



# **Code Administration**

## **Proposed Code Modifications**

**This document created by the Florida Department of Community Affairs -  
850-487-1824**

# TAC: Code Administration

## Sub Code: Building

Total Mods for Code Administration: 4

<b>Date Submitted</b>	3/25/2010	<b>Section</b>	101, 102, 105	<b>Proponent</b>	DOUG MELVIN
<b>Chapter</b>	1	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	No Affirmative Recommendation with a Second				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

3524

**Summary of Modification**

REVISE sections 101.2, 101.4, 102.2, and 105.1 to read as follows. ADD sections 101.4.9 and 105.1.4 to read as follows.

**Rationale**

This change revises and/or adds reference to elevator safety code. The proposed modification will merge new Chapter 1 revised or added sections with the 2007 FBC Florida Supplements to update Florida Codes and Standards.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**

There will not be any cost related to this modification. This modification merges the International Building Code (IBC) revisions and the Florida Building Code (FBC). The benefit will be to formalize the triennial code for equitable enforcement.

**Impact to building and property owners relative to cost of compliance with code**

There will not be any cost related to this modification. This modification merges IBC code revisions and the FBC. The benefit will be to formalize the triennial code for equitable compliance.

**Impact to industry relative to the cost of compliance with code**

There will not be any cost related to this modification. This modification merges IBC code revisions and the FBC. The benefit will be to formalize the triennial code for equitable compliance.

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

The migration of the 2007 FBC Florida Supplements and the 2009 IBC code provides for the enhanced health, safety, and welfare of the general public consistent with the industry.

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**

It will harmonize the FBC 2007 and IBC 2009 code to include industry standard ASME A17 Safety Code for Elevators and Escalators to strengthen and improve the Florida Elevator Safety Code, and provide equivalent or better products, methods, or systems of construction.

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**

This code merge does not discriminate against materials, products, methods, or systems of construction.

**Does not degrade the effectiveness of the code**

This code merge does not degrade the effectiveness of the code.

**2nd Comment Period**

09/03/2010 - 10/18/2010

<b>Proponent</b>	Mo Madani	<b>Submitted</b>	10/14/2010	<b>Attachments</b>	No
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**Comment:**

Request that A1, A2, A3 and A4 be considered and approved. The proposed provisions are necessary to implement HB663.

CA3871-G1

## Elevator and Conveying Systems Revisions and Additions to 2007 Florida Supplements

### 101.2 Scope, Exceptions. Change to read as shown.

#### Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the Florida Building Code, Residential.
2. Existing buildings undergoing repair, alterations or additions and change of occupancy shall comply with Chapter 34 of this code.
3. Existing buildings undergoing repair, alterations or additions and change of occupancy or elevator classification shall comply with Chapter 30 of this code.

### 101.4 Referenced codes. Change to read as shown.

**101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through ~~101.4.8~~, **101.4.9**, and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

### 101.4.9 Elevators and Conveying Systems. Add to read as shown.

**101.4.9 Elevators and Conveying Systems.** For additional administrative and special code requirements, see Chapter 30, Florida Building Code, Building, and Rule 61C-5 F.A.C.

### 102.2 Building. Change to read as shown.

**102.2 Building.** The provisions of the Florida Building Code shall apply to the construction, erection, alteration, modification, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every public and private building, structure or facility or floating residential structure, or any appurtenances connected or attached to such buildings, structures or facilities. Additions, alterations, repairs and changes of use or occupancy group in all buildings and structures shall comply with the provisions provided in Chapter **30** and 34 of this code. The following buildings, structures and facilities are exempt from the Florida Building Code as provided by law, and any further exemptions shall be as determined by the legislature and provided by law:

- (a) Building and structures specifically regulated and preempted by the federal government.
- (b) Railroads and ancillary facilities associated with the railroad.
- (c) Nonresidential farm buildings on farms.
- (d) Temporary buildings or sheds used exclusively for construction purposes.
- (e) Mobile or modular structures used as temporary offices, except that the provisions of Part V (Section 553.501-553.513, Florida Statutes) relating to accessibility by persons with disabilities shall apply to such mobile or modular structures.
- (f) Those structures or facilities of electric utilities, as defined in Section 366.02, Florida Statutes, which are directly involved in the generation, transmission, or distribution of electricity.
- (g) Temporary sets, assemblies, or structures used in commercial motion picture or television production, or any sound-recording equipment used in such production, on or off the premises.
- (h) Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida. As used in this paragraph, the term “chickee” means an open-sided wooden hut that has a thatched roof of palm or palmetto or other traditional materials, and that does not incorporate any electrical, plumbing, or other nonwood features.

## Section 105 Permits

### Section 105.1 Required. Change to read as shown.

**105.1 Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any required impact resistant coverings, electrical, gas, mechanical or plumbing system, **elevators and conveying systems**, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official **or regulating agency** and obtain the required permit.

**Section 105.1.4 Elevators and Conveying Systems. ADD to read as shown.**

Section 105.1.4 Elevators and Conveying Systems. As per sections 399.02, and 399.03 Florida Statutes, and section 3013.1, Chapter 30 Florida Building Code, an elevator construction permit is required before installation and/or alteration commences to any equipment, parts, components, or subsystems that require inspection, tests, and independent witnessing to ensure conformance with the Florida Elevator Safety Code.

Revise Section 102.2 to add a new item (i) as follows:

(i) Family mausoleums not exceeding 250 square feet in area which are prefabricated and assembled on site or preassembled and delivered on site and have walls, roofs, and a floor constructed of granite, marble, or reinforced concrete.

Revise Section 102.2 to add (j) as a new item as follows:

(j) Temporary housing provided by the Department of Corrections to any prisoner in the state correctional system.



Add Section 102.8 as a new section to read as follows:

102.8 Existing mechanical equipment. An agency or local government may not require that existing mechanical equipment on the surface of a roof be installed in compliance with the requirements of the Florida Building Code until the equipment is required to be removed or replaced.

Florida Building Code, Building

Add a new Section 102.8 to read as follows:

102.8 **Existing mechanical equipment.** An agency or local government may not require that existing mechanical equipment on the surface of a roof be installed in compliance with the requirements of the Florida Building Code until the equipment is required to be removed or replaced.

Florida Building Code, Existing Building

Add a new Section 101.5.1 to read as follows:

101.5.1 **Existing mechanical equipment.** An agency or local government may not require that existing mechanical equipment on the surface of a roof be installed in compliance with the requirements of the Florida Building Code until the equipment is required to be removed or replaced.

**102.2.5** Each enforcement district shall be governed by a board, the composition of which shall be determined by the affected localities.

(a) At its own option, each enforcement district or local enforcement agency may ~~adopt promulgate~~ rules granting to the owner of a single-family residence one or more exemptions from the Florida Building Code relating to:

1. Addition, alteration or repair performed by the property owner upon his or her own property, provided any addition or alteration shall not exceed 1,000 square feet (93 m<sup>2</sup>) or the square footage of the primary structure, whichever is less.
2. Addition, alteration or repairs by a nonowner within a specific cost limitation set by rule, provided the total cost shall not exceed \$5,000 within any 12-month period.
3. Building and inspection fees.

(b) However, the exemptions under subparagraph (a) do not apply to structures that are located in mapped flood hazard areas, as defined in the Code, unless the enforcement district, local enforcement agency, or local appropriate board has: granted an appeal or variance against the local enforcement agency(s), or determined that the work, which otherwise exempt, does not constitute a substantial improvement, including the repair of substantial damage, of such single-family residences.

**102.2 Building.** The provisions of the Florida Building Code shall apply to the construction, erection, alteration, modification, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every public and private building, structure or facility or floating residential structure, or any appurtenances connected or attached to such buildings, structures or facilities. Additions, alterations, repairs and changes of use or occupancy group in all buildings and structures shall comply with the provisions provided in Chapter **30** and 34 of this code. The following buildings, structures and facilities are exempt from the Florida Building Code as provided by law, and any further exemptions shall be as determined by the legislature and provided by law:

- (a) Building and structures specifically regulated and preempted by the federal government.
- (b) Railroads and ancillary facilities associated with the railroad.
- (c) Nonresidential farm buildings on farms.
- (d) Temporary buildings or sheds used exclusively for construction purposes.
- (e) Non-relocated, existing residential mobile home structures.
- (f) Mobile home or modular structures used as temporary offices, except that the provisions of Part V (Section 553.501-553.513, Florida Statutes) relating to accessibility by persons with disabilities shall apply to such mobile or modular structures.



## Florida Building Code Informal Interpretation



**Date:** Wed Jan 15 2003

**Report #:** 2172

**Code:** Building

**Section:** 101.4.2(a)

**Question:**

Is it the intent of the code to include mobile homes (H.U.D.) as exempt structures from the code. Would this include not having to comply with the code for repair, alterations & modifications to the mobile home such as window & door replacement (impact protection of openings), reroofs, siding replacement, & etc? Also would this include ham radio towers.

