



Mechanical

PART 1 OF 1
WITH COMMENTS

Proposed Code Modifications

This document created by the Florida Department of Business and Professional Regulation -
850-487-1824

Total Mods for **Mechanical** in **Approved as Modified**: 1

Total Mods for report: 6

Sub Code: Mechanical

Date Submitted 7/30/2012	Section 601.4	Proponent Cheryl Harris
Chapter 5	Affects HVHZ No	Attachments No
TAC Recommendation Approved as Modified		
Commission Action Pending Review		

Comments

General Comments Yes **Alternate Language** No

Related Modifications

Summary of Modification

To maintain Florida specific code as related to Balanced air return in duct systems.

Rationale

To clarify balanced return air.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves ability to enforce code

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

Neutral

Impact to industry relative to the cost of compliance with code

Neutral

Requirements

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

Yes

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

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

Does not degrade the effectiveness of the code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

601.54 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.

M5772-G2

Proponent	amador barzaga	Submitted	12/14/2012	Attachments	No
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Comment:

Acceptance to this code modification is essential for the proper performance of air distribution systems in Florida where mold prevention and humidity control are crucial

1st Comment Period History

M5772-G1

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No
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Comment:

No justification was given other in 2010 code

The provision this is based upon has sunset with the other Florida Changes to the 2010 FBC

Because a code provision was in the 2010 FBC does not make it Florida specific.

The amendment does not demonstrate by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code. Per FS 553.73 (7) (g)

The proposed amendment was does not appear to have been submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process.

Chapter 6 Duct Systems

Section 601 General

601.4 Balanced return air. Add to read as shown. Renumber new IMC 601.4 to 601.5.

601.4 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.

Total Mods for **Mechanical** in **No Affirmative Recommendation with a Second**: 5

Total Mods for report: 6

Sub Code: Mechanical

Date Submitted	7/16/2012	Section	513 Smoke Control Systems	Proponent	amador barzaga
Chapter	5	Affects HVHZ	Yes	Attachments	Yes
TAC Recommendation	Approved as Submitted		Approved As Submitted By the Fire TAC		
Commission Action	Pending Review				

Comments

General Comments	Yes	Alternate Language	No
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Related Modifications

Summary of Modification

Maintaining smoke control requirements for High-Rise Buildings

Rationale

Smoke control for “high rise buildings” has been part of the Florida Building Code, Mechanical Section 513, since 2004. In order to maintain the same level of life safety for the citizens of the State of Florida we must maintain this requirement. Inclusion in the code is necessary to avoid diminishing the expected level of life safety that has been established by having this as a code item for over 8 years in the Florida Building Code. This change is consistent with notice for modification #5170.

Fiscal Impact Statement

- Impact to local entity relative to enforcement of code**
None. Maintains current code provisions requirements.
- Impact to building and property owners relative to cost of compliance with code**
None. Code provisions are the same found in the current code.
- Impact to industry relative to the cost of compliance with code**
None. Code provisions are the same found in the current code.

Requirements

- Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
This modification maintains minimum life safety requirements regarding smoke control in High-Rise Buildings.
- Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
This modification is consistent with the statute's requirement that any modification must maintain the same life safety protection of the FBC.
- Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
This modification allows the use of any material, products, methods or systems of construction already deemed acceptable by the Florida Building Code or any alternate materials, design and methods of construction and equipment acceptable to the code official.
- Does not degrade the effectiveness of the code**
This modification maintains the same safety regulations required by the current code and in effect since 2004.

Is the proposed code modification part of a prior code version?
YES

The provisions contained in the proposed amendment are addressed in the applicable international code?
NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?
YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?
NO

2nd Comment Period

10/31/2012 - 12/14/2012

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Proponent	Brad Schiffer	Submitted	12/11/2012	Attachments	No
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Comment:

In addition to the comments presented for Modification #5170.

This Section of Code is for "...mechanical and passive smoke control systems that are required by the Florida Building Code"
This is not the place to add requirements.

F5173-G2

2nd Comment Period

10/31/2012 - 12/14/2012

Proponent	Michael Goolsby	Submitted	12/14/2012	Attachments	No
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Comment:

A building code is intended to be adopted as a legally enforceable document and must provide only requirements necessary to provide a minimum acceptable level of protection

Smoke control provisions have been considered by their previous inclusion in the State's uniform building code as meeting the minimum acceptable level of protection for the health, safety and welfare of the citizens of Florida.

Therefore I support the inclusion of these smoke control provisions as being in harmony with our obligation to provide a minimum acceptable level of protection for our citizens and as well as being consistent and in compliance with the Florida specific criteria required by statute.

F5173-G3

2nd Comment Period

10/31/2012 - 12/14/2012

Proponent	Pete Quintela	Submitted	12/14/2012	Attachments	Yes
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Comment:

Comment on Mod. 5173

This proposal maintains the same level of life safety the citizens of the State of Florida have been entitled and accustomed to since the Florida Building Commission approved the current language in 2004. The fact that this requirement has been in the code for all these years it establishes the basic minimum requirement for the State of Florida.

Keeping smoke control in high-rise buildings does not add any additional costs to what we are presently doing. Besides how can you be considering costs when you are saving lives? I am shocked to hear designers trying to save a dollar by weakening the codes.

A code change is usually originated because the safety components in a building failed and someone died, the end result is a safer building.

The Florida Building Code has been recognized nationally for being the code for others to follow. Trading building construction costs for casualties occurred by cheaper construction costs, is not something the Florida Building Code is known for, let's keep it that way.

I urge the Commission not to be misled by Mr. Schiffer's proposal to weaken the code.

F5173-G4

2nd Comment Period

10/31/2012 - 12/14/2012

Proponent	amador barzaga	Submitted	12/14/2012	Attachments	No
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Comment:

This modification is critical in providing for the life safety of Florida citizens and is an established pillar of efficient and safe building design. Sufficient justification relating to the specific need was reviewed and affirmed by the Technical Advisory Committee (TAC) in October. Consequently, I urge the Florida Building Commission to uphold the unanimous decision of the TAC and approve this modification for inclusion in the 2013 edition of the Florida Building Code.

F5173-G5

1st Comment Period History

08/09/2012 - 09/23/2012

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No
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Comment:

The provision this is based upon has sunset with the other Florida Changes to the 2010 FBC

This code change is unnecessary as the provisions contained in the proposed amendment are adequately addressed in the applicable international code. Per FS 553.73 (7) (g)

The amendment does not demonstrate by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code. Per FS 553.73 (7) (g)

The proposed amendment was does not appear to have been submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process.:

F5173-G1

[F] 513.1 Scope and purpose.

This section applies to mechanical and passive smoke control systems that are required by the ~~International~~ Florida Building Code, ~~or the International Fire Code~~ and shall apply to high rise buildings as defined in the Florida Building Code, Building. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations, or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat-venting provisions found in Section 910 of the ~~International~~ Florida Building Code, Building, ~~or the International Fire Code~~.

Comment on Mod. 5173

This proposal maintains the same level of life safety the citizens of the State of Florida have been entitled and accustomed to since the Florida Building Commission approved the current language in 2004. The fact that this requirement has been in the code for all these years it establishes the basic minimum requirement for the State of Florida.

Keeping smoke control in high-rise buildings does not add any additional costs to what we are presently doing. Besides how can you be considering costs when you are saving lives? I am shocked to hear designers trying to save a dollar by weakening the codes.

A code change is usually originated because the safety components in a building failed and someone died, the end result is a safer building.

The Florida Building Code has been recognized nationally for being the code for others to follow. Trading building construction costs for casualties occurred by cheaper construction costs, is not something the Florida Building Code is known for, let's keep it that way.

I urge the Commission not to be misled by Mr. Schiffer's proposal to weaken the code.

Maintaining the current level of safety for our citizens remains critical. Seniors continue to flock to Florida as they retire; most take up residence in high-rise complexes for convenience, comfort and a sense of community. 2010 U.S. Census data indicate the State's population of individuals 65 years of age and older is 3,418,697. This represents the highest population of seniors in all states subject to the ICC. Respiratory ailments make the elderly easy victims of smoke inhalation. Additionally a large number of Seniors suffer from hearing or sight problems, Alzheimer`s disease or other illnesses and can have trouble finding exits, navigating stairs or seeking help.

Date Submitted 8/2/2012	Section 303.4	Proponent Alfonso Fernandez-Fraga
Chapter 3	Affects HVHZ No	Attachments No
TAC Recommendation - Not Previously Taken Up	NAR With A Second by the Fire TAC	
Commission Action Pending Review		

Comments

General Comments No	Alternate Language Yes
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Related Modifications

Proposed R324 Carbon Dioxide Alarms

Summary of Modification

We need to eliminate the requirement to require outside air to be introduced into single family homes and townhouses

Rationale

We need to remove the requirement to introduce outside air directly into single family homes and townhouses. If outside air is introduced continuously into the return air plenum of single family homes, gross quantities of unwanted and uncontrolled humidity will be introduced, especially when supply fans are set to run continuously without regard as to whether cooling and dehumidification is taking place.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code
None.

