summary
	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.	
SECTION 2409	[Mod 1351] The ASTM E1300	Deletes section
GLASS IN FLOORS AND SIDEWALKS	committee does not endorse the use of	2409 in
2409.1 General.	the standard for floor design. E1300	entirety
Glass installed in the walking surface of floors, landings, stairwells and	values utilize an 8 per 1000 probability	
similar locations shall comply with Sections 2409.2 through 2409.4.	of failure. Would any one design,	
2409.2 Design load.	specify, build, approve, or use a floor	
The design for glass used in floors, landings, stair treads and similar	that has a 1/125 chance of failing?	
locations shall be determined as indicated in Section 2409.4 based on the		
load that produces the greater stresses from the following:		
1. The uniformly distributed unit load (Fu) from Section 1605;		
2. The concentrated load (Fc) from Table 1607.1; or		
3. The actual load (Fa) produced by the intended use.		
The dead load (D) for glass in psf (kN/m2) shall be taken as the total		
thickness of the glass plies in inches by 13 (For SI: glass plies in mm by		
0.0245). Load reductions allowed by Section 1607.9 are not permitted.		
2409.3 Laminated glass.		
Laminated glass having a minimum of two plies shall be used. The glass		
shall be capable of supporting the total design load, as indicated in Section		
2409.4, with any one ply broken.		
2409.4 Design formula.		
Glass in floors and sidewalks shall be designed to resist the most critical of		

Section/ Chapter	Rationale	Summary
the following combinations of loads:		
Fg = 2 Fu + D (Equation 24-11)		
$Fg = (8Fc/A) + D \qquad (Equation 24-12)$		
Fg = Fa + D (Equation 24-13)		
where:		
A = Area of rectangular glass, ft2 (m2).		
D = Glass dead load (psf) = 13 tg (for SI: 0.0245 tg, kN/m2).		
tg = Total glass thickness, inches (mm).		
Fa = Actual intended use load, psf (kN/m2).		
Fc = Concentrated load, pounds (kN).		
$F_g = Total load, psf (kN/m2) on glass.$		
Fu = Uniformly distributed load, psf (kN/m2).		
The design of the glazing shall be based on		
Fg £ Fga (Equation 24-14)		
where Fg is the maximum load on the glass determined from the load		
combinations above, and Fga is the maximum allowable load on the glass,		
computed by the following formula:		
Fga = 0.67 c2 Fge (Equation 24-15)		
where:		
Fge = Maximum allowable equivalent load, psf (kN/m2), determined from		
ASTM E 1300 for the applicable glass dimensions and thickness; and		
c2 = Factor determined from ASTM E 1300 based on glass type.		
The factor, c2, for laminated glass found in ASTM E 1300 shall apply to		
two-ply laminates only. The value of Fa shall be doubled for dynamic		
applications.		
2411.3.2.1.1 Glazed curtain wall, window wall and storefront systems	[Mod 1243] Requiring compliance to	Adds
shall be tested in accordance with the requirements of this Section and the	AAMA 501 as stated in section	additional
<u>Laboratory Test</u> requirements of the American Architectural Manufacturers	1714.5.3.3.1 was meant to achieve	testing

This is only to provide rationale for code change proposals submitted. For final language specific to the 2004 code, more details regarding the sections in the code, and correct wording, please see the 2006 Supplement. Please see the proposed code change modifications for text submitted for consideration by the Florida Building Commission.

Section/ Chapter	Rationale	Summary
Association (AAMA) Standard 501, following test load sequence and test load duration in TAS 202.	compliance of glazed curtain wall, window wall and storefront systems with the intend of the code which, guarantees the health, safety and welfare of the general public. It was not intended, however, to raise the cost of commercial buildings by requiring mandatory field-testing. The proposed change will maintain the nationally recognized modus, whereby; the number and type of field tests is defined by contractual conditions between the commercial project developer and the fenestration product supplier.	requirement
2612.2 Definitions. APPROVED FOAM PLASTIC . An approved foam plastic shall be any thermoplastic, thermosetting or reinforced thermosetting plastic material that has a minimum self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929. It shall have a smoke density rating not greater than 450 and a flame spread of 75 or less when tested in accordance with ASTM E 84. APPROVED PLASTIC . An approved plastic shall be any thermoplastic, thermosetting or reinforced thermosetting plastic material which has a self-ignition temperature of 650°F (343°C), or greater when tested in accordance with ASTM D 1929, a smoke density rating no greater than 450 when tested in the way intended for use by ASTM E 84 or a smoke density rating no greater than 75 when tested in the thickness intended for use according to ASTM D 2843 and which meets one of the following	[Mod 1384] This modification will enhance the code by providing clear guidance to the enforcement agencies and the manufacturing industry.	Adds additional text to definition of "approved plastic—class c-2"

