

# Comments Received after Glitch Comment Period deadline

## Florida Building Code, Building

### Chapter 4

#### Section 420

Skip Gregory, Health Facility Consulting, LLC

Mo,

As we discussed, it was never the intent of these revisions to delete the following paragraphs from Section 420:

1. Paragraphs 420.4.2.1 Space Standard, 420.4.2.1.1, 420.4.2.1.2 and 420.4.2.1.3. were inadvertently deleted. Please restore these sections and their paragraphs. Section 420.4.2.1 Site Standards will then be renumbered to become Section 420.4.2.2 Site Standards.
2. Paragraph 420.4.2.6.2 was inadvertently deleted. Please restore this section.

420.4.2.1 Space standards.

420.4.2.1.1 For planning purposes, each new facility shall provide a minimum of 30 net square feet (2.79 m<sup>2</sup>) per resident served in the occupied resident area(s). The number of residents to be served is to be determined by the facility administration.

420.4.2.1.2 As determined by the facility, space for administrative and support activities shall be provided for use by facility staff to allow for care of residents in the occupied resident area(s).

420.4.2.1.3 As determined by the facility, space shall be provided for all staff and family members of residents and staff.

## Section 424.1.6.5

<Bob\_Vincent@doh.state.fl.us>

05/05/2011 03:33 PM

To [Mo.Madani@dca.state.fl.us](mailto:Mo.Madani@dca.state.fl.us)

cc<Bob\_Pryor@doh.state.fl.us>, <Bob\_Foster@doh.state.fl.us>, [Patti Anderson@doh.state.fl.us](mailto:Patti_Anderson@doh.state.fl.us)

Subject: tiny glitch in FBC 424.1

in the Florida Building Code public pool code at 424.1, the following language exists in two sequential clauses and should be changed to reflect the Dept. of Health rule language provided below. We have had 10 feet per second and 20 gpm in our rule since May 27, 2004, when we revised the velocity to increase from a maximum of 8 fps to a max. of 10 fps and the gpm flow from 15 to 20. We changed this because pumps designed at 50 and 60 feet of TDH were providing more flow than the minimally sized filters capacity due to the larger pipe sizes required for the lower velocity. We only allowed this lower velocity and flow in Chapter 64E-9, FAC, from 12/27/1998 through 5/26/2004.

424.1.6.5.8 Flow velocity. Pressure piping shall not exceed 8 feet per second (2438 mm/s), except that precoat lines ...

424.1.6.5.9.6 The flow rate through each inlet shall not exceed 15 gpm (1 L/s).

FAC 64E-9.007(8) Flow Velocity – Pressure piping **shall not exceed 10 feet per second**, except that precoat lines with higher velocities may be used when necessary for agitation purposes... FAC 64E-9.007(9) Inlets – All inlets shall be adjustable with wall type inlets being directionally adjustable and floor type inlets having a means of flow adjustment. Floor inlets shall be designed and installed such that they do not protrude above the pool floor and all inlets shall be designed and installed so as not to constitute sharp edges or protrusions hazardous to pool bathers. Floor inlets for vinyl liner and fiberglass pools, shall be smooth with no sharp edges, and shall not extend more than 3/8 inches above the pool floor. Wall inlets shall be installed a minimum of 12 inches below the normal operating water level unless precluded by the pool depth or intended for a specific acceptable purpose.

(a)... -(e)... (f) The flow rate through each inlet **shall not exceed 20 gpm**.

**Thanks Mo.**

Bob Vincent, R.S., M.P.A., DOH Bureau of Water Programs, 850.245.4578, 4052 Bald Cypress Way, Bin #C-22, Tallahassee, FL 32399-1742  
Webpages:

Drinking Water <http://www.myfloridaeh.com/water/index.html> Pools <http://www.myfloridaeh.com/water/swim/index.html> Beaches <http://esetapps.doh.state.fl.us/irm00beachwater/default.aspx>

How are we doing? Please take our survey...[http://www.doh.state.fl.us/environment/water/water\\_survey.htm](http://www.doh.state.fl.us/environment/water/water_survey.htm)

FDOH Mission: Promote, protect and improve the health of all people in Florida.

## Section 1008.1.1

Petitioner: Mo Madani

Revise section 1008.1.1 for consistency with HB 849:

553.73(10)(h).....In addition, such buildings that are 400 square feet or less and that are intended for use in conjunction with one-and two-family residences are not subject to the door height and width requirements of the Florida Building Code.

**Florida Building Code, Building:**

**Chapter 10 Mean of Egress**

**Section 1008.1.1 Size of doors; revise text to read as follows:**

**1008.1.1 Size of doors. Revise to reserve exception 8 as follows:**

**Exceptions:**

1 – 6 No change.

7. ~~Reserved.~~ In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be an Accessible unit, ~~Type A unit or Type B unit.~~[3968]

8. ~~Reserved~~ Buildings that are 400 square feet or less and that are intended for use in conjunction with one- and two-family residences are not subject to the door height and width requirements of this code.

## Chapter 14

### Section 1404.5.1

PETITIONER: JOE BELCHER

**JDB CODE SERVICES, INC.**

41 Oak Village Boulevard ♦ Homosassa ♦ Florida ♦ 34446-5632 ♦ (352) 450-2631 (Vox) ♦ (813) 925-4152 Fax jdbcodeservices@tampabay.rr.com

May 6, 2011

Mo Madani, Florida Department of Community Affairs

2555 Shumard Oak Blvd.

Tallahassee, FL 32399-2100

Subject: Public Comment FBCB 2010 Section 1404.5.1 (Mod 4466)

Dear Mr. Madani:

In reviewing the section of the draft 2010 FBCB you provided via facsimile, I realize I apparently missed a portion of the section when uploading my original submission, Mod 4466. The Section Number and leading phrase from AAMA 1402 Section 2.2.1.1.1 were omitted in the Supplement and the draft language. I have added the missing Section Number and phrase below. The added text is at it appears in AAMA 1402.