Impact to building and property owners relative to cost of compliance with code
Minimal. The carbon dioxide alarm may be combined with the already-required smoke detector. It may add \$300 per dwelling unit, but this cost will be reduced as the Code-mandated quantities are produced.

Impact to industry relative to the cost of compliance with code
The cost is the cost of the additional detection device, which today is (more or less) \$300 per dwelling unit. This cost will go down.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public
Yes. If indoor air quality is suspect, the alarm will go off.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction
Yes. The option to monitor air quality will use less energy than the continuous introduction of outside air.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities
No this does not discriminate.

Does not degrade the effectiveness of the code
No this does not degrade the effectiveness of the code, it is an improvement.

Is the proposed code modification part of a prior code version? No

Alternate Language

2nd Comment Period

10/31/2012 - 12/14/2012

5994-A4	Proponent Alfonso Fernandez-Fraga	Submitted 11/9/2012	Attachments Yes
	Rationale		
	This mod needs to be reviewed by the Mechanical TAC. The additional R324 language is required because it indicates how and where to install the CO2 sensors.		
	Fiscal Impact Statement		
	Impact to local entity relative to enforcement of code None.		
	Impact to building and property owners relative to cost of compliance with code Minimal. The carbon dioxide alarm may be combined with the already-required smoke detector. It may add \$300 per dwelling unit, but this cost will be reduced as the Code-mandated quantities are produced.		
	Impact to industry relative to the cost of compliance with code The cost is the cost of the additional detection device, which today is (more or less) \$300 per dwelling unit. This cost will go down.		
	Requirements		
	Has a reasonable and substantial connection with the health, safety, and welfare of the general public Yes. If indoor air quality is suspect, the alarm will go off.		
	Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction Yes. The option to monitor air quality will use less energy than the continuous introduction of outside air.		
Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities No this does not discriminate.			
Does not degrade the effectiveness of the code No this does not degrade the effectiveness of the code, it is an improvement.			
Is the proposed code modification part of a prior code version? No			

R303.4 Mechanical ventilation.

Where the air infiltration rate of a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with [Section N1102.4.1.2](#), the dwelling unit shall be provided with ~~whole house mechanical ventilation in accordance with [Section M1507.3](#)~~; carbon dioxide alarms in accordance with Section R324, Carbon Dioxide Alarms.

R303.4 Mechanical ventilation.

Where the air infiltration rate of a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with ~~whole-house mechanical ventilation in accordance with Section M1507.3~~; carbon dioxide alarms in accordance with Section R324, Carbon Dioxide Alarms.

SECTION R324 CARBON DIOXIDE ALARMS

R324.1 Carbon dioxide alarms.

For new construction, where required by other sections of this Code, an approved carbon dioxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in *dwelling units*.

R324.2 Carbon dioxide detection systems.

Carbon dioxide detection systems that include carbon dioxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon dioxide alarms, shall be permitted. Where a household carbon dioxide detection system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner and shall be monitored by an approved supervising station.

Exception: Where carbon dioxide alarms are installed meeting the requirements of Section R324.1, compliance with Section 315.2 is not required.

R324.3 Alarm requirements.

Single-station carbon dioxide alarms shall be installed in accordance with this code and the manufacturer's installation instructions.

Date Submitted	7/12/2012	Section	916	Proponent	Joe Bigelow
Chapter	9	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation With A Second			Approved As Submitted by Special Occupancy TAC	
Commission Action	Pending Review				

Comments

General Comments No **Alternate Language** Yes

Related Modifications**Summary of Modification**

To carry forward carbon monoxide provisions of the 2010 FBC, to be consistent with the Florida Statutes and to implement the Commission plan to update the 2013 Code

Rationale

To be consistent with the Florida Statutes and to implement the Commission plan to update the 2013 Code

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

Currently used under the 2010 Code, no new requirements being established

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

Currently used under the 2010 Code, no new requirements being established

Impact to industry relative to the cost of compliance with code

Currently used under the 2010 Code, no new requirements being established

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

Carried over from the previous, field tested and proven to be effective

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

Carried over from the previous, field tested and proven to be effective

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

Carried over from the previous, field tested and proven to be effective

Does not degrade the effectiveness of the code

Carried over from the previous, field tested and proven to be effective

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

To be consistent with the Florida Statutes and to implement the Commission plan to update the 2013 Code

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

5113-A1

Proponent Ann Stanton **Submitted** 11/15/2012 **Attachments** Yes

Rationale

Conflict in code between the Florida Building Code (Florida law) and the International Building Code. Having two separate sets of criteria for carbon monoxide that may conflict is ill advised. Florida-specific language was approved as submitted. This alternative language would change the code section numbers to replace the I-code language with the language from Florida law.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. Would prevent alternate requirements on the same subject.

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

None. Provide a single set of criteria per Florida law.

Requirements

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

Yes.

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

Yes.

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

No.

Does not degrade the effectiveness of the code

No.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

YES

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

YES

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

F5113-G1

Proponent Ken Cureton **Submitted** 9/21/2012 **Attachments** No

Comment:

The proposal provides for carbon monoxide control provisions as per 553.885 FS.

1st Comment Period History08/09/2012 - 09/23/2012

Proponent	Ken Cureton	Submitted	9/21/2012	Attachments	No
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Comment:

The proposal provides for carbon monoxide control provisions as per 553.885 FS.

F5113-G2**1st Comment Period History**08/09/2012 - 09/23/2012

Proponent	Joseph Eysie	Submitted	9/23/2012	Attachments	No
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Comment:

The Florida Natural Gas Association (FNGA) supports Mod 5113.

F5113-G3

916.1 Carbon monoxide protection.

Every separate building or an addition to an existing building for which a permit for new construction is issued and having a fossil-fuel-burning heater or appliance, a fireplace, an attached garage, or other feature, fixture, or element that emits carbon monoxide as a byproduct of combustion shall have an operational carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes in the new building or addition, or at such other locations as required by this Code.

916.1.1 Carbon monoxide alarm.

The requirements of Section 916.1 shall be satisfied by providing for one of the following alarm installations:

- 1. A hard-wired carbon monoxide alarm.
- 2. A battery-powered carbon monoxide alarm.
- 3. A hard-wired combination carbon monoxide and smoke alarm.
- 4. A battery-powered combination carbon monoxide and smoke alarm.
- 916.1.2 Combination alarms.

Combination smoke/carbon monoxide alarms shall be listed and labeled by a Nationally Recognized Testing Laboratory.

Exceptions:

- 1. An approved operational carbon monoxide detector shall be installed inside or directly outside of each room or area within a hospital, inpatient hospice facility or nursing home facility licensed by the Agency for Health Care Administration, or a new state correctional institution where a fossil-fuel burning heater, engine, or appliance is located. The carbon monoxide detector shall be connected to the fire-alarm system of the hospital, inpatient hospice facility, or nursing home facility as a supervisory signal.
- 2. This section shall not apply to existing buildings that are undergoing alterations or repair unless the alteration is an addition as defined in Section 916.1.3.

916.1.3

Addition shall mean an extension or increase in floor area, number of stories or height of a building or structure.

908.7.1.1 Carbon monoxide protection. Every separate building or an addition to an existing building for which a permit for new construction is issued and having a fossil-fuel-burning heater or appliance, a fireplace, an attached garage, or other feature, fixture, or element that emits carbon monoxide as a byproduct of combustion shall have an operational carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes in the new building or addition, or at such other locations as required by this Code.

908.7.1.1.1 Carbon monoxide alarm. The requirements of Section 916.1 shall be satisfied by providing for one of the following alarm installations:

1. A hard-wired carbon monoxide alarm.
2. A battery-powered carbon monoxide alarm.
3. A hard-wired combination carbon monoxide and smoke alarm.
4. A battery-powered combination carbon monoxide and smoke alarm.

908.7.2 916.1.2 Combination alarms. Combination smoke/carbon monoxide alarms shall be listed and labeled by a Nationally Recognized Testing Laboratory.

Exceptions:

1. An approved operational carbon monoxide detector shall be installed inside or directly outside of each room or area within a hospital, inpatient hospice facility or nursing home facility licensed by the Agency for Health Care Administration, or a new state correctional institution where a fossil-fuel burning heater, engine, or appliance is located. The carbon monoxide detector shall be connected to the fire-alarm system of the hospital, inpatient hospice facility, or nursing home facility as a supervisory signal.
2. This section shall not apply to existing buildings that are undergoing alterations or repair unless the alteration is an addition as defined in Section 908.7.3 916.1.3.