**Answer:**

No, Section 101.4.2(a) applies only to buildings owned by the federal government. Ham radio towers should be designed to withstand the forces imposed on them as required by the AHJ. Please see commentary regarding mobile homes below.

**Commentary:**

The Installation of, and/or addition to, a Mobile/Manufactured Home would require a permit. The State Agency responsible for the oversight of mobile home construction is the Department of Highway Safety and Motor Vehicles (DMV). A HUD labeled Mobile Home, AKA Manufactured Home (not to be confused with a Manufactured/Modular BUILDING which bears a DCA insignia) sold or offered for sale in Florida is required by Florida Statute 320.823 to meet the Federal Mobile Home Construction and Safety Standards promulgated by the Department of Housing and Urban Development. Section 15C-2 of the Florida Administrative Code requires mobile home additions to meet State and local codes, BUT they are to be free-standing and not attached to the mobile home (additions may be attached to the Manufactured Housing Unit if the addition has been designed to be married to the existing unit. [FAC 15C-2.0081(1)(a)] Generally, this requires that the manufacturer certify or state that the unit will take the loads imposed by the addition.). A repair or remodel of a mobile home only requires the use of material and design equivalent to the original construction. "Original construction" is intended to mean the original HUD Standard. The materials are to be nothing more or nothing less than the original construction.

*Notice:*

*The Building Officials Association of Florida, in cooperation with the Florida Building Commission, the Florida Department of Community Affairs, SBCCI, and industry and professional experts offer this interpretation of the Florida Building Code in the interest of consistency in their application statewide. This interpretation is informal, non-binding and subject to acceptance and approval by the local building official.*

<b>Date Submitted</b>	3/11/2010	<b>Section</b>	107.3.5 Minimum plan review criteria	<b>Proponent</b>	Dick Wilhelm
<b>Chapter</b>	1	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	No Affirmative Recommendation with a Second				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

None

**Summary of Modification**

Expands criteria requested on documents submitted for plans review as recommended by the window/wall workgroup report dated August 11, 2009.

**Rationale**

Detail through wall penetrations for fenestrations for both commercial and residential.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**

No fiscal impact to code enforcement

**Impact to building and property owners relative to cost of compliance with code**

No impact to building or property owner

**Impact to industry relative to the cost of compliance with code**

Design professional or architect will have to include fenestration penetrations or documents.

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Provides additional details describing fenestration rough openings or drainage.

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**

Strengthens the code by providing rough opening dimensions to plans review, builder, and fenestration installer.

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**

Does not discriminate.

**Does not degrade the effectiveness of the code**

Improves code enforcement.

**2nd Comment Period**

09/03/2010 - 10/18/2010

<b>Proponent</b>	Dwight Wilkes	<b>Submitted</b>	10/18/2010	<b>Attachments</b>	No
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**Comment:**

Believe that the Mod should be reconsidered as this was a recommendation from the consensus window/wall work group and should be considered a Florida specific need; given the confusion that exists within the building industry on the complex water resistant installation requirements.

CA3577-G1

**107.3.5 Minimum plan review criteria for buildings.** The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions; and all exterior elevations:



# WINDOW WALL WORKGROUP REPORT TO THE FLORIDA BUILDING COMMISSION



August 11, 2009

*Melbourne, Florida*

Facilitation, Meeting and Process Design By



CONSENSUS SOLUTIONS

Report By Jeff A. Blair  
FCRC Consensus Center  
Florida Conflict Resolution Consortium  
Florida State University



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This document is available in alternate formats upon request to Dept. of Community Affairs,  
Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.

## FLORIDA BUILDING COMMISSION WINDOW WALL WORKGROUP REPORT

### Overview and Project Scope

Raul L. Rodriguez, AIA, Chair of the Florida Building Commission, at the request of industry convened a Window Workgroup, charged with representing their stakeholder group's interests, and working with other interest groups to develop a consensus package of recommendations for submittal to the Florida Building Commission. The original scope and purpose of the Workgroup was to provide recommendations on how to provide building officials with needed information for conducting field inspections to ensure windows comply with the relevant wind pressure Code requirements. In addition, the workgroup was charged with considering issues related to window installation and water intrusion. The Workgroup developed consensus on a package of recommendations primarily related to the components and format for a supplemental label, to function as an inspection label, at the May 2006 meeting, and subsequent to the May meeting, window industry stakeholders requested an additional meeting and opportunity to reconsider the package of recommendations. The Chair agreed to reconvene the Workgroup and charged them with reviewing and deciding on the consensus recommendations, which were finalized in November of 2006 and delivered to the Commission in December of 2006, and implemented through the 2007 Code Update Cycle. In April of 2007, the Workgroup's scope was expanded to evaluate and develop consensus recommendations for a template for installation instructions submitted for product approval submittals. The Workgroup completed and delivered their consensus recommendations to the Commission in April of 2007.

At the April 2009 Commission meeting, Chairman Rodriguez announced that the Window Workgroup was renamed to the Window/Wall Workgroup, with the expanded scope of evaluating and developing recommendations regarding the window-wall interface (installation and water intrusion). The Workgroup is evaluating possible code amendments for the 2010 Florida Building Code.

### Window/Wall Workgroup Members

Robert Amoruso, Chuck Anderson, Joe Belcher, Bob Boyer, Rusty Carrol, Jaime Gascon, Dale Griener, Jim Gulde, Jon Hill, John Jervis, C.W. Macomber, Dave Olmstead, Craig Parrino, Roger Sanders, Jim Schock, Steve Strawn, Jim Stropoli, Jim Westphal, Dick Wilhelm, and Dwight Wilkes.

## REPORT OF THE AUGUST 11, 2009 MEETING

### Opening and Meeting Attendance

The meeting started at 1:00 PM, and the following Workgroup members were present: Robert Amoruso, Chuck Anderson, Joe Belcher, Bob Boyer, Rusty Carrol, Herminio Gonzalez for Jaime Gascon, Dale Griener, Jim Gulde, John Jarvis, Jeffrey Stone for C.W. Macomber, Craig Parrino, Jim Schock, Steve Strawn, Jim Stropoli, Jim Westphal, and Dwight Wilkes.

### Members Absent

Jon Hill, Dave Olmstead, Roger Sanders, and Dick Wilhelm.

### DCA Staff Present

Rick Dixon, Mo Madani, and Jim Richmond.

### Meeting Facilitation

The meeting was facilitated by Jeff Blair from the FCRC Consensus Center at Florida State University. Information at: <http://consensus.fsu.edu/>



### Project Webpage

Information on the project, including agenda packets, meeting reports, and related documents may be found in downloadable formats at the project webpage below:

<http://consensus.fsu.edu/FBC/www.html>

### Agenda Review and Approval

The Workgroup voted unanimously, 16 - 0 in favor, to approve the agenda as presented including the following objectives:

- ✓ To Approve Regular Procedural Topics (Agenda and Summary Report)
- ✓ To Identify/Evaluate Code Amendment Options Regarding Windows and the Window/Wall Interface
- ✓ To Receive Update On Research and Identify Future Research Needs
- ✓ To Discuss Window/Wall Initiatives
- ✓ To Consider Public Comment
- ✓ To Identify Needed Next Steps: Information, Assignments, and Agenda Items for Next Meeting

### June 15, 2009 Facilitator's Summary Report Review and Approval

Jeff Blair, Commission Facilitator, asked if any members had corrections or additions to the June 15, 2009 Report, and none were offered.

The Workgroup voted unanimously, 16 - 0 in favor, to approve the June 15, 2009 Facilitator's Summary Report as presented.

### Overview of Current Relevant Code Requirements

Mo Madani, Technical Unit Manager DCA Codes and Standards, provided members with an overview of current Florida Building Code requirements regarding the window/wall interface and answered members questions. The presentation is included as "Attachment 3" of this Report. (*Attachment 3—Current Code Requirements*)

### Identification and Evaluation of Code Amendment Options Regarding Windows and the Window/Wall Interface to be Addressed in the 2010 Florida Building Code

Members were asked to identify and evaluate options regarding Code amendments for the 2010 Code Update process regarding reducing water infiltration from the window wall interface. Options were evaluated using a four-point ranking scale where 4 = acceptable, 3 = minor reservations, 2 = major reservations, and 1 = unacceptable. Options ranked with a 75% or greater number of 4's and 3's in proportion to 2's and 1's shall be considered consensus draft recommendations. Following are options that achieved a consensus level of support as proposed code amendments:

1. *Reorganize the code sections to split curtain wall from garage door requirements.*
2. *Add requirement to Chapter One, plan review requirements, detail through wall penetrations for fenestrations for both commercial and residential plans.*
3. *Include a standard detail for each type of installation and place in the code commentary.*
4. *106.3.5 Minimum plan review criteria for buildings. The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/ roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions and all exterior elevations.*

The complete results of the ranking exercise and a summary of comments is included as "Attachment 4" of this Report.

