MECHANICAL

PART 1 OF 1

WITHOUT 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 Submitted: 6**

Total Mods for report: 42

Sub Code: Mechanical

Date Submitted	7/30/2012	**Section**	307.2.5	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No **Alternate Language** No

Related Modifications

Residential Building - Mechanical - M1141.5 minimum piping insulation

Summary of Modification

Maintain Florida specific code related to insulation of primary condensate drain lines

Rationale

The addition of this section is needed to prevent condensation forming on the outside of the pipe that in the Florida climate could lead to mold in materials surrounding the pipe.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Would need to inspect piping for proper insulation

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

Would protect property from mold with very low cost

Impact to industry relative to the cost of compliance with code

Low impact

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

Strengthens 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 exihibits 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

1st Comment Period History 08/09/2012 - 09/23/2012

5756-A1

Proponent Oscar Calleja **Submitted** 9/23/2012 **Attachments** Yes

Rationale

Change related Residential Building Code, Mechanical M1411.5 to delete reference to R-4 minimum insulation and replace with R-3 minimum insulation to be consistent with Energy Conservation Code R403.3 ad ASHRAE 90.1 Table 6.83 and table 503.2.8.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Pipe insulation would still have to be inspected for proper R value.

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

Protect property from mold at very low cost.

Impact to industry relative to the cost of compliance with code

Low impact

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

Strenghtens code by improving consistency within different sections.

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 exihibits 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

1st Comment Period History 08/09/2012 - 09/23/2012

M5756-G1

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

Comment:

This was submitted to the IMC change # M30-12 and prevent condensation on the drains.
BOAF supports this change

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.

Change related Residential Building Code, Mechanical M1411.5 to delete reference to R-4 minimum insulation and replace with R-3 minimum insulation to be consistent with Energy Conservation Code 403.3 ad ASHRAE 90.1 Table 6.83 and table 503.2.8.

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.

M1411.5 Insulation of refrigerant piping. Piping and fittings for refrigerant vapor (suction) lines shall be insulated with insulation having a thermal resistivity of at least R-3 ~~R-4~~ and having external surface permeance not exceeding 0.05 perm [22.87 ng/(s . m2. Pa)] when tested in accordance with ASTM E96.

Date Submitted	7/30/2012	**Section**	603.1.3	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

To maintain Florida specific code related to the provision of sufficient space adjacent to mechanical systems.

Rationale

To provide a definition for "sufficient space" for mechanical systems to allow for adequate access to equipment

Fiscal Impact Statement

Impact to local entity relative to enforcement of code
Neutral

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

Impact to industry relative to the cost of compliance with code
More cost effective

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 exihibits 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

M5776-G1

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No

Comment:

No data or justification was provided.

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.

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.

Date Submitted	7/31/2012	**Section**	302.5.2	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code related to duct requirements in garages

Rationale

To provide clarification on types of duct allowed in garages for Florida Buildings

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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 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 exihibits 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

R302.5.2 Duct penetration.

Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel, 1 inch minimum rigid nonmetallic Class 0 or Class 1 duct board, or other approved material and shall have no openings into the garage.

Date Submitted	7/24/2012	**Section**	M1602.4 Balanced Return Air.	**Proponent**	amador barzaga
Chapter	16	**Affects HVHZ**	Yes	**Attachments**	Yes

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Add Florida Specific design and performance requirement from the 2010 Florida Building Code

Rationale

Balance air return has been part of the Florida Building Code for the past three code cycles. Maintaining this Section is consistent with the Florida Statutes requirements for Energy Conservation, equipment performance and inclusion in the code is necessary to avoid diminishing the expected level of performance standards

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

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

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

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

Impact to industry relative to the cost of compliance with code

None. 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, this modification provides direction and 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, this modification provides direction and proposed language is in the 2010 Florida Building Code.

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

No, this modification provides direction and proposed language is in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

No, this modification provides direction and proposed language is in the 2010 Florida Building Code.

Is the proposed code modification part of a prior code version? 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. 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 11/2 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.

The proposed language was in the 2010 Florida Building Code and is in accordance with the Florida Statutes for the purpose of maintaining Florida efficiencies.