908.7.3 916.1.3 Addition shall mean an extension or increase in floor area, number of stories or height of a building or structure.

~~[F] 908.7 Carbon monoxide alarms.~~ Group I or R occupancies located in a building containing a fuel burning appliance or in a building which has an attached garage shall be equipped with single station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the *International Mechanical Code* shall not be considered an attached garage.

~~**Exception:** Sleeping units or dwelling units which do not themselves contain a fuel burning appliance or have an attached garage, but which are located in a building with a fuel burning appliance or an attached garage, need not be equipped with single station carbon monoxide alarms provided that:~~

1. ~~The *sleeping unit* or *dwelling unit* is located more than one story above or below any story which contains a fuel-burning appliance or an attached garage;~~
2. ~~The *sleeping unit* or *dwelling unit* is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and~~
3. ~~The building is equipped with a common area carbon monoxide alarm system.~~

~~**[F] 908.7.1 Carbon monoxide detection systems.**~~

~~Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be *listed* as complying with UL 2075.~~

Date Submitted 7/20/2012	Section R315	Proponent Ken Cureton
Chapter 3	Affects HVHZ No	Attachments No
TAC Recommendation	No Affirmative Recommendation with a Second	NAR with a Second by the Fire TAC
Commission Action	Pending Review	

Comments

General Comments Yes **Alternate Language** Yes

Related Modifications

None

Summary of Modification

Modify SECTIONS R315.1 through R315.3

Rationale

To comply with s. 553.73(7)(a) Florida Statutes, the proposed modification will supplement the most current version of the International Existing Building Code (IEBC) base code with Florida specific requirements in accordance with the Commission's approved code change process for the update to the 2013 Florida Building Code. The proposed modification is necessary in order to maintain compliance with Florida Statutes.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. Proposed language is currently adopted by the 2010 Florida Building Code.

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

None. Proposed language is currently adopted by the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

None. Proposed language is currently adopted by the 2010 Florida Building Code.

Requirements

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

Yes. The Proposed language for this Modification is currently included in the 2010 Florida Building Code.

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

Yes. The Proposed language for this Modification is currently included in the 2010 Florida Building Code.

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

It does not. The Proposed language for this Modification is currently included in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

It does not. The Proposed language for this Modification is currently included in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

The proposed code change was submitted in accordance with the Commission's update process for the 2013 FBC in order to maintain compliance with Florida Statutes.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

5438-A1

Proponent Ann Stanton **Submitted** 11/27/2012 **Attachments** Yes

Rationale

Clean up the proposed mod relative to formatting and to reflect Florida law.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. This language reflects that in Florida law as shown in the 2010 Residential code.

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

None. This language reflects that in Florida law as shown in the 2010 Residential code.

Impact to industry relative to the cost of compliance with code

None. This language reflects that in Florida law as shown in the 2010 Residential code.

Requirements

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

Yes. This language reflects that in Florida law as shown in the 2010 Residential code.

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

Yes. This language reflects that in Florida law as shown in the 2010 Residential code.

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

No. This language reflects that in Florida law as shown in the 2010 Residential code.

Does not degrade the effectiveness of the code

No. This language reflects that in Florida law as shown in the 2010 Residential code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

OTHER

Explanation of Choice

There is a lot of overlap with carbon monoxide provisions in the IRC, but Florida law takes precedence over the I-codes.

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

This change reflects Florida law.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

F5438-G2

Proponent Joe Bigelow **Submitted** 12/6/2012 **Attachments** No

Comment:

mod 5438 recieved an "NAR" however staff respectfully requests that the TAC reconsider their position and support the original proposal for consistency with the law.

Proponent	Ken Cureton	Submitted	9/21/2012	Attachments	No
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Comment:

The proposal provides for carbon monoxide control provisions as per 553.885 FS.

F5438-G1

Modify SECTIONS R315.1 through R315.3 as follows:

R315.1 Carbon monoxide alarms.

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in *dwelling units* within which fuel-fired *appliances* are installed and in dwelling units that have attached garages.

Carbon monoxide protection. Every separate building or an addition to an existing building for which a permit for new construction is issued and having a fossil-fuel-burning heater or appliance, a fireplace, an attached garage, or other feature, fixture, or element that emits carbon monoxide as byproduct of combustion shall have an operational carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes.

Exception: This section shall not apply to existing buildings that are undergoing alterations or repair unless the alteration is an addition as defined in Section R315.1.3.

R315.1.1 Carbon monoxide alarm. The requirements of Section R315.1 shall be satisfied by providing for one of the following alarm installations:

- (1) A hard-wired carbon monoxide alarm.
- (2) A battery-powered carbon monoxide alarm.
- (3) A hard-wired combination carbon monoxide and smoke alarm.
- (4) A battery-powered combination carbon monoxide and smoke alarm.

R315.1.2 Combination alarms. Combination smoke/carbon monoxide alarms shall be listed and labeled by a Nationally Recognized Testing Laboratory.

R315.1.3 Addition shall mean: An extension or increase in floor area, number of stories or height of a building or structure.

R315.2 Where required in existing dwellings. Reserved .

~~Carbon monoxide detection systems.~~ Carbon monoxide detection systems that include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720, shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner and shall be monitored by an approved supervising station.

~~Exception:~~ Where carbon monoxide alarms are installed meeting the requirements of [Section R315.1](#), compliance with Section 315.2 is not required.

R315.3 Alarm requirements. Reserved

~~Where required in existing dwellings. Where work requiring a permit occurs in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with [Section R315.1](#).~~

~~**R315.4 Alarm requirements.** Single-station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.~~

R315.1 Carbon monoxide protection. Every separate building or an addition to an existing building for which a permit for new construction is issued and having a fossil-fuel-burning heater or appliance, a fireplace, an attached garage, or other feature, fixture, or element that emits carbon monoxide as byproduct of combustion shall have an operational carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes.

Exception: This section shall not apply to existing buildings that are undergoing alterations or repair unless the alteration is an addition as defined in Section R315.1.3.

~~**315.1 Carbon monoxide alarms.** For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in *dwelling units* within which fuel-fired *appliances* are installed and in dwelling units that have attached garages.~~

R315.1.1 Carbon monoxide alarm. The requirements of Section R315.1 shall be satisfied by providing for one of the following alarm installations:

- (1) A hard-wired carbon monoxide alarm.
- (2) A battery-powered carbon monoxide alarm.
- (3) A hard-wired combination carbon monoxide and smoke alarm.
- (4) A battery-powered combination carbon monoxide and smoke alarm.

R315.1.2 Combination alarms. Combination smoke/carbon monoxide alarms shall be listed and labeled by a Nationally Recognized Testing Laboratory.

R315.1.3 Addition shall mean: An extension or increase in floor area, number of stories or height of a building or structure.

~~**315.2 Carbon monoxide detection systems.** **Reserved.** Carbon monoxide detection systems that include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720, shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy, owned by the homeowner and shall be monitored by an approved supervising station.~~

~~**Exception:** Where carbon monoxide alarms are installed meeting the requirements of Section R315.1, compliance with Section 315.2 is not required.~~

~~**R315.32 Where required in existing dwellings.** **Reserved.** **Where required in existing dwellings.** Where work requiring a *permit* occurs in existing *dwellings* that have attached garages or in existing dwellings within which fuel-fired *appliances* exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.~~

~~**R315.43 Alarm requirements.** **Reserved.** Single-station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.~~

Date Submitted	7/17/2012	Section	101	Proponent	Ann Stanton
Chapter	1	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation with a Second				
Commission Action	Pending Review				

Comments

General Comments	Yes	Alternate Language	Yes
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Related Modifications**Summary of Modification**

Propose Florida-specific administrative criteria.

Rationale

Florida law provides administrative rules that allow local government and the Florida Building Commission specific roles. Administrative requirements contained in the International Mechanical Code that are different are hereby reserved.

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

None. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

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

None. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

Impact to industry relative to the cost of compliance with code

None. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

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

Yes. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

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

Yes. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

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

No. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

Does not degrade the effectiveness of the code

No. Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

Proposed changes to the base code are in the 2010 Florida Building Code, Mechanical.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

5201-A2

Proponent BOAF CDC Submitted 12/13/2012 Attachments Yes

Rationale

Provides a supplement based on the 2012 IMC and the Mechanical TAC recommendations with some modifications.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

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

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

Impact to industry relative to the cost of compliance with code

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

Requirements

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

Yes, allows for providing the required statutory requirements and standardizes the code requirements for design.

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

Yes, allows for providing the required statutory requirements and standardizes the code requirements for design.

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

No, the same materials that were allowed prior to the will still be allowed.

Does not degrade the effectiveness of the code

No, helps standardize the code and allow for staying current with the base code as it is developed and updated.