I believe this change should be considered an erratum or editorial change and request correction via Public Comment. Addition of the Section Number and phrase does not change the intent or application of the section.

Regarding the table to be stricken, the table has no number, but appears on Page 2 of AAMA 1402-86 and is referenced in AAMA 1402-86, Section 2.2.1.2. Section 2.2.1.2 was deleted by Mod 4466.

**Revise 1404.5.1 to read as follows:**

**1404.5.1 Aluminum siding. Aluminum siding shall conform to the requirements of AAMA 1402.**

AAMA 1402, shall be modified to read as follows:


Section 1 Standard Specifications for Aluminum Siding, Soffit, and Fascia, 2.0 Siding Specifications, 2.2 Performance Criteria, 2.2.1 Windload Resistance

2.2.1.1 Static Pressure Test

**2.2.1.1.1** All siding products shall be capable of resisting the design pressures specified for walls for components and cladding loads in accordance with Section 1609.1.1. To verify that the siding will perform under these conditions, it shall be tested in accordance with Test Method #1, "Standard for Testing of Aluminum Siding/Fastener for Windload Resistance" or in an approved manner. The static test pressure shall be as required to demonstrate compliance with the provisions of 1609.1.

**Remainder Unchanged.**

Should you need anything further, please do not hesitate to contact me at your convenience.



Sincerely,

Joseph D. Belcher, Code Consultant

## Chapter 15

### 1507.2.7.1

Eric Stafford

Add clause to reference Table 1507.2.7.1, not the basic wind speed per Figure 1609 to make the code consistent with ASCE 7-2010.

Section 1507.2.7.1, revise as follows:

**1507.2.7.1 Wind Resistance of Asphalt Shingles.** Asphalt Shingles shall be classified in accordance with ASTM D3161, TAS 107 or ASTM D7158 in accordance with Table 1507.2.7.1 ~~to resist the basic wind speed per Figure 1609~~. Shingles classified as ASTM D 3161 Class D or ASTM D 7158 Class G are acceptable for use in the 100-mph wind zone. Shingles classified as ASTM D3161 Class F, TAS107 or ASTM D 7158 Class H are acceptable for use in all wind zones. Asphalt shingle wrappers shall indicate compliance with one of the required classifications as shown in Table 1507.2.7.1.

~~**Exception:** Asphalt shingles not included in the scope of ASTM D 7158 shall be tested and labeled to indicate compliance with ASTM D 3161 and the required classification in Table 1507.2.7.1(2).~~

### 1507.15.3

## Roof Coating

# ROOFING TECHNICAL ADVISORY COMMITTEE

## Minutes

**April 4, 2011**

**1:00-2:30 pm**

**Embassy Suites at USF  
3705 Spectrum Blvd  
Tampa Fl**

**Phone (813) 977-7066**

**Technical Advisory Committee members present ..... Christopher Schulte, Chairman**

**Billy Cone, Lorraine Ross, Karen Warseck, James Buckner, Charles Goldsmith, John (Tim) Tolbert, Mark Zehnal, Bob Boyer.**

1. TAC reviewed and approved the agenda and [January Minutes](#).
2. As requested by the Commission, the TAC discussed and reviewed the concern raised regarding proposed code modifications [R3814-R1](#), [R3799-R1](#), and [R3800-R1](#) specific to the application of roof coating. As part of the discussion, staff provided a summary of the issue detailing the current status of the code change as approved by the Commission for the 2010 FBC including the compromise language provided by the Petitioner. The following is the staff summary which also include staff proposed recommendation:

**1. Current status:**

**2010 Florida Building Code**

**2010 Florida Building Code, Building – Chapter 15**

**1507.15.3 Roof Coating.** Add to read as follows **(Non – HVHZ)** :

**1507.15.3 Roof Coating. Application of elastomeric and or maintenance coating systems over existing asphalt shingles shall be in accordance with the shingle manufacturer’s approved installation instructions. {3814}**

**HVHZ**

**1521.17.1 Application of elastomeric and or maintenance coating systems over existing asphalt shingles shall be in accordance with the shingle manufacturer’s approved installation instructions.**

**{3799}**

1521.18.1 No PUF and/or elastomeric coating systems shall be applied over existing composition shingles.

**2010 Florida Building Code, Residential**

(Non – HVHZ).

**R905.15.3 Application.** Liquid-applied roof coatings shall be installed according to this chapter and the manufacturer’s installation instructions. **The approved allowable uplift resistance for the liquid-applied coatings shall be equal to or greater than the uplift resistance for the roof based on Table R301.2(2).**

**HVHZ**

**R4402.10.17.1 Application of elastomeric and or maintenance coating systems over existing asphalt shingles shall be in accordance with the shingle manufacturer’s approved installation instructions.**

(3800)

**R4402.10.18.1** No sprayed polyurethane foam (PUF) and/or elastomeric coating systems shall be applied over existing composition shingles.

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**2. Compromise Language – Lower Cost regulatory Alternative:**

1507.15.3. Roof Coating, Adhesives and Mastics. Only elastomeric and/or other roof maintenance coating systems which meet the material standards set forth in this code and receive a product approval from the state authority having jurisdiction shall be entitled to be applied to new and existing asphalt or other composition shingles.