Date Submitted	7/6/2012	**Section**	2301.2.7	**Proponent**	Michael Goolsby
Chapter	23	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

M4981-G1

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M2301.2.7 Roof and wall penetrations. Roof and wall penetrations shall be flashed and sealed in accordance with Chapter 9 the HVHZ shall comply with Chapter 44) of this code to prevent entry of water, rodents and insects

Date Submitted	7/6/2012	**Section**	2302.2.2	**Proponent**	Michael Goolsby
Chapter	23	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Approved as Submitted
Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

M4983-G1

Comment:

4983 This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone. Water intrusion protection for the installation should be the same statewide. This is not a high-wind issue.

M2302.2.2 Roof and wall penetrations. Roof and wall penetrations shall be flashed and sealed in accordance with Chapter 9 the HVHZ shall comply with Chapter 44) to prevent entry of water, rodents, and insects.

Total Mods for **Mechanical** in **No Affirmative Recommendation with a Second: 15**

Total Mods for report: 42

Sub Code: Mechanical

Date Submitted	7/17/2012	**Section**	301.15	**Proponent**	Ann Stanton
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

Repropose Florida-specific wind resistance equipment criteria.

Rationale

Proposed language is currently in the 2010 Florida Building Code. It is needed to ensure that HVAC equipment that is exposed to wind during storms is designed to meet those wind speeds.

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 exihibits 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 is currently in the 2010 Florida Building Code. Florida is often exposed to tropical storms and equipment on buildings should be prepared for them.

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

M5222-G1

Proponent	Ken Cureton	Submitted	9/21/2012	Attachments	No

Comment:

The proposal provides for clarification with regard to wind resistance for mechanical equipment as per DCA07-DEC-182 and DCA07-DEC-183.

1st Comment Period History 08/09/2012 - 09/23/2012

M5222-G2

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)
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)

Section 301.15 Wind resistance. Change to read as shown.

301.15 Wind resistance. Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures on the equipment and the supports as determined in accordance with the Florida Building Code, Building. Roof-mounted mechanical units and supports shall be secured to the structure. The use of wood "sleepers" shall not be permitted.

Date Submitted	7/30/2012	**Section**	304.1	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

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

Rationale

On change outs of previously installed equipment or new installation in existing buildings, it would be not be economicaly feasible to require updates to the current code.

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

The cost would increase if exception was not added.

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

If met previous code there should be no adverse impact

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

Improves code by allowing a reasonable exception.

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 exihibits 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

M5747-G1

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No

Comment:

This was submitted to the IMC change # M13-12 and would provide relief for existing conditions.

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)

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.

Date Submitted	7/30/2012	**Section**	306.3.2	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain a Florida Specific Code that allowed installation of air handling units in attics.

Rationale

It is common practice for existing and new Florida homes to have AHUs in the attic.

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

More economical.

Impact to industry relative to the cost of compliance with code

Allows for common Florida design practice to be maintained

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 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 exihibits 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

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

M5751-G1

Comment:

This was submitted to the IMC change # M19-12 except
"1. The service panel of the equipment is located within six (6) feet [1829 mm] of an attic access." Was not part of the submittal.

2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
Is no longer needed as it is covered in 307.2.3 of the 2012 IMC

3. The attic access opening is of sufficient size to replace the air handler.
Is no longer needed as it is covered in 306.3 of the 2012 IMC

4. The notice is the only part needed to be added to the 2013 FMC.

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)

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 device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.

3. The attic access opening is of sufficient size to replace the air handler.

4. A notice is posted on the electric service panel indicating to the homeowner 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.

Date Submitted	7/25/2012	**Section**	407 Return Air Intake	**Proponent**	amador barzaga
Chapter	4	**Affects HVHZ**	Yes	**Attachments**	Yes

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Maintaining return air intakes depicting prohibited locations

Rationale

Section 407 Return Air Intake has been part of the FBC (M) since 2004. Inclusion of this prohibition in the code is necessary in order to maintain the same level of life safety for the citizens of the State of Florida.