(*Attachment 4—Options Ranking Exercise Results*)

### UF Window/Wall Research Update

Cory Salzano, ME, M2E Consulting Engineers, (for Forrest Masters, Assistant Professor of Civil and Coastal Engineering), provided members with a PowerPoint Presentation update on UF research projects being conducted by the UF Hurricane Test Lab regarding water infiltration and the window/wall interface and answered member's questions. Cory noted that 3 projects were evaluated: 1. water penetration resistance of residential window installation options for hurricane-prone areas; 2. comparison of wind-driven rain test methods for residential fenestration; 3. water penetration resistance of field and factory mulled units. The complete presentation may be viewed at the project webpage as follows: <http://consensus.fsu.edu/FBC/wwg.html>

**General Public Comment**

Members of the public were invited to provide the Workgroup with comments. There were no general public comments provided. Members of the public were provided opportunities spoke on each of the substantive discussion issues before the Workgroup.

**Review of Workgroup Delivery and Meeting Schedule**

The Workgroup's delivery and meeting schedule is as follows:

Workgroup appointed	4/8/09
Workgroup meetings	6/8/09
	8/09-10/09
Recommendations to Commission	12/09
Proposals for 2010 FBC submitted for adoption	3/10

(See 2010 FBC development schedule: 2010 Code Effective date is 12/31/2011)

**Next Steps**

The Workgroup will focus on other key initiatives as follows: market incentive initiatives, installer training and certification initiatives, beyond code window performance initiatives, and research initiatives.

**Adjourn**

The Workgroup voted unanimously, 16 - 0 in favor, to adjourn at 5:00 PM.

## ATTACHMENT 1

### MEETING EVALUATION

*Average rank using a 0 to 10 scale, where 0 means totally disagree and 10 means totally agree.*

**1. Please assess the overall meeting.**

- 9.54 The background information was very useful.  
9.54 The agenda packet was very useful.  
9.77 The objectives for the meeting were stated at the outset.  
9.23 Overall, the objectives of the meeting were fully achieved.

**2. Do you agree that each of the following meeting objectives was achieved?**

- 9.31 Evaluation of Code Amendment Options Regarding Windows and the Window/Wall Interface.  
9.58 Update On Research and Identify Future Research Needs.  
9.40 Discussion of Window/Wall Initiatives.  
9.50 Identification of Next Steps.

**3. Please tell us how well the Facilitator helped the participants engage in the meeting.**

- 9.62 The members followed the direction of the Facilitator.  
9.54 The Facilitator made sure the concerns of all members were heard.  
9.69 The Facilitator helped us arrange our time well.  
9.54 Participant input was documented accurately.

**4. Please tell us your level of satisfaction with the meeting?**

- 9.54 Overall, I am very satisfied with the meeting.  
9.69 I was very satisfied with the services provided by the Facilitator.  
9.33 I am satisfied with the outcome of the meeting.

**5. Please tell us how well the next steps were communicated?**

- 9.42 I know what the next steps following this meeting will be.  
9.33 I know who is responsible for the next steps.

6. **What did you like best about the meeting?**
  - How the facilitator ran the meeting and kept everyone focused on the issues.
  - Facilitator and other participants are excellent.
  - Variety of participants skill and experience.
  - I thought the meeting was very productive.
  - It was scheduled during the FBC meeting.
  - Good discussion on important issues.
  
7. **How could the meeting have been improved?**
  - Provide cookies and sodas at break time.
  - Time.
  - Smaller room with a dry erase board.
  - Coffee.
  - Too much on agenda. Caused a sense of rushing, could not complete agenda and many workgroup members had to leave before end of meeting.
  
8. **Do you have any other comments that you would like to add?**
  - Jeff makes all the difference in running a great meeting. Keep it up!
  - Well run, productive meeting.

**ATTACHMENT 2**  
**MEETING ATTENDANCE—PUBLIC**

Public Meeting Attendance
Name
Jack Glenn
Jeffery Stone
Tom Kopec
Peter Thornton
Dennis Chappell
Jim Heise
Mavry Pinto
Frank O'Neil
Patricia Robinson
James Krahn
Michael LaFevre



## ATTACHMENT 3

### CURRENT WINDOW WALL CODE REQUIREMENTS

#### 2007 Florida Building Code, Building

106.3.5 **Minimum plan review criteria for buildings.** The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; and all exterior elevations:

#### **Commercial Buildings:**

8. Structural requirements shall include:
- Soil conditions/analysis
  - Termite protection
  - Design loads
  - Wind requirements
  - Building envelope
  - Structural calculations (if required)
  - Foundation
  - Wall systems
  - Floor systems
  - Roof systems
  - Threshold inspection plan
  - Stair systems

#### **SECTION 109 INSPECTIONS**

Residential (one- and two-family)

6. **Structural requirements shall include:**

**Wall section from foundation through roof, including assembly and materials connector tables wind requirements structural calculations (if required)**

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 Product Approval to indicate compliance with the requirements of one of the following specifications:

ANSI/AAMA/NWDA 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).

1714.5.4 **Anchorage methods.** The methods cited in this section apply only to anchorage of window and door assemblies to the main wind force resisting system.

1714.5.4.1 Anchoring requirements. **Window and door assemblies shall be anchored in accordance with the published manufacturer's recommendations to achieve the design pressure** specified. Substitute anchoring systems used for substrates not specified by the fenestration manufacturer shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice.

1714.5.4.2 Masonry, concrete or other structural substrate. Where the wood shim or buck thickness is less than 1 1/2 inches (38 mm), window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system, in accordance with the manufacturer's published installation instructions. Anchors shall be securely fastened directly into the masonry, concrete or other structural substrate material. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

Where the wood buck thickness is 1 1/4 inches (38 mm) or greater, the buck shall be securely fastened to transfer load to the masonry, concrete or other structural substrate and the buck shall extend beyond the interior face of the window or door frame. Window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange to the secured wood buck in accordance with the manufacturer's published installation instructions. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame assembly to the secured wood buck.

1714.5.4.3 Wood or other approved framing materials. Where the framing material is wood or other approved framing material, window and glass door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange in accordance with the manufacturer's published installation instructions. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

1714.5.5 Mullions occurring between individual window and glass door assemblies.

1714.5.5.1 Mullions. Mullions or mulled fenestration assemblies shall be tested by an approved testing laboratory in accordance with either AAMA 450, ASTM E 330, or TAS 202 (HVHZ shall comply with TAS 202), or shall be engineered in accordance with AAMA 450 using accepted engineering practice. Mullions tested as stand-alone units or qualified by engineering shall use performance criteria cited in Sections 1714.5.5.2, 1714.5.5.3 and 1714.5.5.4. Mullions qualified by an actual test of an entire assembly shall comply with Section 1714.5.5.4, except that mullions in assemblies requiring a deflection limitation, as defined in AAMA/WDMA/CSA 101/I.S.2/A440, shall meet Sections 1714.5.5.2 and 1714.5.5.3. Products not included within the scope of Section 1714.5.5.1 shall comply with Sections 1714.5.5.3 and 1714.5.5.4.

1714.5.5.2 Load transfer. Mullions shall be designed to transfer the design pressure loads applied by the window and door assemblies to the rough opening substrate.

1714.5.5.3 Deflection. Mullions shall be capable of resisting the design pressure loads applied by the window and door assemblies to be supported without deflecting more than  $L/175$ , where  $L$  is the span of the mullion in inches.

1714.5.5.4 Structural safety factor. Mullions that are tested by an approved testing laboratory shall be capable of resisting a load of 1.5 times the design pressure loads applied by the window and door assemblies to be supported. The 1.5 times the design pressure load shall be sustained for 10 seconds, and the permanent deformation shall not exceed 0.2 percent of the mullion span for assemblies requiring deflection limitations, as defined in AAMA/WDMA/CSA 101/IS.2/A440 and 0.4 percent of the mullion span for all other assemblies after the 1.5 times design pressure load is removed. Mullions that are qualified by engineering shall be capable of resisting the design pressure loads applied by the window and door assemblies to be supported without exceeding the allowable stress of the mullion elements.

1714.7 Installation instruction for exterior windows and doors. Windows and doors shall be installed in accordance with the manufacturer's installation instruction.

## 2007 Florida Building Code, Residential

### SECTION R613

#### EXTERIOR WINDOWS AND DOOR ASSEMBLIES

R613.3.1 Testing and labeling. Exterior windows and glass doors shall be tested by an approved independent testing laboratory, and shall be labeled with an approved permanent label identifying the manufacturer, the products model/series number, 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/NWDA101/IS.2 or 101/IS.2/NAFS or AAMA/WDMA/CSA 101/IS.2/A440 or TAS 202 (HVHZ shall comply with TAS 202 utilizing ASTM E 1300-98 or ASTM E 1300-02).