8/18/06

Section/ Chapter	Rationale	Summary
combustibility classifications:		
Class C-1. Plastic materials that have a burning extent of 1 inch per minute		
(25.4 mm) or less when tested in nominal 0.060 inch (1.5 mm) thickness or		
in the thickness intended for use by ASTM D 635.		
Class C-2. Plastic materials that have a burning rate of 2½ inches (64 mm)		
per minute or less when tested in nominal 0.060 inch (1.5 mm) thickness or		
in the thickness intended for use by ASTM D 635.		
Approved plastics for outdoor exposure shall be evaluated for outdoor		
durability in accordance with the Voluntary Standard Uniform Load Test		
Procedure for Thermoformed Plastic Domed Skylights, Architectural		
Aluminum Manufacturers Association Publication AAMA 1600 as		
follows:		
1. Outdoor exposure conditions: Specimen exposed in Florida at 45		
degree south exposure for a period of five years. a. Impact testing, after exposure test as above, per ASTM D		
256, and		
b. Tensile testing on controlled and weathered specimen per		
ASTM D 638. Yield strength difference between controlled and weathered		
specimen shall not exceed 10%.		
2. Alternate:		
a. Exposure to xenon arc weatherometer using a 6500-watt		
lamp per ASTMG 155 and ASTM D 2565 for a period of 4,500 hours.		
b. Impact testing, after exposure test as above, per ASTM D		
256 <u>, and</u>		
c. Tensile testing on controlled and weathered specimen per		
ASTM D 638. Yield strength difference between controlled and weathered		
specimen shall not exceed 10%.		

Section/ Ch				Rationale	Summary
Section 270	<u>3</u>				Adds cross
				[Mod 1275] The index points out other	references to
Cross Refer				electrical requirements throughout the	electrical
Cross refer	<u>ences Defining Electrical Requ</u>	irements of the Flo	<u>rida</u>	Florida building codes.	portions of the
Building Co	ode.				code.
*This table	is provided only as a tool to ass	sist the construction	n industry		
	l guide. User should review all				
	e specific applicable electrical				
00 0000111111					
	Florida F	Building Code 2004			
		hapter 27			
		cal Systems			
	·	s Reference			
		ling Code - Building			
Section		Section			
Chapter 1	Administration	Chapter 7	Fire-Resistance	-Rated Construction	
<u>101</u>	General	<u>712</u>	Penetrations		
<u>102</u>	<u>Applicability</u>	<u>714</u>	·	Rating of Structural Members	
<u>105</u>	<u>Permits</u>	<u>715</u>	Opening Prote		
<u>106</u>	Construction Documents	<u>716</u>	Ducts and Air	<u>Fransfer Openings</u>	
<u>107</u>	Temporary Structures and Uses				
108	<u>Fees</u>	Chapter 9	Fire Protection	Systems	
<u>109</u>	Inspections	<u>901</u>	General		
<u>111</u>	Service Utilities	902	<u>Definitions</u>		
Cl 2	D.C. W.	903	Automatic Spr	-	
Chapter 2	<u>Definitions</u>	<u>904</u>		tomatic Fire-Extinguishing	
<u>202</u>	<u>Definitions</u>	007	Systems Eira Alarm and	Detection Systems	
Chantar 2	Use and Occupancy Classification	907 908	Emergency Al		
Chapter 3	Ose and Occupancy Classification	<u>908</u>	Emergency Al	nin systems	