1517.17.1 Roof Coating, Adhesives and Mastics. Only elastomeric and/or other roof coating systems which meet the material standards set forth in this code and receive a product approval from the Miami-Dade County shall be entitled to be applied to new and existing asphalt or other composition shingles.

~~1521.18.1 No PUF and/or elastomeric coating systems shall be applied over existing composition shingles.~~

4402.10.17.1 Roof Coating, Adhesives and Mastics. Only elastomeric and/or other roof coating systems which meet the material standards set forth in this code and receive a product approval from the Miami-Dade County shall be entitled to be applied to new and existing asphalt or other composition shingles.

~~1521.18.1 No PUF and/or elastomeric coating systems shall be applied over existing composition shingles.~~

3. Staff proposal as an alternative and as starting for the discussion:

**1507.15.3 Roof Coating. Application of elastomeric and or maintenance coating systems over existing asphalt shingles roof coverings shall be in accordance with the shingle-roof coating manufacturer's approved installation instructions as demonstrated through testing to a specific roof substrate.**

Note: we advise that this provision be moved to the Florida Building Code, Existing Building and the applicable Reroofing sections of the FBC.

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In addition to the above summary, the following proposal was also suggested by one of the TAC members:

1507.15.3 Roof Coating. Discontinuous roof systems are to remain discontinuous after the application of approved elastomeric and or maintenance coating systems. When a roof system is changed from discontinuous to continuous due to the application of elastomeric and or maintenance coating systems, the coating system shall be **in accordance with the roof coating manufacturer's approved installation instructions as demonstrated through testing to a specific roof substrate meeting the requirements of Sections 1506.2 and 1506.3.**

**TAC Action:**

**The TAC voted to affirm the current provisions as approved by the Commission under modifications 3814, 3799, and 3800.**

4. Adjourned at 2:30 pm

Note: This document is available to any person requiring materials in alternate format upon request. Contact the Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, Florida, 32399-2100 or call (850) 487-1824.

This document prepared by DCA.

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Manager – Mo Madani – [mo.madani@dca.state.fl.us](mailto:mo.madani@dca.state.fl.us), (850) 922-2247



# Chapter 19

## Section 1918.1

Petitioner: Eric Stafford

Correlation with ASCE 7-2010.

2. Sections 1918.1 and 1918.2, revise as follows:

**1918.1 Reinforced concrete components.** The design and construction of reinforced concrete components for buildings sited in areas ~~where the ultimate design wind speed,  $V_{ult}$ , is with a basic wind speed~~ greater than 115 ~~100~~ mph (45 m/s) in accordance with Figure 1609 shall conform to the requirements of ACI 318 or with Section 1609.1.1, Exception ~~1 3~~, as applicable, except as modified in this section.

**1918.2 Insulated concrete form wall.** Insulated concrete form (ICF) wall construction for buildings shall be in accordance with ACI 318 or with Section 1609.1.1, Exception ~~1 2~~, as applicable.

# Chapter 21

## Section 2102

**Petitioner: Eric Safford**

**The 2007 FBCB also defined Glass Unit Masonry. It was inadvertently left out of the 2010 code.**

GLASS UNIT MASONRY. Masonry composed of glass units bonded by mortar.

# Chapter 31

## 3109.1.1

**Petitioner: Mo Madani**

**3109.1.1 Scope. Add to read as shown.**

Revise section 3109.1.1 for consistency with HB 849 which states” the Florida Building Commission may not adopt any rule having the effect of limiting any exceptions or exemptions contained within this paragraph. “161.053, Florida Statutes”

**3109.1.1 Scope.** The provisions of Section 3109 shall ensure that structures located seaward of the coastal construction control line are designed to resist the predicted forces associated with a 100-year storm event and shall apply to the following:

1. All habitable structures which extend wholly or partially seaward of a coastal construction control line (CCCL) or 50-foot (15.3 m) setback line.
2. Substantial improvement of or additions to existing habitable structures.
3. Swimming pools that are located in close proximity to a habitable structure or armoring. An environmental permit from the Florida Department of Environmental Protection, requiring special siting considerations to protect the beach-dune system, proposed or existing structures and public beach access, is required prior to the start of construction. The environmental permit may condition the nature, timing and sequence of construction of permitted activities to provide protection to nesting sea turtles and hatchlings and their habitat, including review, submittal and approval of lighting plans.

**Exception:** The standards for buildings seaward of a CCCL area do not apply to any modification, maintenance or repair of any existing structure within the limits of the existing foundation which does not require, involve or include any additions to, or repair or modification of, the existing foundation of that structure. ~~except for substantial improvement of or additions to existing habitable structures.~~

~~An environmental permit from the Florida Department of Environmental Protection, requiring special siting considerations to protect the beach-dune system, proposed or existing structures and public beach access, is required prior to the start of construction. The environmental permit may condition the nature, timing and sequence of construction of permitted activities to provide protection to nesting sea turtles and hatchlings and their habitat, including review, submittal and approval of lighting plans.~~

[4203]

# Florida Building Code, Energy Conservation

## Chapter 1

### Section 110.0

Petitioner : **Ann Stanton/DCA/FLEOC**

**Ann Stanton/DCA/FLEOC**

Cc Subject: Glitch fix due to probable change to FL law

Change entity in reporting requirement from the Department of Community Affairs to the “Entity representing the Florida Building Commission”. The Florida DCA is being dissolved by current legislation.