Is the proposed code modification part of a prior code version? No

5201-A1

Proponent BOAF CDC Submitted 9/23/2012 Attachments Yes

Rationale

This is a compilation of the changes show in the supplement from the state, the proposed changes that meet the requirement of statutory or were proposed to the I-Code process. And should cover the requirements for the supplement.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

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

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

Impact to industry relative to the cost of compliance with code

None, these are the current statutory requirements, base code requirements or changes brought forward from the previous code.

Requirements

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

Yes, allows for providing the required statutory requirements and standardizes the code requirements for design.

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

Yes, allows for providing the required statutory requirements and standardizes the code requirements for design.

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

No, the same materials that were allowed prior to the will still be allowed.

Does not degrade the effectiveness of the code

No, helps standardize the code and allow for staying current with the base code as it is developed and updated.

Is the proposed code modification part of a prior code version? No

2nd Comment Period10/31/2012 - 12/14/2012

Page 31 of 71

Proponent	Ann Stanton	Submitted	11/13/2012	Attachments	No
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Comment:

There is nothing wrong with the mod language as proposed; it is necessary if Florida has it's own FBC-Mechanical volume.

M5201-G2**1st Comment Period History**08/09/2012 - 09/23/2012

Proponent	Ken Cureton	Submitted	9/21/2012	Attachments	No
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Comment:

The proposal provides for continuation to the Commission's policy deferring the administrative requirements of the sub-codes to the FBC, B.

M5201-G1

Chapter 1, Administration

Section 101 General

101.1 Scope. Change to read as shown.

[A] 101.1 ~~Title. These regulations shall be known as the Mechanical Code of [NAME OF JURISDICTION], hereinafter referred to as "this code."~~ Scope. The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Mechanical.

101.2 Scope. Change to read as shown.

101.2 Scope. Reserved.

101.3 Intent. Change to read as shown.

101.3 Intent. Reserved.

101.4 Severability. Change to read as shown.

101.4 Severability. Reserved.

Section 102 Applicability

Section 102 Applicability. Change to read as shown.

Section 102 Applicability. Reserved.

Section 103, Department of Mechanical Inspection. Change to read as shown.

Section 103, Department of Mechanical Inspection. Reserved.

Section 104, Duties and Powers of the Code Official. Change to read as shown.

Section 104, Duties and Powers of the Code Official. Reserved.

Section 105, Approval. Change to read as shown.

Section 105, Approval. Reserved.

Section 106, Permits. Change to read as shown.

Section 106, Permits. Reserved.

Section 107, Inspections and Testing. Change to read as shown.

Section 107, Inspections and Testing. Reserved.

Section 108, Violations. Change to read as shown.

Section 108, Violations. Reserved.

Section 109, Means of Appeal. Change to read as shown.

Section 109, Means of Appeal. Reserved.

Section 110, Temporary Equipment, Systems and Uses. Change to read as shown:

Section 110. Temporary Equipment, Systems and Uses. Reserved.

Florida Supplement to the I Codes:

This draft is prepared under the following assumptions:

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 International Plumbing Code with the Florida Supplement to the I Codes Florida Building Code, Plumbing Section.

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

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.

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

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

Where accessibility is required, Use the current Florida Building Code, Building, Accessibility

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

FLORIDA BUILDING CODE, MECHANICAL SUPPLEMENT 2013

CHAPTER 1 ADMINISTRATION

101.1 Title. These regulations shall be known as the *Existing Building Code of the State of Florida* [NAME OF JURISDICTION], hereinafter referred to as “this code.”

102 – 110 are Reserved and The provisions of Chapter 1 Sections 102 - 117 *Florida Building Code, Building* shall govern the administration and enforcement of the *Florida Building Code, Mechanical*.

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.~~

CHAPTER 3 GENERAL REGULATIONS

304.10 Clearances from grade. Equipment and *appliances* installed at grade level shall be supported on a level concrete slab or other *approved* material extending not less than 3 inches (76 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such support shall be in accordance with the manufacturer’s installation instructions.

Exception: On changeouts or new installations of existing buildings where equipment is replaced that has a support platform approved under a previous code.

306.3.2 Air Handling Units. Air handling units shall be allowed in attics if the following conditions are met:

1. The service panel of the equipment is located within six (6) feet [1829 mm] of an attic access.
2. A notice is posted on the electric service panel indicating to the homeowner that the 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 YOU ENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the *International Plumbing Code* relative to the material type. Condensate waste and drain line size shall be not less than 3/4-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.

Exception: Where the drain line is less than 10 feet (3048 mm) in length, for wall mounted ductless split units less than 36,001 Btu/h, the size of the drainpipe need not be larger than the size of the factory drain outlet on the equipment.

307.2.5 Pipe insulation. All horizontal primary condensate drains within unconditioned areas shall be insulated to prevent condensation from forming on the exterior of the drain pipe.

CHAPTER 5 EXHAUST SYSTEMS

SECTION 515 MAUSOLEUM RELIEF VENT

515.1 General. A pressure relief vent shall be provided for each crypt. Niches shall not require pressure relief systems.

515.2 Materials. The pressure relief vent pipe and fittings shall conform to one of the standards listed in Table M515.2A and Table M515.2B.

TABLE 515.2A: CRYPT PRESSURE RELIEF PIPE

MATERIAL STANDARD .

Acrylonitrile butadiene styrene (ABS) plastic pipe ASTM D 2661

ASTM F 628 CSA B181.1

Polylefin pipe CSA CAN/CSA - B181.3

Polyvinyl chloride (PVC) plastic pipe (Type DWV) ASTM D 2665

ASTM D 2949, ASTM F 891

Table 515.2B: Crypt Pressure Relief Fittings

MATERIAL STANDARD

Acrylonitrile butadiene styrene (ABS) plastic pipe ASTM D 3311, CSA B181.1

Polyvinyl chloride (PVC) plastic pipe (Type DWV) ASTM D 3311, ASTM D 2949, ASTM F 891

Plastic, general ASTM F 409

515.3 Pressure Relief Vent. For family mausoleum units where all crypts are bordering an exterior wall, pressure relief ventilation shall be provided from the crypt to the outside of the mausoleum through the exterior wall or roof. For all other mausoleum units, each crypt shall have a pressure relief vent from the crypt to the roof of the mausoleum. The minimum nominal pipe size shall be 1 inch (25 mm). The system shall have a minimum of one-eighth unit vertical to 12 units horizontal (1-percent slope). The piping shall not be trapped or installed to trap water or condensate.

515.4 Termination. Except for family mausoleum units where all crypts are bordering an exterior wall, crypt pressure relief system shall extend through the roof and terminate at least 6 inches (152 mm) above the roof and at least 10 feet (3048 mm) from any openable opening, air intake, or property line. The termination of the relief system pipe shall be done by a roof and vent cap compatible with the relief pressure pipe. The roof and vent cap shall be waterproof. For family mausoleum units where all crypts are bordering an exterior wall, pressure relief ventilation shall be provided from the crypt to the outside of the mausoleum through the exterior wall or roof.

CHAPTER 14 REFERENCED STANDARDS

Florida Codes

Florida Building Commission

c/o Florida Department of Business and Professional Regulation

Building Codes and Standards

2555 Shumard Oak Boulevard

Tallahassee, Florida 32399-2100

Standard Referenced in code

Reference Number Title section number

FBC-B 2013 Florida Building Code, Building

Ch. 11 Florida Building Code, Building - Accessibility

Ch. 553.86 Florida Statute, Public Restrooms

Florida Building Code, Energy Conservation

Ch. 27 Florida Building Code, Building-Electrical (National Electrical Code, NFPA 70)

FEBC—2013 Florida Existing Building Code

FBC-FG 2013 Florida Building Code, Fuel Gas

FBC-P 2013 Florida Building Code, Plumbing

FRC-2013 Florida Residential Code

FFPC-2013 Florida Fire Prevention Code

Florida Supplement to the I Codes:

This draft is prepared under the following assumptions:

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 International Plumbing Code with the Florida Supplement to the I Codes Florida Building Code, Plumbing Section.

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

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.

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

Where accessibility is required, Use the current Florida Building Code, Building, Accessibility

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

FLORIDA BUILDING CODE, MECHANICAL SUPPLEMENT 2013

CHAPTER 1 ADMINISTRATION

101.1 Title. These regulations shall be known as the *Mechanical Code of the State of Florida* [NAME OF JURISDICTION], hereinafter referred to as “this code.”

101.2 Scope.

This code shall regulate the design, installation, maintenance, *alteration* and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code shall also regulate those mechanical systems, system components, *equipment* and appliances specifically addressed herein. The installation of fuel gas distribution piping and *equipment*, fuel gas-fired appliances and fuel gas-fired *appliance* venting systems shall be regulated by the *International Fuel Gas Code*.

Exception:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.
2. Alteration, repair, addition, relocation and change of occupancy of existing structures and buildings shall comply with the provisions of the *Florida Building Code, Existing Building*.