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, this modification maintains minimum life safety requirements regarding return air intake and 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, this modification is consistent with the statute's requirement that any modification must maintain the same life safety protection of the FBC and 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

No, this modification allows the use of materials, products and systems of construction already deemed acceptable by the FBC or any alternate acceptable to the code official plus the proposed language for this Modification is currently included in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

No, this modification maintains the same safety regulations required by the current code and in effect since 2004 and 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 exihibits 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

M5641-G1

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

Comment:

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.

407.1 General.

It shall be prohibited to place a return air intake in the following locations: public bathrooms, and nondedicated kitchen HVAC systems.

Yes, the proposed code change is submitted in order to maintain the current level of safety for Florida citizens.

Date Submitted	7/30/2012	**Section**	602.2.1	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

To maintain Florida Specific Code related to exceptions for exposed materials in plenums

Rationale

To provide exceptions that are commonly found in Florida buildings and do not pose a fire hazard greater than the other listed exceptions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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 exihibits 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

M5774-G1

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No

Comment:

This submittal does not match the current language in the 2012 IMC 602.2.1

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.

602.2.1 Materials within plenums. .

Exceptions:

602.2.1 Materials exposed within plenums. Except as required by Sections 602.2.1.1 through 602.2.1.5, materials within plenums shall be noncombustible or shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E 84.

Exceptions:

~~1. Rigid and flexible ducts and connectors shall conform to Section 603.~~

~~2. Duct coverings, linings, tape and connectors shall conform to Sections 603 and 604.~~

~~3. This section shall not apply to materials exposed within plenums in one- and two-family dwellings.~~

~~4. This section shall not apply to smoke detectors.~~

~~5. Combustible materials fully enclosed within continuous noncombustible raceways or enclosures, approved gypsum board assemblies or within materials listed and labeled for such application.~~

~~6~~. 7. Condensate Pump Units with a total volume not exceeding 2 cubic feet.

~~7~~. 8. Loudspeakers, loudspeaker assemblies, and their accessories exposed within a plenum shall have a peak optical density not greater than 0.50, an average optical density not greater than 0.15, and a peak heat release rate not greater than 100 kW when tested in accordance with UL 2043.

Date Submitted	7/30/2012	**Section**	603.1.4	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific code related to the application of closure products

Rationale

To provide clarification on the accepted application methods for closure products.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves enforcement

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

nuetral

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

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 exihibits 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

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

M5777-G1

Comment:

No data or justification was provided. Manufacturers installation has to be followed, code does not have to spell this out for every item.

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.

603.1.4 Product application. Closure products shall be applied to the air barriers of air distribution system components being joined in order to form a continuous barrier or they may be applied in accordance with the manufacturer'sinstructions or appropriate industry installation standard where more restrictive.

Date Submitted	7/25/2012	**Section**	603	**Proponent**	Ann Stanton
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Replace IMC duct sealing and attachment requirements with Florida-specific requirements as contained in the FBC-Energy Conservation to avoid conflict in code.

Rationale

Make duct sealing and attachment requirements in the Mechanical code agree with those in the Energy code and to maintain Florida efficiencies per Florida law.

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?

OTHER

Explanation of Choice

Duct sealing and attachment criteria are minimal in the IMC compared to Florida-specific criteria.

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exihibits 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

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

M5653-G1

Comment:

The manufacturers' installation requirements cover what the IMC base code does not, this is unnecessary language for the 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.

We do not need to repeat the SMACNA Manual in the code.

SECTION 603

DUCT CONSTRUCTION AND INSTALLATION

603.1 General. An air distribution system shall be designed and installed to supply the required distribution of air. The installation of an air distribution system shall not affect the fire protection requirements specified in the *International Building Code*. Ducts shall be constructed, braced, reinforced and installed to provide structural strength and durability. All transverse joints, longitudinal seams and fitting connections shall be securely fastened and sealed in accordance with the applicable standards of this section.

All enclosures which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers and shall be constructed and sealed in accordance with the applicable criteria of this section.