R613.6 Anchorage methods.

R613.6.1 Anchoring requirements. Window and door assembly anchoring systems shall be tested to achieve the design pressure specified. Substitute anchoring systems shall provide equal or greater anchoring performance as demonstrated by accepted engineering practice. When provided, the manufacturer's published installation instructions for as tested or substitute anchoring systems can be used. In no case shall the anchorage exceed the spacing for the tested rated performance.

R613.6.1.1 Masonry, concrete or other structural substrate. Where the wood shim or buck thickness is less than 1 1/2 inches (38 mm), window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system, in accordance with the manufacturers published installation instructions. Anchors shall be securely fastened directly into the masonry, concrete or other structural substrate material. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be

made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

Where the wood buck thickness is 1 1/2 inches (38 mm) or greater, the buck shall be securely fastened to transfer load to the masonry, concrete or other structural substrate and the buck shall extend beyond the interior face of the window or door frame. Window and door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange to the secured wood buck in accordance with the manufacturers published installation instructions. Unless otherwise tested, bucks shall extend beyond the interior face of the window or door frame such that full support of the frame is provided. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame assembly to the secured wood buck.

R613.6.1.2 Wood or other approved framing material. Where the framing material is wood or other approved framing material, window and glass door assemblies shall be anchored through the main frame or by jamb clip or subframe system or through the flange in accordance with the manufacturer's published installation instructions. Shims shall be made from materials capable of sustaining applicable loads, located and applied in a thickness capable of sustaining applicable loads. Anchors shall be provided to transfer load from the window or door frame to the rough opening substrate.

R613.7 Mullions occurring between individual window and glass door assemblies.

R613.7.1 Mullions. Mullions, other than mullions which are an integral part of a window or glass door assembly tested and labeled in accordance with Section R613.3.1, shall be tested by an approved testing laboratory in accordance with AAMA 450 or be engineered in accordance with accepted engineering practice.

R613.7.1.1 Engineered mullions. Mullions qualified by accepted engineering practice shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4.

R613.7.1.2 Mullions tested as stand alone units. Mullions tested as stand alone units in accordance with AAMA 450 shall comply with the performance criteria in Sections R613.7.2, R613.7.3, and R613.7.4.

R613.7.1.3 Mullions tested in an assembly. Mullions qualified by a test of an entire assembly in accordance with AAMA 450 shall comply with Sections R613.7.2 and R613.7.4.

R613.7.2 Load transfer. Mullions shall be designed to transfer the design pressure loads applied by the window and door assemblies to the rough opening substrate.

**R613.7.5 Installation instruction for exterior windows and doors. Windows and doors shall be installed in accordance with ASTM E 2112 or in accordance with the manufacturer's installation instruction.**

R613.8 Flashing, sealants and weatherstripping. Flashing and sealants for exterior windows and doors shall comply with Section R703.8.

R703.8 Flashing. Approved corrosion-resistant flashing shall be applied shingle-fashion in such a manner to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashings shall be installed at all of the following locations:

1. Exterior window and door openings. Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage.
2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.
3. Under and at the ends of masonry, wood or metal copings and sills.
4. Continuously above all projecting wood trim.
5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
6. At wall and roof intersections.
7. At built-in gutters.

R613.8.1 All exterior fenestration products shall be sealed at the juncture with the building wall with a sealant complying with AAMA 800 and ASTM C 920 Class 25 Grade NS or greater for proper joint expansion and contraction, ASTM C 1281, AAMA 812, or other approved standard as appropriate for the type of sealant.

#### SECTION R616 PRESCRIPTIVE REQUIREMENTS FOR WINDOW INSTALLATION IN WOOD FRAME CONSTRUCTION

##### R616.1 General.

R616.1.1 The provisions of this section shall cover the installation of windows in buildings utilizing a membrane/drainage system of not more than three stories in height.

R616.1.2 The provisions of this section apply to windows which employ a mounting flange or fin that is attached and sealed to the window perimeter frame and is designed as an installation fastening appendage.

R616.1.3 The provisions of this section cover the installation process for the described windows and do not include fabrication techniques that would be required to joint individual windows to each other, either horizontally or vertically. It does not cover any other factory or field fabrication which joins or combines multiple windows. The instructions for mulling windows together and any accessories required must be supplied by the window manufacturer.

R616.1.4 The provisions of this section provide minimum requirements for window installation, based on current best practices. Actual conditions in buildings may vary. In cases where variations occur, the installer shall consult with the window manufacturer or registered design professional. If

the provisions of this section conflicts with the manufacturer's instruction, the manufacturer's instruction shall take precedence.

#### R616.2 Water resistance.

R616.2.1 Water-resistive barriers (WRB). The installation of the WRB shall be installed prior to the window installation. The application of the WRB involves covering the vertical surfaces of the wall, lapped, fastened, taped, and sealed per the WRB manufacturer's instructions. Penetrations through the WRB for the installation of windows shall be made pursuant to this standard by the window installer. Apply the WRB in water shedding fashion, starting at the base of the wall and working towards the top. Install the WRB to the face of the building framing or sheathing.

R616.2.2 Sealants. All gunable sealants shall comply with AAMA 808.5 (per AAMA 800) and ASTM C 920 Class 25 Grade NS or greater for proper joint expansion and contraction. If preformed tapes are used they shall meet ASTM C 1281 specification. Prior to using the sealants, the applicator shall seek input from sealant manufacturer for proper joint design, material compatibility, and sealant selection. Aerosol foam sealants shall perform to the AAMA 812 standard.

R616.2.3 Cladding application stucco and other cladding shall not be installed prior to window installation.

#### R616.2.4 Pre-installation.

R616.2.4.1 Pre-installation inspection. Prior to the installation of the window, an inspection of the WRB shall be made by the window installer to ensure that it has been installed in accordance with the WRB manufacturer's instructions. Any tears, penetrations, or defects within 12 inches past the rough opening area shall be sealed per the WRB manufacturer's instructions before the installation starts. Refer to ASTM C 755.

#### R616.3 Window installation procedures.

##### R616.3.1 Installation procedures.

R616.3.1.1 In the event that the WRB has not been modified the installer shall complete the following steps. Carefully cut the WRB in a modified "I" pattern per ASTM E 2112. A full "I" cut is also acceptable. Fold the bottom and side flaps over and behind the interior side of the framing. Attach the WRB into position on the inside of the rough opening, and trim any excess as required.

R616.3.1.2 At the head of the opening, starting at the top corner of the window (rough) opening, measure from the corner horizontal and then vertical a dimension equal to the roll width of the flashing to be applied, and make a mark. At a 45 degree angle, carefully cut the WRB on a diagonal. Repeat this step on the opposite corner. Gently raise the bottom edge of the flap created in the WRB up and temporarily tape the top corners and center to the exterior face of the WRB above. This is done in order to allow for installation of the window and head flashing later.

R616.3.2 Apply horizontal sill flashing material. If a rigid or semirigid sill pan system is used, apply sill flashing level with the top edge of the rough opening sill.

R616.3.2.1 Self-adhering flashing (SAF) is able to serve as both horizontal sill flashing and the sill pan with sufficient width. The SAF must cover the sill to at least the depth of the window plus 2 inches onto the face of the WRB drainage plane. Cut the sill flashing long enough to extend an equal distance beyond the rough opening width. Cut a length equal to the rough opening width plus two times the roll width of the jamb flashing. When mechanical flashing is used the minimum roll width shall be 9 inches, while SAF shall be a minimum of 4 inches.

R616.3.3 Install a rigid or semirigid sill pan system. The pan shall direct water to the exterior or to the membrane drainage plane for subsequent drainage to the exterior of the building. When the sill pan is made of metal and includes end dams, seal the sill pan into position, integrating the end dams with the WRB and the down turned leg of the sill pan with the flashing. SAF may also be used to seal the end dam to the WRB at the jamb condition.

R616.3.4 Inspect and clean the back side (interior surface) of the exterior window mounting flange. Look for any missing seals at the corner joinery. If corner seals are missing or need to be touched up, contact the window manufacturer for the recommended type of sealant to apply and then reapply as necessary.

R616.3.5 Apply a continuous 3/8-inch nominal diameter bead of sealant to the back surface (interior face) of the mounting flange of the window at the head and both jambs. Apply sealant in line with any prepunched holes or slots in the mounting flange. Connect that bead of sealant across any joinery on the window frame at all four corners. At an option, the sealant shall be permitted to be applied to the wall surface as opposed to the back of the mounting flange.