102 – 110 are Reserved and the provisions of Chapter 1 Sections 102 - 117 *Florida Building Code; Building* shall govern the administration and enforcement of the *Florida Building Code, Mechanical*.

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.~~

CHAPTER 3 GENERAL REGULATIONS

304.10 Clearances from grade. Equipment and *appliances* installed at grade level shall be supported on a level concrete slab or other *approved* material extending not less than 3 inches (76 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such support shall be in accordance with the manufacturer’s installation instructions.

Exception: On changeouts or new installations of existing buildings where equipment is replaced that has a support platform approved under a previous code.

306.3.2 Air Handling Units. Air handling units shall be allowed in attics if the following conditions are met:

1. The service panel of the equipment is located within six (6) feet [1829 mm] of an attic access.
2. A notice is posted on the electric service panel indicating to the homeowner that the 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 YOU ENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the *International Plumbing Code* relative to the material type. Condensate waste and drain line size shall be not less than 3/4-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.

Exception: Where the drain line is less than 10 feet (3048 mm) in length, for wall mounted ductless split units less than 36,001 Btu/h, the size of the drainpipe need not be larger than the size of the factory drain outlet on the equipment.

307.2.5 Pipe insulation. All horizontal primary condensate drains within unconditioned areas shall be insulated to prevent condensation from forming on the exterior of the drain pipe.

CHAPTER 5 EXHAUST SYSTEMS

513.1 Scope and purpose.

This section applies to mechanical and passive smoke control systems that are required by the *International Florida Building Code*, ~~or the International Fire Code~~ and shall apply to high rise buildings as defined in the *Florida Building Code, Building*. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations, or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat-venting provisions found in Section 910 of the *International Florida Building Code, Building*, ~~or the International Fire Code~~.

SECTION 515 MAUSOLEUM RELIEF VENT

515.1 General. A pressure relief vent shall be provided for each crypt. Niches shall not require pressure relief systems.

515.2 Materials. The pressure relief vent pipe and fittings shall conform to one of the standards listed in Table M515.2A and Table M515.2B.

TABLE 515.2A: CRYPT PRESSURE RELIEF PIPE

MATERIAL STANDARD .

Acrylonitrile butadiene styrene (ABS) plastic pipe ASTM D 2661

ASTM F 628 CSA B181.1

Polylefin pipe CSA CAN/CSA - B181.3

Polyvinyl chloride (PVC) plastic pipe (Type DWV) ASTM D 2665

ASTM D 2949, ASTM F 891

Table 515.2B: Crypt Pressure Relief Fittings

MATERIAL STANDARD

Acrylonitrile butadiene styrene (ABS) plastic pipe ASTM D 3311, CSA B181.1

Polyvinyl chloride (PVC) plastic pipe (Type DWV) ASTM D 3311, ASTM D 2949, ASTM F 891

Plastic, general ASTM F 409

515.3 Pressure Relief Vent. For family mausoleum units where all crypts are bordering an exterior wall, pressure relief ventilation shall be provided from the crypt to the outside of the mausoleum through the exterior wall or roof. For all other mausoleum units, each crypt shall have a pressure relief vent from the crypt to the roof of the mausoleum. The minimum nominal pipe size shall be 1 inch (25 mm). The system shall have a minimum of one-eighth unit vertical to 12 units horizontal (1-percent slope). The piping shall not be trapped or installed to trap water or condensate.

515.4 Termination. Except for family mausoleum units where all crypts are bordering an exterior wall, crypt pressure relief system shall extend through the roof and terminate at least 6 inches (152 mm) above the roof and at least 10 feet (3048 mm) from any openable opening, air intake, or property line. The termination of the relief system pipe shall be done by a roof and vent cap compatible with the relief pressure pipe. The roof and vent cap shall be waterproof. For family mausoleum units where all crypts are bordering an exterior wall, pressure relief ventilation shall be provided from the crypt to the outside of the mausoleum through the exterior wall or roof.

CHAPTER 6 DUCT SYSTEMS

601.5 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.

603.1.3 Space provided. Sufficient space shall be provided adjacent to all mechanical components located in or forming a part of the air distribution system to assure adequate access for (1) construction and sealing in accordance with the requirements of Section 603.1 of this code; (2) inspection; and (3) cleaning and maintenance. A minimum of 4 inches (102 mm) is considered sufficient space around air handling units.

Exception: Retrofit or replacement units not part of a renovation are exempt from the minimum clearance requirement.

CHAPTER 14 REFERENCED STANDARDS

Florida Codes

Florida Building Commission

c/o Florida Department of Business and Professional Regulation

Building Codes and Standards

1940 North Monroe Street
Tallahassee, FL 32399-1027

Standard Referenced in code

Reference Number Title section number

FBC-B 2013 Florida Building Code, Building

Ch. 11 Florida Building Code, Building - Accessibility

Ch. 553.86 Florida Statute, Public Restrooms

Florida Building Code, Energy Conservation

Ch. 27 Florida Building Code, Building-Electrical (National Electrical Code, NFPA 70)

FEBC—2013 Florida Existing Building Code

FBC-FG 2013 Florida Building Code, Fuel Gas

FBC-P 2013 Florida Building Code, Plumbing

FRC-2013 Florida Residential Code

FFPC-2013 Florida Fire Prevention Code

Date Submitted	7/25/2012	Section	202	Proponent	Ann Stanton
Chapter	2	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation with a Second				
Commission Action	Pending Review				

Comments

General Comments No **Alternate Language** Yes

Related Modifications**Summary of Modification**

Add definitions relative to duct sealing requirements of the Energy Conservation code.

Rationale

The Mechanical and mechanical provisions of the Residential code should have the same requirements for duct sealing. These definitions are needed to tie in with the Energy Conservation code duct construction requirements.

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

None. Proposed language is currently in the 2010 Florida Building Code.

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

None. Proposed language is currently in the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

None. Proposed language is currently in the 2010 Florida Building Code.

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

Yes. Proposed language is currently in the 2010 Florida Building Code.

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

Yes. Proposed language is currently in the 2010 Florida Building Code.

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

No. Proposed language is currently in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

No. Proposed language is currently in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

Proposed language was in the 2010 FBC. It was processed in accordance with an approved plan from the Florida Building Commission for the purpose of maintaining Florida efficiencies.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

5645-A1

Proponent Ann Stanton **Submitted** 11/27/2012 **Attachments** Yes

Rationale

Remove definitions designed to make the code consistent with the Energy Conservation code. Mod 5653 was not approved by the Mechanical TAC.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. Definitions are available in the Energy Conservation code.

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

None. Definitions are available in the Energy Conservation code.

Impact to industry relative to the cost of compliance with code

None. Definitions are available in the Energy Conservation code.

Requirements

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

Yes. Definitions are not used in the Mechanical code.

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

Yes. Definitions are not used in the Mechanical code.

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

No. Definitions are not used in the Mechanical code.

Does not degrade the effectiveness of the code

No. Definitions are not used in the Mechanical code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

NO

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

1st Comment Period History

08/09/2012 - 09/23/2012

M5645-G1

Proponent Ken Cureton **Submitted** 9/21/2012 **Attachments** No

Comment:

The proposal provides for terms for consistency with the Energy Code.

Proponent BOAF CDC **Submitted** 9/23/2012 **Attachments** No

Comment:

This code change is unnecessary as the provisions contained in the proposed amendment are adequately addressed in the applicable international code. Per FS 553.73 (7) (g)

Attic is the same as the 2012 IBC and the 2010 FBC

Air-Handling Unit is the same as the 2012 IMC and the 2010 FMC

Boiler and water heater are both defined in code; nothing has been submitted showing the need for this additional definition.

The rest of the "Definitions" are industry technical terms that do not require definition in code.

The amendment does not demonstrate by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code. Per FS 553.73 (7) (g)

M5645-G2

Section 202, Definitions

Add the following:

AIR-HANDLING UNIT. The fan unit of a furnace and the fan-coil unit of a split-system, packaged air conditioner or heat pump.

ATTIC. An enclosed unconditioned space located immediately below an uninsulated roof and immediately above the ceiling of a building. For the roof to be considered insulated, roof insulation shall be at least the R-value required to meet Section R405.2.1 or Section C407.2.1 of the *Florida Building Code, Energy Conservation*.

BOILER, HOT WATER SUPPLY. Any vessel used for generating hot water to be used external to the vessel, which exceeds any of the following limitations:

1. A heat input capacity of 400,000 Btuh (117.2 kW).
2. A water temperature of 210°F (99°C).
3. A nominal water capacity of 120 gal (454 L).