603.1.1 Mechanical fastening. All joints between sections of air ducts and plenums, between intermediate and terminal fittings and other components of air distribution systems, and between subsections of these components shall be mechanically fastened to secure the sections independently of the closure system(s).

603.1.2 Sealing. Air distribution system components shall be sealed with approved closure systems.

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.

603.1.4 Product application. Closure products shall be applied to the air barriers of air distribution system components being joined in order to form a continuous barrier or they may be applied in accordance with the manufacturer'sinstructions or appropriate industry installation standard where more restrictive.

603.1.5 Surface preparation. The surfaces upon which closure products are to be applied shall be clean and dry in accordance with the manufacturer's installation instructions.

603.1.6 Approved mechanical attachments. Approved mechanical attachments for air distribution system components include screws, rivets, welds, interlocking joints crimped and rolled, staples, twist in (screw attachment), and compression systems created by bend tabs or screw tabs and flanges or by clinching straps. Mechanical attachments shall be selected to be appropriate to the duct system.

603.1.7 Approved closure systems. Closure system materials, including adhesives when used, shall have a flame spread rating not over 25 without evidence of continued progressive combustion and a smoke-developed rating not over 50 when tested in accordance with the ASTM E 84. The following closure systems and materials are approved for air distribution construction and sealing for the applications and pressure classes prescribed in Sections 603.2 through 603.10:

1. Metal Closures.

a. Welds applied continuously along metal seams or joints through which air could leak.

b. Snaplock seams, and grooved, standing, double-corner, and Pittsburgh-lock seams as defined by SMACNA, as well as all other rolled mechanical seams. All seams shall be rolled or crimped.

2. Gasketing, which achieves a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that it is used only between mated surfaces which are mechanically fastened with sufficient force to compress the gasket and to fill all voids and cracks through which air leakage would otherwise occur.

3. Mastic Closures. Mastic shall be placed over the entire joint between mated surfaces. Mastics shall not be diluted. Approved mastics include the following:

a. Mastic or mastic plus embedded fabric systems applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part III.

b. Mastic or mastic plus embedded fabric systems applied to nonmetal flexible duct that are listed and labeled in accordance with the UL 181B, Part II.

c. Mastic ribbons, which achieve a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that they may be used only in flange-joints and lap-joints, such that the mastic resides between two parallel surfaces of the air barrier and that those surfaces are mechanically fastened.

4. Tapes. Tapes shall be applied such that they extend not less than 1 inch (25 mm) onto each of the mated surfaces and shall totally cover the joint. When used on rectangular ducts, tapes shall be used only on joints between parallel rigid surfaces and on right angle joints. Approved tapes include the following:

a. Pressure-sensitive tapes.

1) Pressure-sensitive tapes applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part I.

2) Pressure-sensitive tapes applied to nonmetal flexible duct that are listed and labeled in accordance with the UL 181B, Part I.

b. Heat-activated tapes applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part II.

5. Aerosol Sealant. Such sealants shall be installed by manufacturer-certified installers following manufacturer instructions and shall achieve 25/50 flame spread/smoke density development ratings under ASTM E 84 or UL 723.

6. Foams. Spray polyurethane foam shall be permitted to be applied without additional joint seals.

603.1.8 Cavities of the Building Structure. Cavities in framed spaces, such as dropped soffits and walls, shall not be used to deliver air from or return air to the conditioning system unless they contain an air duct insert insulated according to Section C403.2.7.1 of the Florida Building Code, Energy Conservation, and constructed and sealed in accordance with the requirements of Table 603 appropriate for the duct materials used.

Exception: Return air plenums.

603.2 Duct sizing. Ducts installed within a single dwelling unit shall be sized in accordance with ACCA Manual D or other approved methods. Ducts installed within all other buildings shall be sized in accordance with the ASHRAE Handbook of Fundamentals or other equivalent computation procedure based on the following:

1. Calculation of the supply air for each room shall be based on the greater of the heating load or sensible cooling load for that room.

2. Duct size shall be determined by the supply air requirements of each room, the available static pressure and the total equivalent length of the various duct runs.