**110.0 Reporting to entity representing the Florida Building Commission the Department of Community Affairs.** A reporting form shall be submitted to the local building department by the owner or owner’s agent with the submittal certifying compliance with this code. Reporting forms shall be a copy of the front page of the form applicable for the code chapter under which compliance is demonstrated.

**110.1 Reporting schedule.** It shall be the responsibility of the local building official to forward the reporting section of the proper form to the entity representing the Florida Building Commission Department of Community Affairs on a quarterly basis as per the reporting schedule in Table 110.1.

**TABLE 110.1**  
**REPORTING SCHEDULE**

Group I*	Group II*	Group III*	
Quarter 1	12/31	1/31	2/28
Quarter 2	3/31	4/30	5/31
Quarter 3	6/30	7/31	8/31
Quarter 4	9/30	10/31	11/30

\*See Appendix A of this chapter for group designations.

## Chapter 4

### Section 402.1.1

Petitioner : **Ann Stanton**

Section 402.1.1 of the FBC-Energy Conservation has been made Florida-specific to include not only criteria from the building envelope but also criteria relating to the air distribution system. Further, this compliance method has been limited to a single set of criteria for all of Florida; it is not broken out by climate zone. The following language changes are suggested to Section 402.1.1:

**402.1.1 Component Insulation and fenestration criteria.** The building thermal envelope and air distribution system shall meet the requirements of Table 402.1.1 ~~based on the climate zone specified in Chapter 3.~~

### Table 402.1.1.3

Petitioner :**Ann Stanton**

Table 402.1.1.3, fix footnote "b" to change the word "exterior" to "interior", correcting the mass wall R-value listed to agree with the IECC.

Fenestration	Skylight	Ceiling	Frame wall	Mass wall <sup>b</sup>	Floor	Basement wall	Crawlspace wall
U-0.65	U-0.75	U-0.035	U-0.082	U-0.124	U-0.064	U-0.360	U-0.477

b. When more than half the insulation is on the ~~exterior-interior~~, the mass wall *U*-factors shall be a maximum of ~~0.165, 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall *U* factor in Marine Zone 4 and Zones 5 through 8.~~

Correct as shown:

b. When more than half the insulation is on the ~~exterior-interior~~, the mass wall *U*-factors shall be a maximum of ~~0.165, 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall *U* factor in Marine Zone 4 and Zones 5 through 8.~~

## Chapter 5

### Section 503.2.7.2

Petitioner :**Ann Stanton**

Table 503.2.7.2 of the Florida *Building Code, Energy Conservation* needs to be fixed as shown because the criteria listed as "Mechanical Attachment" are not mechanical in nature, but rather are more specific duct sealing criteria.

Table 603 of the *Florida Building Code, Mechanical*, and Table 1601.4 of the *Florida Building Code, Residential*,

TABLE 503.2.7.2 [et al]  
DUCT SYSTEM CONSTRUCTION AND SEALING  
[in part]

DUCT TYPE/CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT
Mechanical closets	All joints between the air barriers of walls, ceiling, floor and door framing and all penetrations of the air barrier shall be sealed to the air barrier with approved closure	<del>The following closure systems are approved for use in mechanical closets:</del>

	<p>systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight passageway.</p> <p><b>Exception:</b> Air passageways into the closet from conditioned space that are specifically designed for return air flow.</p> <p>The following air barriers are approved for use in mechanical closets:</p> <ol style="list-style-type: none"> <li>1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard, <del>taped and</del> sealed <u>with joint compound over taped joints between gypsum wallboard panels.</u></li> <li>2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier <u>by one of the following:</u> <ol style="list-style-type: none"> <li>a. <u>Sealants complying with the product and application standards of this table for fibrous glass ductboard or</u></li> <li>b. <u>A suitable long-life caulk or mastic for all applications.</u></li> </ol> </li> </ol>	<p><del>1. Gypsum wallboard joint compound over taped joints between gypsum wallboard panels.</del></p> <p><del>2. Sealants complying with the product and application standards of Table 503.2.7.2 for fibrous glass ductboard.</del></p> <p><del>3. A suitable long-life caulk or mastic compliant with the locally adopted mechanical code for all applications.</del></p>
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## Section 503.2.8

Petitioner : **Ann Stanton**

The following footnotes were inadvertently left off of Table 503.2.8, Minimum Pipe Insulation, and should be reinstated from the 2007 Florida Building Code.

Table 503.2.8  
MINIMUM PIPE INSULATION

3. Piping insulation is not required between the control valve and coil on run-outs when the control valve is located within 4 feet of the coil and the pipe size is 1 inch or less.
4. These thicknesses are based on energy efficiency considerations only. Issues such as water vapor permeability or surface condensation sometimes require vapor retarders or additional insulation.

## Appendix B

Form

Table B-1.1.2

Petitioner : **Ann Stanton**

**Comment:** There is a conflict in code between Section 403.2.2.1 of the *Florida Building Code, Energy Conservation*, and how duct performance is handled in Section 405, the Simulated Performance Alternative.