CONDITIONED SPACE. That volume of a structure which is either mechanically heated, cooled or both heated and cooled by direct means. Spaces within the thermal envelope that are not directly conditioned shall be considered buffered unconditioned space. Such spaces may include, but are not limited to, mechanical rooms, stairwells and unducted spaces beneath roofs and between floors. Air leakage into dropped ceiling cavities does not constitute conditioned space. See "SPACE (a) conditioned space in Section 202 of the *Florida Building Code, Energy Conservation*. ~~An area, room or space being heated or cooled by any equipment or appliance.~~

DRAWBAND. A fastener which surrounds and fastens a duct fitting with either the inner lining or the outer jacket of flexible ducts. Tension ties, clinch bands, draw ties, and straps are considered drawbands.

DUCT FITTING. Couplings that join sections of ducting together or to other air distribution system components. When used to join sections of flexible non-metal duct, duct fittings are typically metal or other rigid material and have a raised bead or indented groove against which the drawband is secured. Terminal fittings join ducting to supply outlets and return inlets at the end of the distribution system and include register and return boots and register and return boxes. Intermediate fittings join flexible non-metal duct to other sections of flexible non-metal duct, to sections of other types of ducting, and to mechanical equipment and include collars, take-offs, tap-ins, sleeves, and the supply and return ends of air handlers and furnaces. See "INTEGRAL FLANGE DUCT COLLAR FITTING"

ENCLOSED SUPPORT PLATFORM. A framed enclosure located inside or outside the conditioned space, which supports a furnace or central heating/air conditioning air handler and which may contain and protect a return duct section of the air distribution system.

EXISTING BUILDING. A building or portion thereof that was previously occupied or approved for occupancy by the authority having jurisdiction. (Reference Section 101.4.1 of the *Florida Building Code, Energy Conservation*.)

FLEXIBLE NON-METAL DUCT. A type of flexible air duct comprised of a wire-reinforced core (usually plastic), an insulation layer and an outer jacket (usually a durable reinforced plastic).

GASKETS OR GASKETING. A compressible, resilient, elastic packing, made of foam rubber or of a synthetic foam polymer. A gasket is distinct from the components being joined and must be capable of closing all air leakage pathways between the air barriers of the joint and of creating an air-tight seal.

INTEGRAL FLANGE DUCT COLLAR FITTING. . A type of duct collar fitting having a flange that is secured to and sealed to the cylinder or sleeve of the fitting. A function of this flange is to provide a surface which can be sealed to rigid ductboard.

MASTIC. A thick, pliable substance that adheres well to specific materials and is used for sealing different building components together. Mastics are often used in conjunction with fibrous or mesh fabric.

MASTIC RIBBONS. Mastic ribbons are malleable, putty-like packings which are used in applications akin to those of gasketing; but, they do not have the elasticity of gasketing. Such mastics contain nearly 100 percent solid, require no curing in air, and are used without reinforcing fabric.

MECHANICAL CLOSET. For the purposes of this code, a closet used as an air plenum which contains the blower unit or air handler of a central air conditioning or heating unit.

MECHANICAL EQUIPMENT PLENUM CHAMBER. In an air distribution system, that part of the casing, or an air chamber furnace, to or from which the air duct system delivers conditioned air.

SEAL or SEALING – AIR DUCT. The use of closure products, either welds, mastic, mastic plus embedded fabric, adhesives, caulking, gaskets, pressure sensitive tapes, heat-activated tapes or combinations thereof as allowed by specific sections of this code, to close cracks, joints, seams, and other openings in the air barriers of air duct, air handling units, and plenum chambers for the purpose of preventing air leakage. No joining of opening from which a closure product is absent shall be considered sealed unless considered otherwise in specific cases identified by this code. Closeness of fit between mated parts alone shall not be considered a seal.

~~AIR HANDLING UNIT.~~ The fan unit of a furnace and the fan-coil unit of a split system, packaged air conditioner or heat pump.

~~ATTIC.~~ An enclosed unconditioned space located immediately below an uninsulated roof and immediately above the ceiling of a building. For the roof to be considered insulated, roof insulation shall be at least the R-value required to meet Section R405.2.1 or Section C407.2.1 of the Florida Building Code, Energy Conservation.

~~BOILER, HOT WATER SUPPLY.~~ Any vessel used for generating hot water to be used external to the vessel, which exceeds any of the following limitations:

- ~~1. A heat input capacity of 400,000 Btuh (117.2 kW).~~
- ~~2. A water temperature of 210°F (99°C).~~
- ~~3. A nominal water capacity of 120 gal (454 L).~~

~~CONDITIONED SPACE.~~ That volume of a structure which is either mechanically heated, cooled or both heated and cooled by direct means. Spaces within the thermal envelope that are not directly conditioned shall be considered buffered unconditioned space. Such spaces may include, but are not limited to, mechanical rooms, stairwells and unducted spaces beneath roofs and between floors. Air leakage into dropped ceiling cavities does not constitute conditioned space. See "SPACE (a) conditioned space in Section 202 of the Florida Building Code, Energy Conservation. An area, room or space being heated or cooled by any equipment or appliance.

~~DRAWBAND.~~ A fastener which surrounds and fastens a duct fitting with either the inner lining or the outer jacket of flexible ducts. Tension ties, clinch bands, draw ties, and straps are considered drawbands.

~~DUCT FITTING.~~ Couplings that join sections of ducting together or to other air distribution system components. When used to join sections of flexible non-metal duct, duct fittings are typically metal or other rigid material and have a raised bead or indented groove against which the drawband is secured. Terminal fittings join ducting to supply outlets and return inlets at the end of the distribution system and include register and return boots and register and return boxes. Intermediate fittings join flexible non-metal duct to other sections of flexible non-metal duct, to sections of other types of ducting, and to mechanical equipment and include collars, take-offs, tap-ins, sleeves, and the supply and return ends of air handlers and furnaces. See "INTEGRAL FLANGE DUCT COLLAR FITTING"

~~ENCLOSED SUPPORT PLATFORM.~~ A framed enclosure located inside or outside the conditioned space, which supports a furnace or central heating/air conditioning air handler and which may contain and protect a return duct section of the air distribution system.

~~EXISTING BUILDING.~~ A building or portion thereof that was previously occupied or approved for occupancy by the authority having jurisdiction. (Reference Section 101.4.1 of the Florida Building Code, Energy Conservation.)

~~FLEXIBLE NON-METAL DUCT.~~ A type of flexible air duct comprised of a wire-reinforced core (usually plastic), an insulation layer and an outer jacket (usually a durable reinforced plastic).

~~GASKETS OR GASKETING.~~ A compressible, resilient, elastic packing, made of foam rubber or of a synthetic foam polymer. A gasket is distinct from the components being joined and must be capable of closing all air leakage pathways between the air barriers of the joint and of creating an air-tight seal.

INTEGRAL FLANGE DUCT COLLAR FITTING. . A type of duct collar fitting having a flange that is secured to and sealed to the cylinder or sleeve of the fitting. A function of this flange is to provide a surface which can be sealed to rigid ductboard.

MASTIC. A thick, pliable substance that adheres well to specific materials and is used for sealing different building components together. Mastics are often used in conjunction with fibrous or mesh fabric.

MASTIC RIBBONS. Mastic ribbons are malleable, putty-like packings which are used in applications akin to those of gasketing; but, they do not have the elasticity of gasketing. Such mastics contain nearly 100 percent solid, require no curing in air, and are used without reinforcing fabric.

MECHANICAL CLOSET. For the purposes of this code, a closet used as an air plenum which contains the blower unit or air handler of a central air conditioning or heating unit.

MECHANICAL EQUIPMENT PLENUM CHAMBER. In an air distribution system, that part of the casing, or an air chamber furnace, to or from which the air duct system delivers conditioned air.

SEAL or SEALING – AIR DUCT. The use of closure products, either welds, mastic, mastic plus embedded fabric, adhesives, caulking, gaskets, pressure sensitive tapes, heat activated tapes or combinations thereof as allowed by specific sections of this code, to close cracks, joints, seams, and other openings in the air barriers of air duct, air handling units, and plenum chambers for the purpose of preventing air leakage. No joining of opening from which a closure product is absent shall be considered sealed unless considered otherwise in specific cases identified by this code. Closeness of fit between mated parts alone shall not be considered a seal.

Date Submitted	7/17/2012	Section	516	Proponent	Ann Stanton
Chapter	5	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation with a Second				
Commission Action	Pending Review				

Comments

General Comments **No** **Alternate Language** **Yes**

Related Modifications**Summary of Modification**

Include a section on carbon monoxide alarms from the 2010 Florida Building Code per Florida law.

Rationale

Florida law requires that carbon monoxide control systems be provided under certain conditions. The 2010 Florida Building Code, Mechanical, included this language with the criteria for smoke control in section 513. This proposal references requirements of the law in Section 916 of the Florida Building Code, Building, from Section 516 of the FBC-Mechanical.

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

None. Proposed language is currently in the 2010 Florida Building Code.