3. Friction loss data shall correspond to the type of material used in duct construction.

603.4 Metallic ducts. All metallic ducts shall be constructed as specified in the SMACNA HVAC Duct Construction Standards—Metal and Flexible and shall be mechanically attached and sealed using approved closure systems for the pressure class as specified in Table 603.

Exception: Ducts installed within single dwelling units shall have a minimum thickness as specified in Table 603.4.

603.4.1 Minimum fasteners. Reserved. ~~Round metallic ducts shall be mechanically fastened by means of at least three sheet metal screws or rivets spaced equally around the joint.~~

~~**Exception:** Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion so as to prevent a hinge effect.~~

603.5 Nonmetallic ducts. 603.5 Nonmetallic ducts. Nonmetallic ducts shall be constructed with Class 0 or Class 1 duct material and shall comply with UL 181 and shall meet criteria in Table 603 appropriate to the type of duct installed. Fibrous duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards. The air temperature within nonmetallic ducts shall not exceed 250°F (121°C).

603.5.1 Gypsum ducts. [No change.]

603.5.2 Building cavities designed for air transport. Cavities designed to deliver air from or return air to the conditioning system such as plenums, mechanical closets, enclosed support platforms, cases, air shafts, etc. shall be lined with an air barrier and sealed in accordance with applicable criteria in Table 603, and shall be insulated in accordance with Section R403.2.1 or Section C403.2.7.1 of the Florida Building Code, Energy Conservation, as appropriate.

603.9 Joints, seams and connections. All air distribution system joints, seams and connections shall be constructed, sealed and attached as described in Table 603 by duct type. ~~All longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA HVAC Duct Construction Standards—Metal and Flexible and NAIMA Fibrous Glass Duct Construction Standards. All joints, longitudinal and transverse seams and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic plus embedded fabric systems, liquid sealants or tapes. Closure systems used to seal ductwork listed and labeled in accordance with UL 181A shall be marked "181A-P" for pressure-sensitive tape, "181-A-M" for mastic or "181-A-H" for heat-sensitive tape. Closure systems used to seal flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181B-M" for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked "181B-C." Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer's installation instructions. Unlisted duct tape is not permitted as a sealant on any duct.~~

~~**Exception:** Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.~~

TABLE 603

DUCT SYSTEM CONSTRUCTION AND SEALING

DUCT TYPE/ CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT	TEST STANDARD
Metal duct, rigid and flexible			
Pressures less than 1-inch water gauge	Closure systems as described in Section 603.1.7: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. 3. Mastic, mastic-plus-embedded fabric, or mastic ribbons. ` 4. Gaskets. 5. Pressure-sensitive tape. 6. Aerosol sealant	Mechanical attachments approved: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. Crimp joints for round metal ducts shall have a contact lap of at least 1½ inches (38 mm). Round metal ducts shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. [1]	SMACNA HVAC Air Duct Leakage Test Manual
Pressures 1-inch water gauge or greater	Closure systems as described in Section 603.1.7: 1. Continuous welds. 2. Mastic or mastic-plus-embedded fabric systems. 3. Gaskets.	Mechanical attachments approved: 1. Continuous welds Round metal ducts shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint.[1]	

High pressure duct systems designed to operate at pressures greater than 3-inch water gauge (4-inch water gauge pressure class)	The tested duct leakage class, at a test pressure equal to the design duct pressure class rating, shall be equal to or less than Leakage Class 6. Leakage testing may be limited to representative sections of the duct system but in no case shall such tested sections include less than 25 percent of the total installed duct area for the designated pressure class.		
Plastic duct	See Section 603.8.3.	Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions.	ASTM D 2412
Fibrous glass duct, rigid.	All joints, seams and duct wall penetrations between sections of duct and between duct and other distribution system components shall be sealed with closure systems as described in Section 603.1.7: 1. Heat-activated tapes. 2. Pressure-sensitive tapes. 3. Mastics or mastic-plus-embedded fabric systems.	Mechanically fastened per standard to secure the sections independent of the closure system(s). Attachments of ductwork to air-handling equipment shall be by mechanical fasteners in accordance with Section 603.1.1. Where access is limited, two fasteners on one side shall be acceptable.	NAIMA Fibrous Glass Duct Construction Standards. UL 181 UL 181A
Flexible duct systems, nonmetal.	All duct collar fittings shall have a minimum 5/8 inch (16 mm) integral flange for sealing to other components and a minimum 3-inch (76 mm) shaft for insertion into the inner duct core. Flexible ducts having porous inner cores shall not be used. **Exception:** Ducts having a nonporous liner between the porous inner core and the outer jacket. Fastening and sealing requirements shall be applied to	Flexible nonmetal ducts shall be joined to all other air distribution system components by either terminal or intermediate fittings. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C.	UL 181 UL 181B ADC FDPIS