- **Table B-1.1.2, Specifications for the Standard Reference and Proposed Designs, provides a possible credit for a Proposed Design air distribution system that has been tested to demonstrate that the air distribution system leakage is more efficient compared to the typically more leaky assumption for the air distribution system of the Standard Reference Design.** It is important to point out that the efficiency of the air distribution system in the Standard Reference Design is represented simplistically as a distribution system efficiency (DSE) of 80%, which means that only 80% of the heating and cooling that is generated by the heating and cooling system is being effectively applied to the space heating and cooling loads. Slightly less than half of this 20% inefficiency (8%) is assumed to derive from air distribution system air leakage losses and slightly less than half (another 8%) is assumed to be due to air distribution system heat losses and gains. Thus, if you have no heat losses or gains and no distribution system leakage, the distributions system would be assumed to have an efficiency of 96%. For the proposed Design, the physical location of the air distribution system is specified and, as such, the heat losses and gains are directly accounted. After accounting directly for heat losses and gains, the remaining value of the air leakage only portion of the DSE is 88%. If the air distribution system is not tested, the DSE of 88% intrinsically accounts for a leaky air distribution system. However, in the event that the air distribution system is tested for air leakage, the measured leakage is used to directly account for air leakage as well.
- **Section 403.2.2.1 requires that all ducts be tested to be “substantially leak free”.**
- **If Table B-1.1.2 is corrected to show an airtight Proposed Design duct, and the tested duct does not achieve this efficiency,** either the home will have to be denied a certificate of occupancy until the air distribution system is brought into compliance or the performance of the duct will have been overrated for the home, possibly allowing the home to be significantly less efficient than minimum code compliance levels. Ducts that do not pass the air tightness test would technically have to be fixed and retested until shown to meet the standard. It is possible that some code officials would see not just testing but retesting as onerous and look the other way, thus “giving away the farm”.

There are two choices by which this conflict in code may be resolved:

**Option 1:** Exempt the ducts from the duct testing requirement where the home complies by Section 405. This option would provide credit for a tested duct system based on the duct system’s tested performance but would not require retesting.

**Option 2:** Change Table B-1.1.2 to reflect the assumed efficiency of a duct tested to be “substantially leak free” per Section 403.2.2.1 of the code for the duct’s location. This option would require retesting for non-compliant ducts or allow undeserved credit if the ducts are not fixed and retested.

**Relevant Code Text**

**403.2.2 Sealing (Mandatory).** All ducts, air handlers, filter boxes and building cavities which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section 503.2.7.2 of this code and shall be shown to meet duct tightness criteria in Section 403.2.2.1.

**403.2.2.1 Duct tightness.** Duct tightness shall be verified by testing to ASHRAE Standard 152. All ducts and air handlers shall be either located in conditioned space or tested by a Class 1 BERS rater to be “substantially leak free”.

**Exception:** Buildings complying by Section 405. [Option 1]

**405.2 Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Section 401.2 be met. All supply and return ducts not completely inside the *building thermal envelope* shall be insulated to a minimum of R-6.

**B-1.1.2 Residence specifications.** The *Standard Reference Design* and *Proposed Design* shall be configured and analyzed as specified by Table B-1.1.2.

**Table B-1.1.2  
Specifications for the Standard Reference and Proposed Designs**

<i>Building Component</i>	<i>Standard Reference Design</i>	<i>Proposed Design</i>
<b>Thermal distribution systems</b>	A thermal distribution system efficiency (DSE) of 0.80 shall be applied to both the heating and cooling system efficiencies	Using Proposed Design duct locations and a DSE of 0.88, except when tested in accordance with ASHRAE Standard 152 <sup>1</sup> , in which case measured duct air leakage values shall be used.

OR

[Option 2]

**Table B-1.1.2  
Specifications for the Standard Reference and Proposed Designs**

<i>Building Component</i>	<i>Standard Reference Design</i>	<i>Proposed Design</i>
<b>Thermal distribution systems</b>	A thermal distribution system efficiency (DSE) of 0.80 shall be applied to both the heating and cooling system efficiencies	<del>Using Proposed Design duct locations and a DSE of 0.88, except when tested in accordance with ASHRAE Standard 152<sup>1</sup>, in which case measured duct air leakage values shall be used.</del> <u>As tested to Section 403.2.2.1 for the installed duct’s location.</u>

**NOTE:** Per Chapter 2 of the *FBC, Energy Conservation*, SUBSTANTIALLY LEAK FREE is defined as: Distribution system air leakage to outdoors is no greater than 3 cfm per 100 square feet of conditioned floor area at a pressure differential of 25 Pascal (0.10 in. w.c.) across the entire air distribution system, including the manufacturer’s air handler enclosure

# Appendix C

## Form 402

### Form 402, Comment 1

Petitioner : **Ann Stanton**

cc

Subject: Comment on code glitch

Form 402 has a discrepancy with the language of Section 402.3.6 of the Florida Building Code, Energy Conservation, which states:

**402.3.6 Replacement fenestration.** Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table 402.1.1."

**Table 402A**, Exception 2 on Form 402 reads as follows:

"2. Renovations with new windows under  $\geq 2$  foot overhang whose lower edge does not extend further than 8 feet from the overhang may have tinted glazing or double-pane clear glazing. Replacement skylights installed in renovations shall be double paned or single paned with a diffuser."

The exception language on Form 402 has been in the code for years but clearly does not agree with the new language taken from the IECC that requires replacement windows to meet code. To remove this discrepancy, **Exception 2 should be removed from Footnote (2) in Table 402A on Form 402.**

### Form 402, COMMENT 2

Petitioner : **Ann Stanton**

COMMENT ON MOD 4791:

Form 402, page 2, footnote (3) needs to be fixed as well as other glitches with fixes proposed to Form 402. In footnote (3), the word "except" (see language from the current form below) appears to have gotten lost, which changes the whole meaning of the footnote. Footnote (3), as read, would require R-7.8 if >50% of the insulation were on the outside (the code requires R-6). The language for the same footnote on the current form, Form 1100B-08, reads as follows:

Form 1100B-08:

(3) R-values are for insulation material only as applied in accordance with manufacturer's installation instructions. For mass walls, the "interior of wall" requirement (R-6) must be met except if at least 50% of the R-4 insulation value required for the "exterior of wall" is installed exterior of, or integral to, the wall.