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

None. Proposed language is currently in the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

None. Proposed language is currently in the 2010 Florida Building Code.

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

Yes. Proposed language is currently in the 2010 Florida Building Code.

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

Yes. Proposed language is currently in the 2010 Florida Building Code.

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

No. Proposed language is currently in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

No. Proposed language is currently in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

Proposed language was in the 2010 FBC. It was processed in accordance with an approved plan from the Florida Building Commission for the purpose of maintaining Florida efficiencies.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

5228-A1

Proponent Ann Stanton **Submitted** 11/15/2012 **Attachments** Yes

Rationale

Changes code reference to Section 908.7 of the IBC as proposed in Alternate A1 to mod F5228, which would replace the I-code language with language from previous Florida code reflecting Florida law concerning carbon monoxide alarms.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None.

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

None.

Requirements

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

Yes.

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

Yes.

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

No.

Does not degrade the effectiveness of the code

No.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

OTHER

Explanation of Choice

The IMC does not reference the new IBC provisions for carbon monoxide alarms as this mod would per previous editions of the FBC-Mechanical.

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

This mod simply changes Florida's mechanical code to reference a different section of the building code, which is proposed to be modified in Alt Language A1 to mod F5113 to remove possible conflicts in code resulting from I-code requirements for carbon monoxide that differ from Florida law.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

1st Comment Period History

08/09/2012 - 09/23/2012

M5228-G1

Proponent BOAF CDC **Submitted** 9/23/2012 **Attachments** No

Comment:

IBC 2012 Section 908.7 and IRS 2012 Section 315 cover Carbon Monoxide Alarms with better language than the 2010 FBC. This code change is unnecessary as the provisions contained in the proposed amendment are adequately addressed in the applicable international code. Per FS 553.73 (7) (g)

The amendment does not demonstrate by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code. Per FS 553.73 (7) (g)

The proposed amendment was does not appear to have been submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process.

Add Section 516 Carbon Monoxide as follows:

516

CARBON MONOXIDE CONTROL SYSTEMS

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

516

CARBON MONOXIDE CONTROL SYSTEMS

516.1 Carbon monoxide control systems. See Section 908.7 916 of the *Florida Building Code, Building*.

Date Submitted	8/2/2012	Section	M1507.3.1	Proponent	Jeff Sonne / FSEC
Chapter	15	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation with a Second				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	Yes
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Related Modifications

6013

Summary of Modification

Require whole-house ventilation systems to be balanced or positive pressure and enthalpy recovery type to reduce risk of moisture and mold.

Rationale

Negative pressure systems increase the risk of condensation in a Florida building envelope where the direction of moisture flow is frequently from the outside to the inside. Although spot ventilation systems can be negative, a continuous system greatly increases the risk. Researchers have seen a number of Florida buildings where negative pressure combined with low indoor thermostat settings and vinyl wall coverings or other moisture barriers have combined to create detrimental levels of mold. The proposed modification would require balanced or positively pressured systems to reduce this risk. The enthalpy recovery ventilation system would reduce the high levels of moisture brought into the home and reduce humidity levels or dehumidification energy relative to other ventilation options during humid weather.

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

Some, to verify enthalpy recovery effectiveness. If code mod 6013 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no impact to local entity.

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

Some first cost increase, but if code mod 6013 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no cost increase. Ongoing costs lower in applicable cases due to enthalpy recovery.

Impact to industry relative to the cost of compliance with code

Some first cost increase, but if code mod 6013 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no cost increase.

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

Reduces moisture and mold risks associated with negative pressure mechanical ventilation in our climate.

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

Improves the code by reducing moisture and mold risks associated with negative pressure mechanical ventilation in our climate.

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

Does not discriminate among balanced enthalpy recovery systems; reduces moisture and mold risks in our climate.

Does not degrade the effectiveness of the code

Improves the effectiveness of the code by reducing moisture and mold risks in applicable cases.

Is the proposed code modification part of a prior code version? No

2nd Comment Period

10/31/2012 - 12/14/2012

6014-A1

Proponent	Submitted	Attachments
Jeff Sonne / FSEC	12/14/2012	Yes

Rationale

Negative pressure systems increase the risk of condensation in a Florida building envelope where the direction of moisture flow is frequently from the outside to the inside. Although spot ventilation systems can be negative, a continuous system greatly increases the risk. Researchers have seen a number of Florida buildings where negative pressure combined with low indoor thermostat settings and improper moisture barriers have combined to create detrimental levels of mold. The proposed modification would require balanced or positively pressured systems to reduce this risk.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Some; if code mod 6013 or 6013-A2 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no impact to local entity.

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

Some first cost increase, but if code mod 6013 or 6013-A2 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no cost increase.

Impact to industry relative to the cost of compliance with code

Some first cost increase, but if code mod 6013 or 6013-A2 is accepted, the M1507.3.1 requirements won't apply in a number of cases; so in these cases, no cost increase.

Requirements

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

Reduces moisture and mold risks associated with negative pressure mechanical ventilation in our climate.

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

Improves the code by reducing moisture and mold risks associated with negative pressure mechanical ventilation in our climate.

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

Does not discriminate among balanced ventilation systems; reduces moisture and mold risks in our climate.

Does not degrade the effectiveness of the code

Improves the effectiveness of the code by reducing moisture and mold risks in applicable cases.

Is the proposed code modification part of a prior code version? **No**

1st Comment Period History

08/09/2012 - 09/23/2012

M6014-G1

Proponent	Submitted	Attachments
Mike Moore	9/22/2012	Yes

Comment:

Please see the attached for a comment requesting disapproval of M6014.

1st Comment Period History

08/09/2012 - 09/23/2012

M6014-G2

Proponent	Submitted	Attachments
Jeff Sonne / FSEC	9/23/2012	Yes

Comment:

Please see attached.

M1507.3.1 System design.

The whole-house ventilation system shall consist of one or more ~~supply or exhaust fans, or a combination of such~~ supply and exhaust fans such that the design is balanced or creates positive pressure in the conditioned space with respect to outside, and associated ducts and controls. Local exhaust or supply fans are permitted to serve as such a system. Outdoor air ducts connected to the return side of an air handler shall be considered to provide supply ventilation. ~~The system shall be designed with a minimum enthalpy recovery effectiveness of 0.50.~~

M1507.3.1 System design.

Where the air infiltration rate in a dwelling unit is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) ~~the whole-house ventilation system, including associated ducts and controls, shall consist of one or more supply or exhaust fans, or a combination of such supply and exhaust fans balanced in accordance with the provisions of the *International Mechanical Code*, and associated ducts and controls. Local exhaust or supply fans are permitted to serve as such a system. Outdoor air ducts connected to the return side of an air handler shall be considered to provide supply ventilation.~~ The ventilation system shall be designed with a ventilation air flow rate of 15cfm * (Number of bedrooms +1).



September 21, 2012

Energy Technical Advisory Committee
Florida Building Commission
1940 North Monroe Street
Tallahassee FL 32399

Re: M6014

Dear FBC Staff and Mechanical TAC:

Newport Ventures, representing Broan-NuTone, respectfully requests disapproval of M6014. Climatic restrictions on whole house mechanical ventilation (WHMV) system types have been removed from ASHRAE 62.2-2010 Addendum G and should not be instated within the Florida code. The reason statement given by ASHRAE 62.2 for removing climatic restrictions on WHMV system types is as follows:

*"This addendum removes limits on the amount of net exhaust flow of whole-house mechanical ventilation systems in hot, humid climates and the amount of net supply flow in very cold climates. The committee reviewed Section 4.6, "Restrictions on System Type" and decided the restrictions were not justified by recent field experience. There was general agreement that the problems in both hot/humid and cold climates were caused by specific and easily avoidable errors in envelope design that could not be solved by the system restrictions in Section 4.6."*¹

Similarly, the 2012 IRC does not place restrictions on WHMV system type, instead focusing on addressing proper building design. M6014's example of installing interior vapor retarders such as vinyl wall coverings is an example of bad building design in Florida that has the potential to cause mold growth regardless of whether or not a WHMV system is installed and irrespective of the type of WHMV system specified. Further, calculations show that the depressurization of a home operating an exhaust-only WHMV system at the minimum 2012 IRC rates (and the maximum rates permitted in Florida) is very low, at ~ 2 Pascals (0.008 in w.g.) induced by running a 60 cfm exhaust system in a 2400 sqft home with 9 foot ceilings and an air tightness level of 5.0 ACH 50. For perspective, this is the same amount of pressure that could be expected to be generated by a 4 mph breeze on a perpendicular wall – a condition that already occurs over 80% of the hours in a typical year, based on TMY3 weather data for Orlando.