Section/ C	hapter			Rationale	Summary
<u>302</u>	<u>Classification</u>	909	Smoke Control		
<u>306</u>	Factory Group F	<u>910</u>	Smoke and Hea		
<u>307</u>	<u> High -Hazard Group H</u>	<u>911</u>	Fire Command	Center	
<u>311</u>	Storage Group S				
		Chapter 10	Means of Egres	-	
Chapter 4	Special Detailed Requirement	<u>1006</u>	_	s Illumination and Signs	
	Based on Use and Occupancy	<u>1008</u>	Doors, Gates an	nd Turnstiles	
402	Covered Mall Buildings	<u>1033</u>	Day Care		
<u>403</u>	High-Rise Buildings				
<u>404</u>	<u>Atriums</u>	Chapter 11	Florida Accessi	bility Code For Building	
<u>405</u>	Underground Buildings		Construction		
			Pa	art A	
<u>406</u>	Motor-Vehicle-Related Occupancies	<u>11-3</u>	Miscellaneous I	Instructions and Definitions	
<u>407</u>	Group I-2	<u>11-4</u>	Accessible Elen	ments and Spaces: Scope	
<u>408</u>	Group I-3		and Technical R	Requirements	
<u>409</u>	Motion Picture Projection Rooms	<u>11-9</u>	Accessible Tran	nsient Lodging	
<u>412</u>	Aircraft-Related Occupancies			Part B	
<u>414</u>	<u>Hazardous Materials</u>	<u>5</u>	Guidelines		
<u>415</u>	Groups H-1, H-2, H-3, H-4 and H-5				
<u>419</u>	<u>Hospitals</u>	Chapter 12			
<u>420</u>	Nursing Homes	<u>1205</u>	Lighting		
<u>421</u>	Ambulatory Surgical Centers				
<u>423</u>	State Requirements for Educational	Chapter 13	Energy Efficien	<u>ney</u>	
	<u>Facilities</u>	<u>13-101</u>	Scope		
<u>424</u>	Swimming Pools and Bathing Places	Subchapter			
	(Public and Private)	<u>13-2</u>	<u>Definitions</u>		
<u>425</u>	Public Lodging Establishments	<u>13-3</u>	Referenced Star	ndards and Organizations	
<u>426</u>	Public Food Service Establishments	<u>13-4</u>	Commercial Bu	uilding Compliance Methods	
<u>427</u>	Mental Health Programs	<u>13-6</u>	Residential Buil	lding Compliance Methods	
<u>428</u>	Manufactured Buildings	Appendix 13-B	Supplemental Ir	nformation for Subchapter 13-4	
431	Transient Public lodging Establishments				

Section/ Ch	napter		Rationale	Summary
435	Control of Radiation Hazards	Chapter 26	Plastic	
436	Day Care Occupancies	<u>2606</u>	Light-Transmitting Plastics	
	El . 1 D . 111	Page 1 of 3		
	<u>Florida Buildi</u> <u>Chapter</u>			
	Electrical Sy			
	Cross Refer	rence		
Castian	<u>Florida Building Code</u>	e - Building Continued Section		
Section Chapter 26	Plastic	3006	Machine Rooms	
Continued	- Morre	3011	Alterations to Electric and Hydraulic	
2611	Light-Transmitting Plastic Interior Signs	<u></u> -	Elevators and Escalators	
<u>2612</u>	High-Velocity Hurricane Zones-Plastics	Chapter 31	Special Construction	
		<u>3102</u>	Membrane Structures	
Chapter 27	Electrical	<u>3108</u>	Radio and Television Towers	
<u>2701</u>	<u>General</u>	<u>3112</u>	Lighting, Mirrors, Landscaping	
<u>2702</u>	Emergency and Standby Power Systems			
		Chapter 33		
Chapter 30	Elevators and Conveying Systems	<u>3306</u>	Protection of Pedestrians	
3003	Emergency Operations	<u>3310</u>	Exits	
<u>3005</u>	Conveying Systems	<i>a</i>		
		Chapter 35	Referenced Standards	
	Florida Buildin			
Chapter 3	Resider Building Planning	<u>rnar</u> Chapter 24	Fuel Gas	
R303	Light, Ventilation and Heating	G2403(202)	General Definitions	
R313	Smoke Alarms	G2410(309)	Electrical	