R616.3.6 Apply a discontinuous bead of sealant on the interior surface of the mounting flange at the sill. The bead of sealant is to have a minimum of two-inch voids near the ends, which will allow any liquid water that has entered the window opening to exit easily.

R616.3.6.1 As an alternate to the discontinuous bead of sealant, a weep screed or wicking mechanism may be applied at the jamb ends of the sill to allow liquid water to escape.

R616.3.6.2 Additionally, if a rigid or semirigid sill pan is used, apply a bead of sealant to the outboard side of the upturned leg of the pan where it will integrate with the interior side of the window and form an air/water seal.

R616.3.7 Immediately set the window into the opening. Hold the window temporarily into position and apply shims as required to ensure the window is set plumb, level, square and true. Fasten the window perimeter securely into position in accordance with the manufacturer's instructions. Install shims in such a manner that they will not interfere with the application of the air seal which will be applied on the interior side in the steps that follow.

R616.3.8 Flashing shall be applied over the mounting flange of the window at both jambs. Either SAF or mechanical flashing shall be permitted to be used in the following steps. When SAF is used, the additional bead of sealant over the mounting flange (see Section R616.3.8.2) shall be omitted.

R616.3.8.1 Cut the flashing to a measurement equal to twice the roll width of the flashing being used, plus the height of the rough opening, minus 1 inch.

R616.3.8.2 When mechanical flashing is used, apply a continuous 3/8-inch nominal diameter bead of sealant over the wall and the exterior face of the mounting flange, starting 8 1/2 inches above the rough opening continuing down the jambs to the bottom of the sill mounting flange. Apply in line with any pre-punched holes/slots in the mounting flange and cover any fastener heads.

R616.3.8.3 Position the top end of the flashing 1/2-inch below where the top edge of the head flashing will cover the jamb flashing later. Do not interfere with the WRB flap at the head. Tuck the top of the jamb flashing under the flap of the water-resistive barrier at the head.

R616.3.9 Apply a piece of flashing across the head of the rough opening. Either SAF or mechanical flashing may be used. Where SAF is used, the sealant over the mounting flange (see Section R616.3.9.3) shall be omitted.

R616.3.9.1 Cut a piece of head flashing that is the width of the rough opening plus two times the roll width of the flashing plus 2 inches.

R616.3.9.2 Apply primer to any exposed OSB as required by the flashing manufacturer.

R616.3.9.3 When using mechanically applied flashing, apply a continuous 3/8-inch nominal diameter bead of sealant along the mounting flange at the head. Apply the sealant in line with any prepunched holes or slots in the mounting flange and cover any fastener heads.

R616.3.9.4 Adhere the flashing across the head of the window on top of the mounting flange and beyond the rough opening on each side extending it 1 inch over the outside edge of the flashing at the jambs. Fasten the mechanically applied flashing as needed.

R616.3.10 Remove the previously applied tape which holds the flap of the WRB at the head. Allow the flap to lay flat over the head flashing. Apply a new piece of sheathing tape over the entire diagonal cut made in the WRB. The tape should be compressed against the WRB and the head flashing, which extends over the jamb.

R616.3.11 On the interior, the installer shall apply a backer rod and an interior perimeter bead of sealant or other window manufacturer approved material between the window and the rough opening on all sides to form an air seal. If a rigid or semirigid sill pan was used, recheck the seal between the sill of the window and the upturned leg of the sill pan and reseal as needed.

R616.3.11.1 In cases where shims cause interference with the application of the backer rod or sealant, trim excess shim material to allow for a continuous air/water seal. In all cases, make sure the entire perimeter joint has been sealed, creating an air/water-tight condition.

R616.4 Post installation procedure drainage holes shall be inspected for blockage and freed of any obstructions to allow drainage.



## ATTACHMENT 4

### OPTIONS RANKING EXERCISE RESULTS

*The Window/Wall Workgroup is charged with evaluating and developing recommendations regarding the window-wall interface (installation and water intrusion).*

#### 1. 2010 Code Amendment Proposals

##### Format

**Reorganize the sections to split curtain wall from garage door requirements.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	14	1	0	0
<i>Revised</i>	15	0	0	0

##### **Comments and Reservations (August 11, 2009):**

JB: What is issue? Answer: curtain wall is currently placed in garage door section

DW: Should go further. Separate, but add section for just flashing of door and windows.

**Create separate section of code for all flashing of windows and doors requirements**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	4	10	1	0
<i>Revised</i>	0	2	5	4

##### **Comments and Reservations (August 11, 2009):**

DW: code has several sections which is confusing, so one location would help clarify.

SS: flashing is a finishing detail and shouldn't be in Chapter 6, move to appropriate chapter.

DW: take out of structural and put in wall.

CP: want to see language before voting in favor of this concept.

JS: prefer to keep the ICC format.

CA: might be redundant to copy language from reference documents in the code, reference to the standard approach may be easier for future.

DG: changed vote on second vote because we need to maintain ICC codes format.

### Installation Instructions/Standards

#### Consider adopting the FMA/AAMA prescriptive installation documents by reference.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	2	6	3	4

#### Comments and Reservations (August 11, 2009):

MM: are these available yet?

CA: 100 is available, 200 ballot is still out on this now for modifications to original expected to be complete by December 2009.

JB: masonry industry has opposed some issues in standards, not available yet, will oppose requirement of putting something between stucco and block.

CP: 100 is for frame and 200 is for masonry walls, my negative vote is for masonry requirement.

JB: his comments and vote were relative to masonry also.

Members agreed to split out 100 and 200 and discuss/rank separately.

#### Consider adopting the FMA/AAMA 100 (wood frame) prescriptive installation documents by reference.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	2	8	5	0

#### Comments and Reservations (August 11, 2009):

JS: need to identify edition of the standard if added to code.

Jim Krahn: 100 and 200 are AMMA and FMA, there is a FMA/WDMA 250, will be 300 series for door installation. 250 is for mounting flange windows in CMUs.

CP: can't support this because haven't reviewed latest version of document.

DG: need to have more precise recommendations and need to review the document first.

JJ: Code already has 616 sequence and adding 100 would be redundant, would need to remove if use as reference standard.

#### Consider adopting the FMA/AAMA 200 (masonry frame) prescriptive installation documents by reference.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	0	8	2	5

#### Comments and Reservations (August 11, 2009):

JJ: document depends on unsustainable precision of wall openings (in field).

JB: believes you can get masonry opening within tolerances given, put dimension requirements and inspection in code last time and will pursue plan review next time

JJ: code and FMA document have different field tolerance requirements.

#### Review new AMMA standards for window installation for reference into the code.

*Members agreed standards have to be complete before considering.*

**Consider including Jacksonville installation in the code.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	0	8	5	3

**Comments and Reservations (August 11, 2009):**

*Members agreed this could be re-evaluated once the documents is sent and reviewed.*

JS: specification is for wood frame with stucco, Jacksonville window industry is proposing to run stucco to flange, grooving and finishing.

DW: First Coast BOAF original flashing detail was based on 2112.

Jeff S: don't know much about it.

DW: this is not needed.

CA: word description of the stucco stop and gap.

**Would adoption of inspection checklist for window installation be a helpful addition to the code.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	1	0	5	9

**Comments and Reservations (August 11, 2009):**

DG: concern with checklist in code.

**Require installation sealant details for product approval to cover masonry, Stucco and wood installations.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	0	4	2	9

**Comments and Reservations (August 11, 2009):**

JS: some manufacturers installation specifications are not adequate but code defers to them.

SS: manufacturers requirements should generally apply, but they don't work for all instances.

**Manufactures must state on their product approval compatible wall systems with proper installation drawings.**

*Members agreed this option is outside scope of Workgroup.*

**Standards referenced in the codes must be readily available.**

*Members agreed this is already required.*

**Evaluation agencies instructed not approve installation details not allowed by the Code****Comments and Reservations (August 11, 2009):**

JS: problem is some think installation specifications apply to flashing also.

*Members agreed to send to P.A for review, outside scope of the Workgroup.*

**Consider developing a default fastener schedule*****Comments and Reservations (August 11, 2009):***

CA: these do not preempt manufacturers specifications but could provide a default schedule.

SS: too many different window configurations and substrates to be practical.

DG: since schedule would be based on worst case, the table would rarely be used.

CP: good concept, but when came up previously decided one size fits all not good.

DW: too complex.

Ken: another problem is cantilever effect on fasteners.

CA: *Withdrawn proposal.*

**Consider requiring 2-by bucks in masonry openings**

	<i>4= acceptable</i>	<i>3= minor reservations</i>	<i>2= major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	0	1	8	5

***Comments and Reservations (August 11, 2009):***

CA: 2x buck would give you same substrate to attach window to as it was tested in.

JB: I disagree.

CP: 1x bucks have been used due to other problems created by using 2x bucks.