Duct core to duct fitting	such intermediate liners. The reinforced lining shall be sealed to the duct fitting using one of the following sealing materials which conforms to the approved closure and mechanical attachment requirements of Section 603.1.7: 1. Gasketing. 2. Mastic, mastic-plus-embedded fabric, or mastic ribbons. 3. Pressure-sensitive tape. 4. Aerosol sealants, provided that their use is consistent with UL 181.	The reinforced core shall be mechanically attached to the duct fitting by a drawband installed directly over the wire-reinforced core and the duct fitting. The duct fitting shall extend a minimum of 2 inches (51 mm) into each section of duct core. When the flexible duct is larger than 12 inches (303 mm) in diameter or the design pressure exceeds 1-inch water gauge, the drawband shall be secured by a raised bead or indented groove on the fitting.	
Duct outer jacket to duct collar fitting	The outer jacket of a flexible duct section shall be secured at the juncture of the air distribution system component and intermediate or terminal fitting in such a way as to prevent excess condensation. The outer jacket of a flexible duct section shall not be interposed between the flange of the duct fitting and the flexible duct, rigid fibrous glass duct board, or sheet metal to which it is mated. The duct collar fitting's integral flange shall be sealed to the rigid duct board or sheet metal using one of the following closure systems/materials which conforms to the approved closure and mechanical attachment standards of Section 603.1.7:		

Duct collar fitting to rigid duct	1. Gasketing. 2. Mastic or mastic-plus-embedded fabric systems. 3. Mastic ribbons when used to attach a duct collar to sheet metal. 4. Pressure-sensitive tape. 5. Aerosol sealants, provided that their use is consistent with UL 181.	The duct collar fitting shall be mechanically attached to the rigid duct board or sheet metal by appropriate mechanical fasteners, either screws, spin-in flanges, or dovetail flanges.	
Terminal and intermediate fittings. **Fittings and joints between dissimilar duct types** **Terminal fittings and air ducts to building envelope**	Approved closure systems shall be as designated by air distribution system component material type in Section 603.1.7. **Exception:** When the components of a joint are fibrous glass duct board and metal duct, including collar fittings and metal equipment housings, the closure systems approved for fibrous glass duct shall be used. Terminal fittings and air ducts which penetrate the building envelope shall be mechanically attached to the structure and sealed to the envelope component penetrated and shall use one of the following closure		

components	systems/materials which conform to the approved closure and mechanical application requirements of Section 603.1.7: 1. Mastics or mastic-plus-embedded fabrics. 2. Gaskets used in terminal fitting/grille assemblies which compress the gasket material between the fitting and the wall, ceiling or floor sheathing.		
Air-handling units.	Air-handling units located outside the conditioned space shall be sealed using approved closure systems described in Section 603.1.7 for metallic ducts.	All air-handling units shall be mechanically attached to other air distribution system components.	