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<u>R317</u>	Dwelling Unit Separation	G2411(310)	Electrical Bone	ding	
		G2440(615)	Sauna Heaters		
Chapter 8	Roof -Ceiling Construction				
R808	Insulation Clearance	Chapter 33	General Requi	rements Electrical	
		E3301	General Requi	rements Electrical	
Chapter 13	General Mechanical System				
	Requirements	Chapter 43	Referenced Sta	<u>ndards</u>	
M1303	<u>Labeling of Equipment</u>				
<u>M1305</u>	Appliance Access				
	Florida Building Code 2004				
	Florida Building Code - Existing Building				
Chapter 3		Chapter 11	Relocated or M	loved Buildings	
<u>305</u>	Alteration-Level 3	<u>1102</u>	Requirements		
Chapter 4	<u>Repairs</u>	Chapter 12	Compliance A	<u>ternatives</u>	
<u>401</u>	General	<u>1201</u>	General		
<u>408</u>	Electrical				
		Chapter 14	Referenced Sta	<u>ndards</u>	
Chapter 5	Alterations Level 1				
<u>508</u>	Electrical	Appendix B	Standard for R	<u>ehabilitation</u>	
Chapter 6	Alterations Level 2				
<u>608</u>	Electrical				
Chapter 8	Change of Occupancy				
808	Electrical				
<u>811</u>	Other Requirements				
Chapter 9	Additions				
901	General				

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904	Smoke Alarms in Occupancy			
	Groups R-3 and R-4			
	Electric Cross F	Page 2 of 3 ilding Code 2004 al Systems teference		
g. 4.	<u>Florida Buildin</u>	Code - Mechanical		
Section		Section 012	I. C D	
Chartan 2	Consul Bouleting	<u>912</u>	Infrared Radiant Heaters	
Chapter 3	General Regulations	<u>917</u>	Cooking Appliances	
<u>301</u>	General	<u>918</u>	Forced-Air Warm-Air Furnaces	
206		924	Stationary Fue Cell Power Plants	
<u>306</u>	Access and Service Space	<u>927</u>	Residential Electric Duct Heaters	
	7.1	<u>928</u>	Vented Residential Floor Furnaces	
Chapter 5	Exhaust Systems			
<u>502</u>	Required Systems	Chapter 10	Boilers, Water Heaters and	
<u>503</u>	Motors and Fans		Pressure Vessels	
<u>504</u>	<u>Clothes Dryer Exhaust</u>	<u>1001</u>	<u>General</u>	
<u>509</u>	Fire Suppression Systems	<u>1004</u>	<u>Boilers</u>	
<u>513</u>	Smoke Control Systems	<u>1006</u>	Safety and Pressure Relief Valves	
			And Controls	
Chapter 6	<u>Duct Systems</u>			
<u>601</u>	<u>General</u>	Chapter 11		
<u>602</u>	Plenums	<u>1104</u>	System Application Requirements	
<u>606</u>	Smoke Detection System Control	<u>1105</u>	Machinery Room, General Requirements	
<u>607</u>	Ducts and Air Transfer Openings	<u>1106</u>	Machinery Room, Special Requirements	
Chapter 8	Chimneys and Vents	Chapter 15	Referenced Standards	
<u>801</u>	<u>General</u>			
<u>804</u>	Direct-Vent, Integral Vent and			
	Mechanical Draft System			