**Prescriptive Requirements****Require a stucco stop to keep stucco off window frame.**

*Members agreed to consider at the next meeting.*

Send Chuck's information to members.

**Installation details should provide the correct detail regarding not having stucco in contact with window frame.**

*Members agreed to consider at the next meeting.*

**Installation requirements should include ensuring there are good options to trim and service the system later.*****Comments and Reservations (August 11, 2009):***

*Members agreed this was not an option to rank.*

CA: need to be able to replace sealant.

CP: need to have installation that can be later serviced.

JS: trim is covering sealant causing problem.

CP: concern is any new and different install technique be evaluated for ability for later removal and repair

**Add head flashing requirement for through wall flashing.**

**Comments and Reservations (August 11, 2009):**

*Members agreed this was not an option to rank.*

Is this specific to frame?

Not comfortable with what is being asked here.

**Add requirement to Chapter one, plan review requirements, detail through wall penetrations for fenestrations for both commercial and residential plans.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	4	10	0	0

**Comments and Reservations (August 11, 2009):**

JS: nothing yet in code that deals with penetration and flashing so need something code officials can inspect.

JB: is limiting to fenestration products ok?

**Add language for window maintenance in the chap 16 voluntary part of Existing Building Code.**

*This option was withdrawn.*

**Comments and Reservations (August 11, 2009):**

DG: Maybe language in Existing Bldg Code to address this. Maybe it is an education process for public

JB: urge caution; 2004 storms showed the newer buildings had problems more than multi-painted older buildings; Chapter 16 added to FBC, Existing for voluntary only.

CP: classify as significant problem; not building code though; furthering education should be Commission initiative; good thing to do.

JS: doesn't hurt to have instructive language in code under "repairs". Should be in non-mandatory part of the code.

JB: should be in Chapter 16 instead of Repairs.

JR: problems with putting in code.

DW: ASTM E 2112 speaks to requirement for installing window in way it can be maintained

DG: this is more of an education process than code, withdraw as an option.

Put snippet in code that owner must get manufacturers documents on maintenance.

DG: there is no way to enforce that owner gets such information.

JS: move this suggestion under installer certification perhaps, instead as a code option.

SS: manufacturer's websites have information on maintenance already.

**Discuss the use of three sided sill pans under sills.**

	<i>4=acceptable</i>	<i>3= minor reservations</i>	<i>2=major reservations</i>	<i>1= not acceptable</i>
<i>Initial Ranking 8/11/09</i>	0	0	0	14

**Comments and Reservations (August 11, 2009):**

CA: there is no reason to put this in the code.

JB: agree with CA, no reason to put in code.

Include a standard detail for each type of installation, should be placed in the code commentary.

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	7	6	0	0

**Comments and Reservations (August 11, 2009):**

JS: someone needs to have responsibility for the design/installation specifications. The problem is residential.

JS: a picture is worth thousand words. Add picture to go with the requirements currently in code.

RC: where do you stop if you start this?

JB: good idea for a commentary, perhaps window industry could develop one. Building departments would want an A or E detail for anything not in drawings included in the code.

MM: building department would not allow anything but what is in the drawings.

DW: a few details on windows would not overload code, e.g. look at details for rebar installation that are in current code.

RC: would consider putting comment in commentary type format.

DG: belongs in commentary. Agrees with JB.

JS: propose adding installation details and they should be placed in code commentary.

**106.3.5 Minimum plan review criteria for buildings. The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions and all exterior elevations.**

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	8	4	1	0

**Comments and Reservations (August 11, 2009):**

RC: still have to have design drawings so should be no problem requiring this in code; would add rough opening size to requirement too.

DW: should add through wall penetrations also.

CA: possibly use "flashing" and "sealing" .

***Inclusion of verbiage to require job-specific installation instructions to accompany each window and door, and make access to instructions easier and more assured.***

Section R613.1, be amended to read: "Windows shall be installed and flashed in accordance with the manufacturer's written job-specific installation instructions. Written job-specific installation instructions shall be provided by the manufacturer for each window".

	4=acceptable	3= minor reservations	2=major reservations	1= not acceptable
Initial Ranking 8/11/09	1	1	3	9

**Comments and Reservations (August 11, 2009):**

SS: this can't be done.

JJ: architects are doing this now. Prescriptive in code won't work. Need alternative.

CA: manufacturer's stocking makes this difficult. Architects or engineers of record should be responsible.

JB: I agree with CA.

**Inclusion of Structural, Free-Foam PVC as an acceptable buck material for CMU construction.**

Section R613.6.1.1 states, in part: "Masonry, concrete or other structural substrate. Where the wood shim or buck thickness is less than 1-1/2 inches (38mm), window and door assemblies shall be anchored through the main frame or by jamb clip or sub-frame system, in accordance with the manufacturers published installation instructions." Tends to limit interpretation that the buck system needs to be wood. Either removing the wood reference or adding "Structural Free Foam PVC".

**Comments and Reservations (August 11, 2009):**

*This option was withdrawn.*

JJ: reason is for ability to make a curved buck. Suggest removing word "wood".

JB: would this allow for other than curved use?

CP: is intent to allow only for bucks for less than 1.5 inch?

JJ: no, should be allowed for sealing any buck opening.

CP: what about through fastening, will it cause fastener problems?

JJ: maybe should limit to some maximum spacing.

MM: this is a product and should not be in the code.

JB: the concept is good, but need to know more.

RC: would support "or other approved materials".

DG: I agree with the concept, but object to removing "wood" from the code. Should say "or other approved material".

Do the same in other parallel sections.

**Acceptance of visco-elastic foam tape as equivalent to materials and methods currently used for weatherproofing window wall joints. (aka impregnated acrylic foam tape).**

**Comments and Reservations (August 11, 2009):**

*This option was withdrawn.*

JJ: recommend use of this in retrofits. Concern is it doesn't meet definition of flashing which may prevent its use.

CA: struggle with expandable foams.

JJ: this is not an injectable foam. It has been well tested in Europe

MM: is this used as a sealant or flashing

JJ: in Europe it replaces flashing and sealing.

*Maybe this should be included in testing done here.*

JJ: there are only European standards.

JB: discussion on how to get PA.

MM: maybe submit for evaluation to acceptance criteria of ICC or evaluation entity.

JJ: if manufacturer included this in its installation specifications would that be acceptable to code?

DG: the code has covered this an it is up to Building Official to apply the alternative method approval approach.

Visco elastic foam weather sealing “tapes” need to be made acceptable for use in CMU (and other) installations governed by the Florida Building Code and cannot be held contrary to in-place definitions for Flashing, Insulation and Vapor Retardant, etc. while it’s maybe contrary to their definitions, it performs these functions in field application.

Options:

1. Grandfather-in the applicable European standards and tests cited as equivalencies.
2. Field Test as part of the on-going testing performed at UF to demonstrate performance.
3. Create code language to be inserted in appropriate Code Sections to create de facto or implied code approval.

**How can aging problems be addressed? Previous discussion indicated some of the issue is improper design and part is ineffective maintenance.**

*Members agreed there was no reason/ need to rank this.*

## TESTING AND EVALUATION

**Develop an acceptable level of leakage for window/wall assembly tests.**

*Members agreed this is a research issue.*



<b>Date Submitted</b>	3/18/2010	<b>Section</b>	107.3.5	<b>Proponent</b>	Mohammed Shaikh
<b>Chapter</b>	1	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	No Affirmative Recommendation with a Second				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Add the recommendations of the Window Wall Work Group report of August 2009 in the plan review criteria of Section 107.3.5.

**Rationale**

Per recommendation of Window Wall Work Group report of August 2009

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**

See Window Wall work group report of August 2009

**Impact to building and property owners relative to cost of compliance with code**

See Window Wall work group report of August 2009

**Impact to industry relative to the cost of compliance with code**

See Window Wall work group report of August 2009

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

Yes is for the safety and welfare of people

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**

Strengthens and improves the code

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**

Does not discriminate

**Does not degrade the effectiveness of the code**

Improves the effectiveness of the code

**2nd Comment Period**

09/03/2010 - 10/18/2010

<b>Proponent</b>	Dwight Wilkes	<b>Submitted</b>	10/18/2010	<b>Attachments</b>	No
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**Comment:**

Believe that the recommendation from the consensus window/wall work group should be included as a Florida specific; given the tremendous amount of confusion that still exists in the industry.

CA3615-G1

**107.3.5 Minimum plan review criteria for buildings.** The examination of the documents by the building official shall include the following minimum criteria and documents: a floor plan; site plan; foundation plan; floor/roof framing plan or truss layout; all fenestration penetrations; flashing; and rough opening dimensions and all exterior elevations:



<b>Date Submitted</b> 4/2/2010	<b>Section</b> All	<b>Proponent</b> Doug Harvey
<b>Chapter</b> 1	<b>Affects HVHZ</b> No	<b>Attachments</b> Yes
<b>TAC Recommendation</b>	No Affirmative Recommendation with a Second	
<b>Commission Action</b>	Pending Review	

**Related Modifications**

None

**Summary of Modification**

Replace the Florida Building Code-Fuel Gas with the 2009 International Fuel Gas Code in its entirety.