Suggested fix to Form 402-2010:



(3) R-values are for insulation material only as applied in accordance with manufacturers' installation instructions. For mass walls, the "interior of wall" requirement must be met except if at least 50% of the R-6 insulation required for the "exterior of wall" is installed exterior of, or integral to, the wall.

## Form 402, COMMENT 3

Petitioner :Ann Stanton

Form 402, page 2, Table 402B should be fixed to include additional criteria required by the code as shown:

Air distribution system 403.2 Ducts in attics or on roofs insulated to R-8; other ducts R-6. Ducts not in conditioned space tested to Qn=0.03 by Class 1 BERS rater.

# Florida Building Code, Mechanical

## Chapter 2

### Section 202

Petitioner :Ann Stanton

**Section 202 of the FBC, Mechanical, contains definitions for words that are not used in the text. They should be deleted.**

~~**MANUFACTURED BUILDING.** A closed structure, building assembly, or system of subassemblies, which may include structural, electrical, plumbing, heating, ventilating or other service systems manufactured for installation or erection, with or without other specified components, as a finished building or as part of a finished building, which shall include, but not be limited to, residential, commercial, institutional, storage, and industrial structures.~~

~~**MANUFACTURED HOME.** As defined by the U.S. Department of Housing and Urban Development, residential units constructed in accordance with Federal Mobile Construction and Safety Standards, pursuant to 42 USC 55.5401, et. seq. and 24 CFR 3282 and 3283. (Reference Section 101.4.8.1 Chapter 13, §13-101.2.4 of the Florida Building Code, Energy Conservation Building).~~

~~**SITE-INSTALLED COMPONENTS AND FEATURES.** Equipment, materials, measures, practices and features which are affixed to a new manufactured home at its first set-up that are not initially installed by the manufacturer. Reference Section 101.4.8.1 Chapter 13, §13-101.2.4 of the FBC-ECB.~~

## Chapter 6

### Table 603

Petitioner :**Ann Stanton**

Table 603 needs to be fixed to be concurrent with Table 503.2.7.2 of the Florida *Building Code, Energy Conservation* as shown because the criteria listed as “Mechanical Attachment” are not mechanical in nature, but rather are more specific duct sealing criteria.

TABLE 603 [et al]  
DUCT SYSTEM CONSTRUCTION AND SEALING  
[in part]

DUCT TYPE/CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT
Mechanical closets	<p>All joints between the air barriers of walls, ceiling, floor and door framing and all penetrations of the air barrier shall be sealed to the air barrier with approved closure systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight passageway.</p> <p><b>Exception:</b> Air passageways into the closet from conditioned space that are specifically designed for return air flow.</p> <p>The following air barriers are approved for use in mechanical closets:</p> <ol style="list-style-type: none"> <li>1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard, <del>taped and</del> sealed <u>with joint compound over taped joints between gypsum wallboard panels.</u></li> <li>2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier <u>by one of the following:</u> <ol style="list-style-type: none"> <li>a. <u>Sealants complying with the product and application standards of this table for fibrous glass ductboard or</u></li> <li>b. <u>A suitable long-life caulk or mastic for all applications.</u></li> </ol> </li> </ol>	<p><del>The following closure systems are approved for use in mechanical closets:</del></p> <ol style="list-style-type: none"> <li><del>1. Gypsum wallboard joint compound over taped joints between gypsum wallboard panels.</del></li> <li><del>2. Sealants complying with the product and application standards of Table 503.2.7.2 for fibrous glass ductboard.</del></li> <li><del>3. A suitable long-life caulk or mastic compliant with the locally adopted mechanical code for all applications.</del></li> </ol>

# Florida Building Code, Plumbing

## Chapter 10

### Section 1003.5

**Petitioner: Eberhard Roeder – DOH**

**The proposal makes the code consistent with the Florida onsite sewage treatment and disposal systems standards which are statutory standards for grease interceptors, remedies inconsistencies between the base text and existing Florida regulations.**

**1003.5 Grease interceptors. Change to read as shown.**

**1003.5 Grease interceptors for onsite sewage treatment and disposal systems.** Grease interceptors are not required for a residence. However, one or more grease interceptors are required where grease waste is produced in quantities that could otherwise cause line stoppage or hinder sewage disposal. Where a grease interceptor is required or used, only kitchen wastewater shall first pass through the interceptor and then be discharged into the first compartment of a septic tank or other approved system. Grease interceptors shall be water and gas tight. Each interceptor shall be engineered to withstand the load, such as from vehicular traffic, to be placed on the interceptor. Sizing of grease interceptors shall be based on the equations of Table 1003.5.1. The minimum tank volume of grease interceptors shall be 750 gallons (2839 L), and the maximum volume of an individual grease interceptor chamber shall be 1,250 gallons (4731 L). Interceptors shall be permitted to be installed in series or as multi-chambered tanks.

**1003.5.1 Grease interceptor capacity. Add to read as shown.**

**1003.5.1 Grease interceptor capacity.** The minimum grease retention capacity for interceptors shall be at least two times the flow through rate. Sizing of grease interceptors shall be based on the equations of Table 1003.5.1. The minimum tank volume of grease interceptors shall be 750 gallons (2839 L), and the maximum volume of an individual grease interceptor chamber shall be 1,250 gallons (4731 L). When the required effective capacity of the grease interceptor is greater than 1250 gallons, installation of multi-chambered grease interceptors or grease interceptors in series is required.