ection/ Ch	apter		Rationale	Summary
	Florida Building	Code 2004		
	Florida Building Coo	de - Plumbing		
Chapter 6	Water Supply and Distribution	Part II	Design Criteria	
<u>601</u>	General	<u>I.</u>	Control Valves	
612	Well Pumps and Tanks used for Private			
	Potable Water Systems	Part IV	<u>Materials</u>	
		<u>H.</u>	Low Voltage Wiring	
Chapter 11	Storm Drainage	<u>I.</u>	Irrigation Controllers	
<u>1113</u>	Sumps and Pumping Systems	<u>J.</u>	Pumps and Wells	
Chapter 13	Referenced Standards	Part V.	<u>Installation</u>	
		<u>E.</u>	Low Voltage Wire Installation	
Appendix F	Proposed Construction Building Codes	<u>F.</u>	Hydraulic Control Tubing	
	For Turf and Landscape Irrigation			
	Systems			
	Florida Building	Code 2004		
	Florida Building Co	de - Fuel Gas		
Chapter 2	<u>Definitions</u>	Chapter 6	Specific Appliances	
		<u>627</u>	Air Conditioning Equipment	
Chapter 3	General Regulations	<u>630</u>	Infrared Radiant Heaters	
<u>306</u>	Access and Service Space			
<u>309</u>	<u>Electrical</u>	Chapter 7	Gaseous Hydrogen Systems	
<u>310</u>	Electrical Bonding	<u>703</u>	General Requirements	
		<u>706</u>	Location of Gaseous Hydrogen Systems	
Chapter 4	Gas Piping Installations			
<u>413</u>	Compressed natural Gas Motor Vehicle	Chapter 8	Referenced Standards	
	<u>Fuel- Dispensing Stations</u>			
	ing Metal Framing Members: M	Page 3 of 3	nbers. [Mod 1273] This year an	n appliance Adds bondin

Charles Hounications for text submitted for consideration	Rationale	Cummony
Section/ Chapter	Kationale	Summary
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. 35 ANSI/TIA/EIA-222- FG - 96-05 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures1609.1.1, 3108.4	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. [Mod 1358] Telecommunications Industry Association will replace the existing standard TIA/EIA –222-F-96 with ANSI/TIA 222- G-05 effective January 1, 2006. The present standard (1996) permits one third allowable increase in material stresses for wind load, which contradicts with ASCE 7 – 02, the reference standard for loads for FBC 2004. The new standard follows ASCE 7-02 and eliminates the allowable increase, therefore the proposed modification will clarify the situation and update the reference to the latest standard.	metal framing members. Replaces ANSI/TIA/EIA -222-F-96 with ANSI/TIA- 222-G-05 as a referenced standard
Truss Plate Institute 583 D'Onofrio Drive, Suite 200 218 N. Lee Street, Suite 312 Madison, WI 53719 Alexandria, VA 22314 TPI 1—2002 National Design Standards for Metal-Plate-Connected Wood Truss Construction 2303.4, 2306.1, 2314.4.9, 2319.17.2.1.1, TPI HIB —91 Handling, Installing and Bracing Metal Plate Connected Wood Trusses 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)] 2314.4.9	[Mod 1257] 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	Replaces HIB- 91 with BCSI 1-03 and corrects TPI address

Section/ Chapter		Rationale	Summary
		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.	
35 ASTM D 4477	Standard Specification for	[Mod 1783r] Modification adds two (2) new standards to the ASTM referenced	Adds 2 new standards—
1404.9, 1405.13	Rigid (Unplasticized) Poly (Vinyl Chloride) (PVC) Soffit1	standards listing and enhances the code and its enforcement requirements.	ASTM D 4477 and ASTM D 4756
Timber (Glulam) D5055—0004 Specification for Wood I-joists	ablishing Allowable Properties for Structural Glued Laminated Establishing and Monitoring Structural Capacities of Prefabricated in for Evaluation of Structural Composite Lumber Products	[Mod 1814] These standards contain updates that reflect the state-of-the-art knowledge of the ASTM committee on these wood products. This modification updates references to newer versions of three product standards currently in use by the wood industry.	Updates standard year for ASTM D 3737, D 5055, and D5456
35 D3679— <u>01e05</u> Specifica	ation for Rigid Poly (Vinyl Chloride) (PVC)	[Mod 1763] This change simply brings the Code up to date with the latest	Updates standard year