**Rationale**

There are no Florida specific problems that are not covered by the regulations contained within the 2009 International Fuel Gas Code.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**

There is no impact to local enforcement other than gaining consistency and putting inspection and review personnel in line with the Code that certification is attained under and used throughout the nation

**Impact to building and property owners relative to cost of compliance with code**

None

**Impact to industry relative to the cost of compliance with code**

Allows for a code that is more up to date with the new standards, practices and materials. Improves consistency and compliance in design, construction and enforcement. Saves money and time by allowing for a single place to request code modifications.

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**

No change

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**

Improves

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**

This change does not discriminate

**Does not degrade the effectiveness of the code**

This change does not degrade the effectiveness of the code and should improve effectiveness as consistency will be increased.

**Alternate Language**

**2nd Comment Period**

09/03/2010 - 10/18/2010

<b>CA4381-A1</b>	<b>Proponent</b> Thomas Allen	<b>Submitted</b> 10/18/2010	<b>Attachments</b> Yes
	<b>Rationale</b>		
	this provides the answers to the questions raised by the TAC Committees this would eliminate the FFGC and simplify the Florida Code process this would save the citizens of Florida the cost of developing a code for 6 pages of changes. this change follows the Commissions request to return to the base code.		
	<b>Fiscal Impact Statement</b>		
	<b>Impact to local entity relative to enforcement of code</b>		
	Simplifys enforcement		
	<b>Impact to building and property owners relative to cost of compliance with code</b>		
	None		
	<b>Impact to industry relative to the cost of compliance with code</b>		
	none		
<b>Requirements</b>			
<b>Has a reasonable and substantial connection with the health, safety, and welfare of the general public</b>			
Yes			
<b>Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction</b>			
Provides equivalent products, methods, or systems			
<b>Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities</b>			
does not discriminate			
<b>Does not degrade the effectiveness of the code</b>			
does not degrade the effectiveness of code			

**2nd Comment Period**

09/03/2010 - 10/18/2010

Proponent	Submitted	Attachments
Thomas Allen	10/18/2010	Yes

CA4381-G2

**Comment:**

With the changes brought forward in the update of the base code, the attached shows the changes based on review of the 2007 IFGC, the 2009 IFGC. Basically there are 6 pages of code differences, plus an introductory page and adding the Florida Reference Standards to the 2009 IFGC. This clearly shows that we do not need to publish an entirely new book for this few differences. This follows the mandate from the Florida Building Commission to return to the base code. Thank You.

**1st Comment Period History**

04/15/2010 - 06/01/2010

Proponent	Submitted	Attachments
Doug Harvey	6/1/2010	No

CA4381-G1

**Comment:**

We, the Building Officials Association of Florida (BOAF), believe this modification may require some additional explanation. The BOAF executive board has been consulted regarding this code proposal and they are in agreement that the proposal appears to go along the line of the vote taken by the Commission last fall to remove non-Florida specific items, return to the base documents and have a separate Florida supplement, if needed. The International Code is the base code for the Florida Codes. As such, a strike-through/underline version of the document has not been attached to this modification. Due to the length and file sizes needed, as well as the proposed document being familiar as the base code, this did not seem necessary. Since the base document is the root document for the Florida code, and the Commission voted to return to the base documents over the next two (2) code cycles, we ask the Commission to accept the proposal and allow it to move forward. This is based on the vote taken by the Commission during a public meeting in the Fall of 2009. BOAF supports taking the very specific items modifying the base code to meet Florida Statutes or rules into a smaller and easier to manage stand alone Florida supplement.

Replace the ~~Florida Building Code Fuel Gas~~ with the 2009 International Fuel Gas Code in its entirety.

Florida Supplement to the I Codes:

This draft is prepared under the following assumption:

- The flood provisions in the base code will be brought forward as recommended by the Floodplain Workgroup and approved by the Commission.

Florida Building Code, Fuel Gas:

For the purposes of using this supplement the following references apply throughout:

International Building Code, use the current Florida Building Code, Building

International Residential Code, use the current Florida Building Code, Residential

International Plumbing Code, use the current Florida Building Code, Plumbing

International Mechanical Code, use the current Florida Building Code, Mechanical

International Fire Code, use the current Florida Fire Prevention Code.

International Fuel Gas Code, use the current International Fuel Gas Code with the Florida Supplement to the I Codes  
Florida Building Code, Fuel Gas Section.

The Florida Supplement lists the Florida Code Changes and ~~the sections that do not apply in Florida.~~

## FLORIDA BUILDING CODE FUEL GAS SUPPLEMENT 2010

### CHAPTER 1 ADMINISTRATION

**101.1 Scope.** The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Fuel Gas.

The rest of Chapter 1 is Reserved.

### CHAPTER 2 DEFINITIONS

**201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have the meanings as defined in Webster's Third New International Dictionary of the English Language Unabridged. ~~ordinarily accepted meanings such as the context implies.~~

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### CHAPTER 3 GENERAL REGULATIONS

~~**301.1.1 Other fuels.** The requirements for combustion and dilution air for gas fired appliances shall be governed by Section 304. The requirements for combustion and dilution air for appliances operating with fuels other than fuel gas shall be regulated by the International Mechanical Code.~~

**301.1.1** This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment (see "Point of delivery").



2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge).

LP-gas piping systems with an operating pressure of 20 psig (140 kPa) or less.

3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

1. Portable LP-gas equipment of all types that are not connected to a fixed fuel piping system.

2. Installation of farm equipment such as brooders, dehydrators, dryers and irrigation equipment.

3. Raw material (feedstock) applications except for piping to special atmosphere generators.

4. Oxygen-fuel gas cutting and welding systems.

5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.

6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.

7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.

8. LP-gas installations at utility gas plants.

9. Liquefied natural gas (LNG) installations.

10. Fuel gas piping in power and atomic energy plants.

11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors and calorimeters.

12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

13. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.

14. Installation of LP-gas systems for railroad switch heating.

15. Installation of LP-gas and compressed natural gas (CNG) systems on vehicles.

16. Gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.

17. Building design and construction, except as specified herein.

**301.12 Seismic resistance.** ~~Reserved. When earthquake loads are applicable in accordance with the International Building Code, the supports shall be designed and installed for the seismic forces in accordance with that code.~~

**305.5 Private garages.** ~~Reserved—Appliances located in private garages shall be installed with a minimum clearance of 6 feet (1829 mm) above the floor.~~

**Exception:** ~~The requirements of this section shall not apply where the appliances are protected from motor vehicle impact and installed in accordance with Section 305.3.~~

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**306.3 Appliances in attics.** Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than ~~20 feet (6096 mm)~~ 6 feet (1829 mm) in length measured along the centerline of the passageway from the attic access opening to the appliance's service panel. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

**Exceptions:**

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
2. ~~Where the passageway is not less than 6 feet (1829 mm) high for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.~~

**306.3.1 Electrical requirements.** ~~A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the appliance location in accordance with NEPA 70. [M] A lighting fixture with receptacle outlet, controlled by a switch located at the required passageway opening, shall be provided so as to light the passageway and service area and installed in accordance with Chapter 27 of the Florida Building Code, Building~~

**306.3.2 Air-handling units.** Air-handling units shall be allowed in residential attics if the following conditions are met:

1. The service panel of the equipment is located within 6 feet (1829 mm) feet of an attic access.
2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
3. The attic access opening is of sufficient size to replace the air handler.
4. A notice is posted on the electric service panel indicating to the homeowner thatthe air handler is located in the attic. Said notice shall be in all capitals, in 16-point type, with the title and first paragraph in bold:

#### NOTICE TO HOMEOWNER

A PART OF YOUR AIR-CONDITIONING SYSTEM, THE AIR HANDLER, IS LOCATED IN THE ATTIC. FOR PROPER, EFFICIENT, AND ECONOMIC OPERATION OF THE AIR-CONDITIONING SYSTEM, YOU MUST ENSURE THAT REGULAR MAINTENANCE IS PERFORMED. YOUR AIR-CONDITIONING SYSTEM IS EQUIPPED WITH ONE OR BOTH OF THE FOLLOWING: 1) A DEVICE THAT WILL ALERT YOU WHEN THE CONDENSATION DRAIN IS NOT WORKING PROPERLY, OR 2) A DEVICE THAT WILL SHUT THE SYSTEM DOWN WHEN THE CONDENSATION DRAIN IS NOT WORKING. TO LIMIT POTENTIAL DAMAGE TO YOUR HOME, AND TO AVOID DISRUPTION OF SERVICE, IT IS RECOMMENDED THAT YOUENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

**309.1 Grounding.** Gas piping shall not be used as a grounding electrode. Each above-ground portion of a gas piping system upstream from the equipment shutoff valve shall be electrically continuous and bonded to any grounding electrode, as defined by Chapter 27 of the Florida Building Code, Building.