**1003.5.2 Construction of interceptor. Add to read as shown.**

**1003.5.2 Construction of interceptor.** Each interceptor shall be constructed and approved in accordance with Rule 64E-6, *Florida Administrative Code*. Minimum depth of the liquid shall be 40 inches (1016 mm). Each compartment shall be accessible with a manhole having a minimum area of 225 square inches clearance of 18 inches (457 mm) square or in diameter. Interceptors must be

located so as to provide easy access for routine inspection, cleaning and maintenance. Manholes shall be provided over the inlet and outlet of each interceptor and be brought to finished grade.

**1003.5.3 Inlet and outlet piping. Add to read as shown.**

**1003.5.3 Inlet and outlet piping.** The inlet invert shall discharge a minimum 2 1/2 inches above the liquid level line and the outlet pipe shall have a tee with a minimum diameter of 4 inches that extends to within 8 inches of the bottom of the tank. The inlet and outlet piping shall have a two-way cleanout tee installed. Inlet piping shall enter at 2 1/2 inches (64 mm) above the liquid level. Inlet piping shall connect to a tee, sweep or baffle, which shall extend to 24 inches (610 mm) below the water level. The outlet pipe shall start at 8 inches (203 mm) above the bottom of the interceptor and extend vertically to a tee. The tee and pipe shall be no less than 4 inches (102 mm) in diameter. The tee shall be installed with the run in the vertical direction.

**Table 1003.5.1: Sizing Formulas for Grease Interceptors Private Sewage Disposal System. Add to read as shown.**

**Table 1003.5.1: Sizing Formulas for Grease Interceptors, Private Sewage Disposal System**

SIZING FORMULA FOR RESTAURANTS:	OTHER ESTABLISHMENTS WITH COMMERCIAL KITCHENS:
<p><math>(S) \times (GS) \times (HR/12) \times (LF) = \text{Effective Capacity of grease Interceptor in gallons}</math></p> <p>Where:</p> <p>S = Number of seats in dining area</p> <p>GS = Gallons of waste water per seat (Use 25 gallons for ordinary restaurants with china dishes and/or automatic dishwasher); (Use 10 gallons for single service article restaurants with paper or baskets and no dishwashers)</p> <p>HR = Number of hours establishment restaurant is open</p> <p>LF = Loading Factor (Use 2.00 interstate highway; 1.50 other freeways; 1.25 recreational area; 1.00 main highway; 0.75 other roads highway)</p>	<p><math>(M) \times (GM) \times (LF) = \text{Effective capacity of Grease interceptor in gallons}</math></p> <p>Where:</p> <p>M = Meals prepared per day</p> <p>GM = Gallons of waste water per meal (Use 5 gallons)</p> <p>LF = Loading Factor (Use 1.00 with dishwashing machine and 0.75 without dishwashing machine)</p>

# Florida Building Code, Residential

## Chapter 2

### Section 202

Section 202 of the FBC, Residential, contains definitions for words that are not used in the text. They should be deleted..

~~**UNUSUALLY TIGHT CONSTRUCTION.** Construction meeting the following requirements:~~

- ~~1. Walls comprising the building thermal envelope have a continuous water vapor retarder with a rating of 1 perm [57.4 ng/(s · m<sup>2</sup> · Pa)] or less with openings therein gasketed or sealed.~~
- ~~2. Doors and openable windows meet the air leakage requirements of Section N1106; and~~
- ~~3. Caulking or sealants are applied to areas such as joints around window and door frames between sole plates and floors, between wall ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, and at other openings.~~

## Chapter 3

### Section R311.2

Petitioner: Mo Madani

Revise R311.2 for consistency with HB 849:

553.73(10)(h).....In addition, such buildings that are 400 square feet or less and that are intended for use in conjunction with one-and two-family residences are not subject to the door height and width requirements of the Florida Building Code.

Section R311.2 Egress door, revise to add the following exception:

**R311.2 Egress door.** At least one egress door shall be provided for each *dwelling* unit. The egress door shall be side-hinged, and shall provide a minimum clear width of 32 inches (813 mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the *dwelling* without the use of a key or special knowledge or effort.

Exception:

Buildings that are 400 square feet or less and that are intended for use in conjunction with one- and two-family residences are not subject to the door height and width requirements of this code.

## Section R311.7.5

Petitioner: Eric Stafford.

Section R311.7.5, reformat as follows so that the exception is independent from the specific code provisions.

**R311.7.5 Landings for stairways.** There shall be a floor or landing at the top and bottom of each stairway.

**Exception:** A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.

A flight of stairs shall not have a vertical rise larger than 12 feet (3658 mm) between floor levels or landings.

The width of each landing shall not be less than the width of the stairway served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

## Chapter 4

### Section R401.1

Petitioner: Eric Stafford

Section R401.1, revise as follows: there is no reason for referencing Section R301.2.1.1 in this section.

**R401.1 Application. R401.1 Application.** The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R322. Wood foundations shall be designed and installed in accordance with AF&PA PWF. ~~(see Section R301.2.1.1).~~

**Exceptions:** (no change)

## Chapter 6

## Section R606.14.1

Petitioner: Eric Stafford

Section R606.14.1. Figure R606.11(1) is not applicable to high wind areas. Revert back to the original Florida-specific language as shown below:

**R606.14.1 Joist bearing.** Except where supported on a 1-inch by 4-inch (25.4 mm by 102 mm) ribbon strip and nailed to the adjoining stud and as provided in Section R606.11, the ends of each joist shall not have less than 11/2 inches (38 mm) of bearing on wood or metal, or less than 3 inches (76 mm) on masonry. Joists shall have a bearing of not less than 1<sup>1</sup>/<sub>2</sub> inches (38 mm), except as provided in Section R606.14, and shall be supported in accordance with Figure R606.11(1).