Section/ Chapter	Rationale	Summary
Siding	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.	for ASTM D 3679
FBCB Chapter 35 AA ADM 1—00 05 Aluminum Design Manual: Part 1-A Aluminum Structures, Allowable Stress Design; and Part 1-B—Aluminum Structures, Load and Resistance Factor Design of Buildings and Similar Type Structures AA 94	[Mod 1905r] The proposal updates to the latest edition of the Aluminum Design Manual developed by the national Aluminum Association.	Updates standard year for ADM 1
35 ASTM D 6841-03 Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-Retardant- Treated-Lumber	[Mod 1931r] Bring code into line with industry practices.	Adds ASTM D as a referenced standard
35(proposes same change for ch 43 in FBCR) FBCB Ch. 35 ASTM E 1886-02 or 054 E 1996-02- or 054	[Mod 1913r] The proposal is to update to the latest edition of referenced standards. The updated standards represent the state of the art in hurricane protection testing. The original testing	Updates ASTM E 1886 and ASTM E 1996
E 1886- 02 <u>054</u> E 1996- 00 <u>054</u>	standards had little input from industry. The industry has increased involvement in the development of the standard and that expertise has had a positive effect on	

Section/ Chapter	Rationale	Summary
	the standard.	
TEST PROTOCO	DLS	1
RAS 117.6 1. Refer to page RAS117.6.10.4.2, sample formula for Side Lap Row. The formula should read as follows:	[Mod 1098] Sample formulas are incorrect.	Corrects sample formulas
$(1 ext{ fastener/24 } \underline{12} ext{ in)} ext{ } x ext{ } (12 ext{ in/ft}) ext{ } x ext{ } (3.75 ext{ } \underline{37.5} ext{ ft/row}) ext{ } x ext{ } (1 ext{ row/square}) = 37.5 ext{ fasteners/square}$		
2. Refer to page RAS117.6.10.4.2, sample formula for Center Rows. The formula should read as follows:		
$(1 ext{ fastener/24 in}) ext{ } x ext{ } (12 ext{ in/ft}) ext{ } x ext{ } (3.75 ext{ } 37.5 ext{ } ft/row) ext{ } x ext{ } (1 ext{ row/square}) = 37.5 ext{ } fasteners/square$		
3. Refer to page RAS117.6.10.4.2, sample formula for combination of fasteners. The formula should read as follows:		
$(100 \text{ ft}^2/\text{square}) / (3.75 37.5 \text{fasteners/square}) * + (3.75 37.5 \text{fasteners/square}) = 1.33 \text{ ft}^2 \text{ per fastener}$		
RAS 118-3.08.A.5	[Mod 1349] Deficiencies in the	Revises section
5. Storm Clips. Storm clips may shall be required at the first course of tile based on fastening requirements. Refer to tile Product Approval.	performance of mechanically attached roof tile during hurricane Wilma specifically at the first course was obvious, widespread and needs to be addressed. This code modification will	pertaining to storm clips
	require the addition of storm clips to the first course of mechanically fastened	

Section/ Chapter	Rationale	Summary
	roof tile to deal with this problem and	
	strengthen the current code.	
R119-3.09B . Fasten and secure maximum 24 in. on center with screws or	[Mod 1091] This is a glitch modification	Editorial
fasteners of sufficient length to penetrate the sheathing a minimum of $3/4$	necessary to correct the omission of the	change
in. or to penetrate into a 1 in., or greater, thickness of lumber not less than	word "or". The current language would	
1 in.	restrict the type of fastener to a "screw".	
	The specific application was tested with	
	common nails (the lesser attachment)	
	with the intention being that if the	
	attachment test was successful with	
	nails, then either nails or screws would	
	be an acceptable fastener.	
RAS 119-3.10	[Mod 1350] Deficiencies in the	Revises section
B. Storm Clips. Storm clips may shall be required at the first	performance of mechanically attached	pertaining to
course of tile based on fastening requirements. Refer to tile	roof tile during hurricane Wilma	storm clips
Product Approval.	specifically at the first course was	_
	obvious, widespread and needs to be	
	addressed. This code modification will	
	require the addition of storm clips to the	
	first course of mechanically fastened	
	roof tile to deal with this problem and	
	strengthen the current code.	
RAS 120	[Mod 1280] Across the State of Florida	Revises section
3.10 Hip and Ridge Installation - CHOOSE ONE of the following:	throughout the 2004 and current 2005	pertaining to
A. Set hip and ridge tile in a continuous bed of mortar, lapping tile a	hurricane seasons the substandard	hip and ridge
minimum 2 in. Ensure bed of mortar does not protrude in center of hip or	performance of roofing hip and ridge tile	installation
ridge junction. Approximately 1 in. of field tile shall extend beyond bed of	attachment installed exclusively with	
mortar.	mortar has become evident. Currently in	