**310.1 Pipe and tubing other than CSST.** Each above-ground portion of a gas piping system ~~other than corrugated stainless steel tubing (CSST)~~ that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping ~~other than CSST~~ shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance.

**310.1.1 CSST.** ~~Corrugated stainless steel tubing (CSST) gas piping systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent.~~

## SECTION 311

### CARBON MONOXIDE CONTROL SYSTEMS

**311 Carbon monoxide control systems.** See Section 916 of the Florida Building Code, Building.

## CHAPTER 4 GAS PIPING INSTALLATIONS

**404.15.3 Tracer.** An ~~yellow~~ insulated copper tracer wire or other approved conductor shall be installed adjacent to underground nonmetallic gas piping. Access shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic gas piping. The tracer wire size shall not be less than 18 AWG and the insulation type shall be suitable for direct burial.

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## CHAPTER 5 CHIMNEYS AND VENTS

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**503.10.14 Passage through ceilings, floors or walls.** Single-wall metal pipe connectors shall not pass through any wall, floor or ceiling except as permitted by Sections 503.7.4 and 503.10.15.

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## CHAPTER 6 SPECIFIC APPLIANCES

### Section 615. Sauna Heaters Reserved

**615.1 General.** Sauna heaters shall be installed in accordance with the manufacturer's installation instructions.

**615.2 Location and protection.** Sauna heaters shall be located so as to minimize the possibility of accidental contact by a person in the room.

**615.2.1 Guards.** Sauna heaters shall be protected from accidental contact by an approved guard or barrier of material having a low coefficient of thermal conductivity. The guard shall not substantially affect the transfer of heat from the heater to the room.

**615.3 Access.** Panels, grilles and access doors that are required to be removed for normal servicing operations shall not be attached to the building.

**615.4 Combustion and dilution air intakes.** Sauna heaters of other than the direct vent type shall be installed with the draft hood and combustion air intake located outside the sauna room. Where the combustion air inlet and the draft hood are in a dressing room adjacent to the sauna room, there shall be provisions to prevent physically blocking the combustion air inlet and the draft hood inlet, and to prevent physical contact with the draft hood and vent assembly, or warning notices shall be posted to avoid such contact. Any warning notice shall be easily readable, shall contrast with its background and the wording shall be in letters not less than  $\frac{3}{4}$  inch (6.4 mm) high.

**615.5 Combustion and ventilation air.** Combustion air shall not be taken from inside the sauna room. Combustion and ventilation air for a sauna heater not of the direct vent type shall be provided to the area in which the combustion air inlet and draft hood are located in accordance with [Section 304](#).

**615.6 Heat and time controls.** Sauna heaters shall be equipped with a thermostat which will limit room temperature to 194°F (90°C). If the thermostat is not an integral part of the sauna heater, the heat sensing element shall be located within 6 inches (152 mm) of the ceiling. If the heat sensing element is a capillary tube and bulb, the assembly shall be attached to the wall or other support, and shall be protected against physical damage.

~~615.6.1 Timers.~~ A timer, if provided to control main burner operation, shall have a maximum operating time of 1 hour. The control for the timer shall be located outside the sauna room.

~~615.7 Sauna room.~~ A ventilation opening into the sauna room shall be provided. The opening shall be not less than 4 inches by 8 inches (102 mm by 203 mm) located near the top of the door into the sauna room.

~~615.7.1 Warning notice.~~ The following permanent notice, constructed of approved material, shall be mechanically attached to the sauna room on the outside:

~~WARNING: DO NOT EXCEED 30 MINUTES IN SAUNA. EXCESSIVE EXPOSURE CAN BE HARMFUL TO HEALTH. ANY PERSON WITH POOR HEALTH SHOULD CONSULT A PHYSICIAN BEFORE USING SAUNA.~~

The words shall contrast with the background and the wording shall be in letters not less than  $\frac{1}{4}$  inch (6.4 mm) high.

~~Exception:~~ This section shall not apply to one and two family dwellings.

**Chapter 8 - Referenced Standards**

<p><b>Florida Codes</b></p> <p>Standard reference number</p> <p>FBC-B-10</p>	<p>Florida Building Commission                  c/o Florida Department of Community Affairs                  Building Codes and Standards                  2555 Shumard Oak Boulevard                  Tallahassee, FL 32399-2100</p> <p>Title</p> <p>Florida Building Code, Building</p>	<p>Referenced in code section number</p> <p>101.1, 201.3, 301.14, 302.1, 302.2, 305.6, 306.6, 401.1.1, 412.6, 413.3, 413.3.1, 501.1, 501.3, 501.12, 501.15.4, 609.3,</p>
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Chapter 13	Florida Building Code, Building: Energy Efficiency	614.2, 706.2 301.2
Chapter 27	Florida Building Code, Building: Electrical (NEC/NFPA 70)	201.3, 306.3.1,
306.4.1, 306.5.2, 309	1, 309.2, 703.6,	
FBC-M-10	Florida Building Code, Mechanical	201.3, 301.13, 304.11, 501.1, 614.2 618.5, 621.1, 624.1, 631.2, 632.1, 703.1.2
FBC-P-10	Florida Building Code, Plumbing	201.3, 301.6, 624.1.1, 624.2
FBC-R-10	Florida Building Code, Residential	703.2.1
FFPC-10-	Florida Fire Prevention Code	201.3, 303.4, 401.2, 412.1, 412.6, 412.7, 412.7.3, 412.8, 413.1, 413.3, 413.3.1, 701.1, 701.2, 703.2, 703.2.2, 703.3.8, 703.4, 703.5, 704.1.2, 704.3, 704.4, 706.2, 707.1, 707.2, 708.1

#### **Appendix C - (IFGS) Exit Terminals of Mechanical Draft and Direct-Venting Systems**

**RESERVED (not to be adopted or utilized)**

#### **Appendix D - (IFGS) Recommended Procedure for Safety Inspection of an Existing Appliance Installation**

**RESERVED (not to be adopted or utilized)**



Florida Supplement to the I Codes:

This draft is prepared under the following assumption:

- The flood provisions in the base code will be brought forward as recommended by the Floodplain Workgroup and approved by the Commission.

Florida Building Code, Fuel Gas:

For the purposes of using this supplement the following references apply throughout:

International Building Code, use the current Florida Building Code, Building  
International Residential Code, use the current Florida Building Code, Residential  
International Plumbing Code, use the current Florida Building Code, Plumbing  
International Mechanical Code, use the current Florida Building Code, Mechanical  
International Fire Code, use the current Florida Fire Prevention Code.  
International Fuel Gas Code, use the current International Fuel Gas Code with the Florida Supplement to the I Codes Florida Building Code, Fuel Gas Section.

The Florida Supplement lists the **Florida Code Changes** and **the sections that do not apply in Florida.**

<b>Date Submitted</b>	4/2/2010
<b>Mod Number</b>	
<b>Code Version</b>	2010
<b>Code Change Cycle</b>	2010 Triennial Original Modifications 03/01/2010-04/02/2010
<b>Sub-code</b>	Fuel Gas
<b>Chapter Topic</b>	Publication
<b>Section</b>	All
<b>Related Modification</b>	
<b>Affects HVHZ</b>	No
<b>Summary of modification</b>	Replace the Florida Building Code-Fuel Gas with the 2009 International Fuel Gas Code in its entirety.
<b>Text of Modification</b>	The 2009 International Fuel Gas Code text in its entirety.
<b>Rational</b>	There are no Florida specific problems that are not covered by the regulations contained within the 2009 International Fuel Gas Code.
<b>Fiscal Impact statement</b>	There is no fiscal impact by this change
<b>Impact to Local Enforcement</b>	There is no impact to local enforcement other than gaining consistency and putting inspection and review personnel in line with the Code that certification is attained under and used throughout the nation
<b>Impact to Building owner</b>	None
<b>Impact to Industry</b>	Allows for a code that is more up to date with the new standards, practices and materials. Improves consistency and compliance in design, construction and enforcement. Saves money and time by allowing for a single place to request code modifications.
<b>Requirements</b>	None
<b>Has connection to health safety and Welfare</b>	No change
<b>Strengths or improves Code</b>	Improves
<b>Does not discriminate</b>	This change does not discriminate
<b>Does not degrade effectiveness of code</b>	This change does not degrade the effectiveness of the code and should improve effectiveness as consistency will be increased.