The proponent's concern for energy efficient WHMV is valid. However, requiring an energy recovery ventilator (ERV) for this purpose places a very high cost burden on the builder and home owner. A better and more cost effective means of improving the energy performance of WHMV systems is to require a higher

¹ http://www.ashrae.org/File%20Library/docLib/StdAddenda/62_2_2010_2011AddendaSupplement.pdf

Part of Mr. Moore's argument in comment G1 is that "M6014's example of installing interior vapor retarders such as vinyl wall coverings is an example of bad building design in Florida that has the potential to cause mold growth regardless of whether or not a WHMV system is installed and irrespective of the type of WHMV system specified." Since vinyl wall coverings are outside the code jurisdiction and can be done at anytime by a resident, I suggest the safe assumption is that there will be vinyl wall coverings in some locations in some homes. We also need to assume that some residents will lower their thermostats below the outside dew point of the air even though we recommend they don't. As such, running an exhaust fan provides the consistent depressurization that will increase the likelihood of air being drawn through surfaces on a consistent basis. Unlike the "4 mph breeze on a perpendicular wall" Mr. Moore sites, this breeze will not die out. FSEC staff have 100s of man-years studying building science in hot humid climates and believe that allowing negative pressure as a method of meeting constant ventilation requirements will increase the risk of mold issues. Florida's hotel industry has suffered from negative pressure contributing to mold problems. Mr. David Odom (Formerly Vice President of CH2M Hill) and others have written about the increased risk of exhaust only ventilation. They indicate with continuous exhaust only ventilation mold is "probable" in hotel rooms, versus "unlikely" if conditioned make-up is provided to each hotel room [Reference: THE HIDDEN RISKS OF GREEN BUILDINGS: AVOIDING MOISTURE & MOLD PROBLEMS Authors: J. David Odom, ASHRAE, Richard Scott, AIA/NCARB/LEEDR AP& George H. DuBose, CGC Liberty Building Forensics Group, LLC Orlando, Florida, page 6] Just as cigarettes will not cause lung cancer in every smoker, negative pressurization will not cause mold in every home; but FSEC recommends the mod be passed as written to reduce the risk.

Date Submitted	7/23/2012	Section	M1602.4	Proponent	Jeff Sonne / FSEC
Chapter	16	Affects HVHZ	No	Attachments	No
TAC Recommendation	No Affirmative Recommendation with a Second				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	Yes
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Related Modifications

Mechanical Section 601.5

Summary of Modification

Balanced return air requirement and alternatives

Rationale

Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues.

Supporting publication:

Cummings, J., C. Withers, "Balanced Return Air, Duct Airtightness, and Combustion/Dilution Air Code Compliance in 40 Central Florida Homes" Florida Solar Energy Center, FSEC-CR-1789-06, Nov. 29, 2006.
(<http://www.fsec.ucf.edu/en/publications/pdf/FSEC-CR-1789-06.pdf>)

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

Some additional effort to verify compliance. Proposed language is in the 2010 Florida Building Code.

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

Some additional cost in some cases. Proposed language is in the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

Cost is justified since restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

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

Yes. Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

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

Yes. Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

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

No. Proposed language is in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

Increases code effectiveness. Proposed language is in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

It is important for Florida to keep its balanced return air requirement for the reasons provided above; allowing the requirement to lapse until it is included in the IMC would be confusing, potentially cause safety and health issues, provide poorer energy performance in new homes and is not in the interest of the state. Florida is largely a ducted HVAC system state and this affects us as much or more than other states.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

OTHER

Explanation of Choice

Submitted for 2012/13 ICC code development cycle.

2nd Comment Period

10/31/2012 - 12/14/2012

5574-A1

Proponent Jeff Sonne / FSEC Submitted 12/14/2012 Attachments Yes

Rationale

Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Alternative 1 (by same proponent as the original Mod 5574) is submitted so language is consistent with Mod 5772 which was "approved as modified" at the October TAC meeting. Supporting publication: Cummings, J., C. Withers, "Balanced Return Air, Duct Airtightness, and Combustion/Dilution Air Code Compliance in 40 Central Florida Homes" Florida Solar Energy Center, FSEC-CR-1789-06, Nov. 29, 2006. (http://www.fsec.ucf.edu/en/publications/pdf/FSEC-CR-1789-06.pdf)

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Some additional effort to verify compliance. Proposed language is in the 2010 Florida Building Code.

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

Some additional cost in some cases. Proposed language is in the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

Some; cost is justified since restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

Requirements

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

Yes. Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

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

Yes. Restricted return air affects building pressures and increases air infiltration which in turn increases energy use and can cause comfort, building durability, and health and safety issues. Proposed language is in the 2010 Florida Building Code.

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

No. Proposed language is in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

Increases code effectiveness. Proposed language is in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version?

YES

The provisions contained in the proposed amendment are addressed in the applicable international code?

NO

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variation addressed by the foundation code and why the proposed amendment applies to the state?

OTHER

Explanation of Choice

It is important for Florida to keep its balanced return air requirement for the reasons provided above; allowing the requirement to lapse until it is included in the IMC would be confusing, potentially cause safety and health issues, provide poorer energy performance in new homes and is not in the interest of the state. Florida is largely a ducted HVAC system state and this affects us as much or more than other states.

The proposed amendment was submitted or attempted to be included in the foundation codes to avoid resubmission to the Florida Building Code amendment process?

NO

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, causing excess air infiltration or exfiltration, depending on the pressure zones created. 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 caused by air distribution systems across individually closed interior doors where returns are centrally located shall be limited to 0.01 inch WC (2.5 pascals) or less. Pressure differentials across fire walls or other partitions within 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 pressure zone.

M1602.4.1 Prescriptive alternatives. The following alternatives may be used to demonstrate balanced return air for residential applications. 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 bedroom suite shall be included.

1. Transfer ducts or other transfer pathways may achieve this by providing return transfer that is 1½ (or more) times the cross sectional area (square inches or square centimeters) of the supply duct or supply ducts entering the room or space it is serving in addition to at least an unrestricted 1 inch (25.4 mm) door undercut to achieve proper return air balance.

2. Transfer grilles shall provide 0.50 square inches (3.226 cm²) or more (of grille area) for each 1.00 cfm (of supply air) for sizing through-the-wall transfer grilles in addition to at least an unrestricted 1 inch (25.4 mm) door undercut to achieve proper return air balance.

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 is 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.

Date Submitted 7/26/2012	Section M301.13	Proponent Rebecca Quinn obo DEM
Chapter 3	Affects HVHZ No	Attachments No
TAC Recommendation No Affirmative Recommendation Without A Second	Approved As Submitted by Special Occupancy TAC	
Commission Action Pending Review		

Comments

General Comments Yes	Alternate Language No
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Related Modifications

5271

Summary of Modification

Achieves terminology consistency between the building code, the residential code and ASCE 24. Approved as Submitted for the 2015 IBC (S103-12).

Rationale

S103-12, Approved as Submitted by FEMA for the foundation IBC, IMC and IPC. Makes changes everywhere the term "flood hazard areas subject to high velocity wave action" appears, replace with "coastal high hazard area." The two terms are exactly the same. This change will mean consistency of terms between the Building code, ASCE 24, the Residential Code, and the NFIP.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

No impact due to change in terminology to use Coastal High Hazard Area.

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

No impact due to change in terminology to use Coastal High Hazard Area.

Impact to industry relative to the cost of compliance with code

No impact due to change in terminology to use Coastal High Hazard Area.

Requirements

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

No impact due to change in terminology to use Coastal High Hazard Area.

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

No impact due to change in terminology to use Coastal High Hazard Area.

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

Doesn't affect material specifications.

Does not degrade the effectiveness of the code

No impact due to change in terminology to use Coastal High Hazard Area.

Is the proposed code modification part of a prior code version? No

2nd Comment Period

10/31/2012 - 12/14/2012

Proponent Joy Duperault	Submitted 12/10/2012	Attachments No
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Comment:

This proposal combines with SP5679. The resulting title to the section should appear as follows: "M301.13.1 Coastal high hazard areas and coastal A zones."

1st Comment Period History

08/09/2012 - 09/23/2012

Proponent BOAF CDC	Submitted 9/23/2012	Attachments No
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Comment:

This change was submitted to the ICC process.

This change is editorial in nature and is unnecessary, if this is needed it will be approved in Portland for inclusion into the 2015 IPC.

This code change is unnecessary as the provisions contained in the proposed amendment are adequately addressed in the applicable international code. Per FS 553.73 (7) (g)

The amendment does not demonstrate by evidence or data that the geographical jurisdiction of Florida exhibits a need to strengthen the foundation code beyond the needs or regional variations addressed by the foundation code. Per FS 553.73 (7) (g)

M301.13.1 ~~High velocity wave action~~ Coastal high hazard areas. In ~~flood hazard areas subject to high velocity wave action~~ coastal high hazard areas and coastal A zones mechanical systems and equipment shall not be mounted on or penetrate walls intended to break away under flood loads.