Section/ Chapter	Rationale	Summary
OR B A. Mechanically fasten hip and ridge tiles to nailer board shall be optional on roof slopes of 2:12 to 7:12, and shall be required on roof slope greater than 7:12.	the Test Protocols RAS No. 120 there are four alternative methods of attachment that require the use of either wood nailer boards or preformed metal channels secured to the roof substrate. The attachment of the hip and ridge tile to the ridge boards is by either an approved adhesive or approved mechanical fasteners. These alternative methods connect the hip and ridge tile to the roof substrate not the roof field tile.	
TAS 106 4.1 Examine the entire area of the roof for loose tile by lifting any tile by hand or with a hand held griping device. Physically examine not less than one (1) tile in ten (10) of all components in the field area and one (1) tile in five (5) of all tile in perimeter and comer corner areas including hip and ridge tile.	[Mod 1346] To include the hip and ridge tile as part of the product application quality control test.	Adds text to include hip and ridge tile as a requirement of the physical inspection process
TAS 106 6.1.2 For roof areas five (5) squares or more a minimum of one (1) test per every two (2) squares in the field, one (1) test per square in the perimeter area and (1) in the comer corner areas including (1) test per every (20) hip and ridge tile.	[Mod 1294] To officially require hip and ridge roof tile to be a tested component within the guidelines of this quality control test.	Adds requirements to enhance the current test procedure including hip and ridge as a tested component
TAS 139	[Mod 1373] This modification cleans up	Editorial

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Section/ Chapter	Rationale	Summary
6. Performance Requirements: 6.1 Physical Properties - The water-based elastomeric white roof patch product shall conform to physical property requirements as follows: 7. Test Methods: 7.5 Reflectance - Test Method D 2824, Section 8.6 7.6 Accelerated Weathering - Test Method G 26 G155 7.7 Firm Set - Test Method D 2939, Sections 13 & 14	the protocol by not specifying an unpublished ASTM standard, and corrects a typo on the required hours the specimens are to be exposed to weathering prior to compliance evaluation.	change to update the weathering standard reference
7.8 Resistance to Water - Test Method D 2939, Section 17, ALT: A TAS201 5.2 Manufacturers of any specimen with width of more than 20 ft and/or a height of more than 8 ft must submit for approval a proposed comparative test criteria to the Authority Having Jurisdiction prior to testing. TAS202 5.5 Manufacturers of any specimen with width of more than 20 ft	[Mod 1377] Deletion of this requirement cleans up the protocol, and allows for a better representative specimen to be tested.	Deletes sections in entirety
and/or a height of more than 8 ft must submit for approval a proposed comparative test criteria to the Authority Having Jurisdiction prior to testing. TAS203 5.5 Manufacturers of any specimen with width of more than 20 ft and/or a height of more than 8 ft must submit for approval a proposed		
comparative test criteria to the Authority Having Jurisdiction prior to testing. TAS201	[Mod 1374] This modification cleans up	Deletes

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Section/ Chapter	Rationale	Summary
8.3 Fee for testing facilities shall be determined per protocol TAS 301-94. TAS202 8.3 Fee for testing facilities shall be determined per TAS 301-94.	the protocol by not specifying a fee for accreditation. This should be left up to the accreditation agency.	reference of fees
TAS203 9.3 Fee for testing facilities shall be determined per TAS 301-94.		
TAS201 9. Format of Test: The manufacturer shall notify the Authority Having Jurisdiction seven (7) working days prior to the performing of the test. The Authority Having Jurisdiction reserves the right to observe the test. The Authority Having Jurisdiction must be notified of the place and time the test will take place. The test must be recorded on video (VHS) and retained by the laboratory per TAS301-submitted along with test report.	[Mod 1376] Provides the industry more choices by using new technologies to store video, and reduces costs to government agencies and approval agencies having to store duplicates of the video.	Updates video recording requirements
9. Format of Test: The manufacturer shall notify the Authority Having Jurisdiction seven (7) working days prior to the performing of the test. The Authority Having Jurisdiction reserves the right to observe the test. The Authority Having Jurisdiction must be notified of the place and time the test will take place. The test must be recorded on video (VHS) and retained by the laboratory per TAS301-submitted along with test report.		
TAS203		