## Section R610.4.2

Petitioner: Eric Stafford

Section R610.4.2. Revise for consistency with ASCE 7 -2010

**R610.4.2 Exterior thin-unit panels.** The maximum area of each individual thin-unit panel shall be 85 square feet (7.9 m<sup>2</sup>). The maximum dimension between structural supports shall be 15 feet (4572 mm) in width or 10 feet (3048 mm) in height. Thin units shall not be used in applications where the design wind pressure as stated in Table R301.2(1) exceeds ~~20~~ 33 psf (958 Pa).

## Chapter 8

### Section R802.1.6.2.1

Petitioner: Eric Stafford

Section R802.1.6.2.1 (IRC R802.10.2.1) should be deleted. The base code language begins by indicating that this section applies to when "snow controls" which isn't in Florida.

**R802.1.6.2.1 [IRC R802.10.2.1] Applicability limits.** The provisions of this section shall control the design of truss roof framing ~~when snow controls~~ for buildings not greater than 60 feet (18 288 mm) in length perpendicular to the joist, rafter or truss span, not greater than 36 feet (10 973 mm) in width parallel to the joist, rafter or truss span, not greater than two stories in height with each *story* not greater than 10 feet (3048 mm) high, and roof slopes not smaller than 3:12 (25-percent slope) or greater than 12:12 (100-percent slope). Truss roof framing constructed in accordance with the provisions of this section shall be limited to sites subjected to a maximum design wind speed of

110 miles per hour (49 m/s), Exposure A, B or C, and a maximum ground snow load of 70 psf (3352 Pa). For consistent loading of all truss types, roof snow load is to be computed as: 0.7 pg.

## Chapter 16

### Section M1601.4

Petitioner: Ann Stanton

Table M1601.4 needs to be fixed to be concurrent with Table 503.2.7.2 of the Florida *Building Code, Energy Conservation* as shown because the criteria listed as “Mechanical Attachment” are not mechanical in nature, but rather are more specific duct sealing criteria.

TABLE M1601.4 [et al]  
 DUCT SYSTEM CONSTRUCTION AND SEALING  
 [in part]

DUCT TYPE/CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT
Mechanical closets	<p>All joints between the air barriers of walls, ceiling, floor and door framing and all penetrations of the air barrier shall be sealed to the air barrier with approved closure systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight passageway.</p> <p><b>Exception:</b> Air passageways into the closet from conditioned space that are specifically designed for return air flow.</p> <p>The following air barriers are approved for use in mechanical closets:</p> <ol style="list-style-type: none"> <li>1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard, <del>taped and</del> sealed <u>with joint compound over taped joints between gypsum wallboard panels.</u></li> <li>2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier <u>by one of the following:</u> <ol style="list-style-type: none"> <li>a. <u>Sealants complying with the product and application standards of this table for fibrous glass ductboard or</u></li> <li>b. <u>A suitable long-life caulk or mastic for all applications..</u></li> </ol> </li> </ol>	<p><del>The following closure systems are approved for use in mechanical closets:</del></p> <ol style="list-style-type: none"> <li><del>1. Gypsum wallboard joint compound over taped joints between gypsum wallboard panels.</del></li> <li><del>2. Sealants complying with the product and application standards of Table 503.2.7.2 for fibrous glass ductboard.</del></li> <li><del>3. A suitable long-life caulk or mastic compliant with the locally adopted mechanical code for all applications.</del></li> </ol>



## Section M1602.4

An important Florida-specific section of the FBC-Residential code was inadvertently omitted from the Supplement for code change review. It was approved by the Mechanical Technical Advisory Committee for retention in the overall code change process. It was officially retained in the FBC-Mechanical code throughout the code change process. No proposals were received to delete the section. It needs to be reinstated under the Glitch Fix category of conflict of code due to unexpected consequences.

**M1602.4 Balanced Return Air.** Restricted return air occurs in buildings when returns are located in central zones and closed interior doors impede air flow to the return grill or when ceiling spaces are used as return plenums and fire walls restrict air movement from one portion of the return plenum to another. Provisions shall be made in both residential and commercial buildings to avoid unbalanced air flows and pressure differentials caused by restricted return air. Pressure differentials across closed doors where returns are centrally located shall be limited to 0.01 inch WC (2.5 pascals) or less. Pressure differentials across fire walls in ceiling space plenums shall be limited to 0.01 inch WC (2.5 pascals) by providing air duct pathways or air transfer pathways from the high pressure zone to the low zone.

**Exceptions:**

1. Transfer ducts may achieve this by increasing the return transfer 1½ times the cross sectional area (square inches) of the supply duct entering the room or space it's serving and the door having at least an unrestricted 1 inch undercut to achieve proper return air balance.
2. Transfer grilles shall use 50 square inches (of grille area) to 100 cfm (of supply air) for sizing through-the-wall transfer grilles and using an unrestricted 1 inch undercutting of doors to achieve proper return air balance.
3. Habitable rooms only shall be required to meet these requirements for proper balanced return air excluding bathrooms, closets, storage rooms and laundry rooms, except that all supply air into the master suite shall be included.