Section/ Chapter	Rationale	Summary
10. Format of Test: The manufacturer shall notify the Authority Having Jurisdiction seven (7) working days prior to the performing of the test. The Authority Having Jurisdiction reserves the right to observe the test. The Authority Having Jurisdiction must be notified of the place and time the test will take place. The test must be recorded on video (VHS) and retained by the laboratory per TAS301-submitted along with test report. TAS 202-12.1 12. Additional Testing: 12.1 After successfully completing all parts of the test described in this protocol, the specimen shall be subjected to the forced entry test per ASTM F588, ASTM F842, and AAMA 1304 as applicable. as required by Section 1707.4.2 of the Florida Building Code, Building. Minimum gauge of materials shall be determined prior to testing per Section 1707.4.2 of the Florida Building Code, Building. 12.2 Any product when installed that is subjected to weathering, where such weathering can affect the integrity of the product, the manufacturer shall contact the Authority Having Jurisdiction for additional testing requirements such as but not limited to moisture, U.V., accelerated aging, and other similar tests. 12.3 The Authority Having Jurisdiction reserves the right to require any additional testing necessary to assure full compliance with the intent of the Florida Building Code, Building.	[Mod 1379r] It would clearly document the requirement with what is actually occurring. Manufacturers are testing to these forced entry standards when complying with TAS202.	Replaces forced entry test compliance requirements
 TAS 301 6. Submittals: 6.1 Name, address, contact person and telephone number of testing facility. 6.2 Name and registration number of Florida-Registered Professional 	[Mod 1375] This modification cleans up the protocol by not specifying a fee for accreditation. This should be left up to the accreditation agency. The change is complemented with independence	Adds independence requirements and deletes reference to

Section/ Chapter	Rationale	Summary
Engineer as stated in Section 3.4 of this protocol. 6.3 Resume of qualification of personnel involved in testing. 6.4 List of all equipment, located at the facility, by name, model and serial number. 6.5 Name, address, contact person and telephone number of independent agency performing calibration of equipment. 6.6 List of test(s) to be performed. 6.7 Copy of facility's quality control program. 6.8 Copy of facility's safety program. 6.9 Copy of facility's table of organization. 6.10 Copy of facility's occupational license. 6.11 Statement indicating the period of time that facility has been involved in the independent testing business. 6.12 Letter requesting certification and registration of facility. 6.13 Proper fees Independence statement.	language that has been required of laboratories accredited to this protocol, and brings the protocol it in line with the independence requirements of the product approval rule.	fees
7. Independence Fees: 7.1 The statement of independence shall be submitted on testing laboratory's stationary and signed by an official of the testing laboratory. The statement shall include the following: 7.1.1 A statement indicating that the laboratory or agency, its associates, entities, or legal persons employed or under contract do not have any financial interest in any product manufacturing company other than providing professional testing services. 7.1.2 A statement indicating that the laboratory or agency is not owned, operated, or controlled by any company manufacturing or distributing any portion of the product inspected or tested.		

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7.1 A fee of \$500.00 shall be submitted with the letter of request for		
certification and registration for facilities located within the limits of the		
High-Velocity Hurricane Zone. This fee covers up to ten (10) types of tests		
submitted with original letter of request.		
7.2 A fee of \$100.00 shall be submitted for each additional ten (10)		
types of tests submitted under same request.		
7.3 For facilities located outside the boundary limits of the High-		
Velocity Hurricane Zone, \$150.00 shall be added to the fees set in 7.1 of		
this protocol for every 50 miles or any part thereto that the facility is		
located away from the High-Velocity Hurricane Zone limits. This extra fee		
shall not exceed \$5000.00.		
10. Duration of Approval:		
10.1 Approval of testing facilities shall be valid for a period of four (4)		
years. The fee for renewal shall be 50% of the original fee. In case of any		
changes to the test procedures or protocols, the Authority Having		
Jurisdiction reserves the right to request additional information or to revoke		
approval of a non-compliance facility.		

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