Return plenums.	Building cavities which will be used as return air plenums shall meet Section 603.1.8 and shall be lined with a continuous air barrier made of durable nonporous materials. All penetrations to the air barrier shall be sealed with a suitable long-life mastic material. **Exception:** Surfaces between the plenum and conditioned spaces from which the return/mixed air is drawn. Roof decks above building cavities used as a return air plenum shall be insulated to at least R-19.		
Mechanical closets.	All joints between the air barriers of walls, ceiling, floor and door framing and all pene-trations of the air barrier shall be sealed to the air barrier with approved closure systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight		

	passageway. **Exception:** Air passageways into the closet from conditioned space that are specifically designed for return air flow. The following air barriers are approved for use in mechanical closets: 1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard, sealed with joint compound over taped joints between gypsum wallboard panels. 2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier by one of the following: a. Sealants complying with the product and application standards of this table for fibrous glass ductboard or b. A suitable long-life caulk or mastic for all applications.		
Enclosed support platforms in unconditioned spaces.	Enclosed support platforms located between the return air inlet(s) from conditioned space and the inlet of the air-handling unit or furnace, shall contain a duct section constructed entirely of rigid metal, rigid fibrous glass duct board, or flexible duct which is constructed and sealed according to the applicable requirements of this table and insulated according to the requirements of Section 503.2.7.1 of the Florida Building Code, Energy Conservation. 1. No portion of the building		

	structure, including adjoining walls, floors and ceilings, shall be in contact with the return air stream or function as a component of this duct section. 2. The duct section shall not be penetrated by a refrigerant line, chase, refrigerant line, wiring, pipe or any object other than a component of the air distribution system. 3. Through-wall, through-floor and through ceiling penetrations into the duct system shall contain a branch duct fabricated of rigid fibrous glass duct board or rigid metal and shall extend to and be sealed by both the duct section and the grille side wall surface.	The branch duct shall be fabricated and attached to the duct insert in accordance with requirements for the duct type used.	

[1] Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

603.10 Supports. Ducts shall be supported with approved hangers at intervals not exceeding 10 feet (3048 mm) in accordance with requirements of Sections 603.10.1 – 603.10.3, or by other approved duct support systems designed in accordance with the Florida Building Code, Building ~~International Building Code~~. ~~Flexible and other factory-made ducts shall be supported in accordance with the manufacturer's installation instructions.~~

603.10.1 Metal ducts. Metal ducts shall be supported by ½-inch (13 mm) wide 1-gage metal straps or 12-gage galvanized wire at intervals not exceeding 10 feet (3048 mm) or other approved means.

603.10.2 Rigid nonmetal ducts. Rigid nonmetallic ducts shall be supported in accordance with the manufacturer's installation instructions.

603.10.3 Flexible ducts. Flexible ducts shall be configured and supported so as to prevent the use of excess duct material, prevent duct dislocation or damage, and prevent constriction of the duct below the rated duct diameter in accordance with the following requirements:

1. Ducts shall be installed fully extended. The total extended length of duct material shall not exceed 5 percent of the minimum required length for that run.

2. Bends shall maintain a center line radius of not less than one duct diameter.

3. Terminal devices shall be supported independently of the flexible duct.

4. Horizontal duct shall be supported at intervals not greater than 5 feet (1524 mm). Duct sag between supports shall not exceed ½ inch (12.7 mm) per foot of length. Supports shall be provided within 1½ feet (38 mm) of intermediate fittings and between intermediate fittings and bends. Ceiling joists and rigid duct or equipment may be considered to be supports.

5. Vertical duct shall be stabilized with support straps at intervals not greater than 6 feet (1829 mm).

6. Hangers, saddles and other supports shall meet the duct manufacturer's recommendations and shall be of sufficient width to prevent restriction of the internal duct diameter. In no case shall the material supporting flexible duct that is in direct contact with it be less than 1½ inches (38 mm) wide.

Date Submitted	7/31/2012	**Section**	Table 603	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain the Florida Specific Duct System Construction and Sealing

Rationale

To provide clarification on duct system construction and sealing for Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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 exihibits 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

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

M5800-G1

Comment:

The manufacturers' installation requirements cover what the IMC base code does not, this is unnecessary language for the 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.

TABLE 603

DUCT SYSTEM CONSTRUCTION AND SEALING

DUCT TYPE/ CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT	TEST STANDARD
Metal duct, rigid and flexible Pressures less than 1-inch water gauge	Closure systems as described in Section 603.1.7: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. 3. Mastic, mastic-plus-embedded fabric, or mastic ribbons. ` 4. Gaskets. 5. Pressure-sensitive tape. 6. Aerosol sealant	Mechanical attachments approved: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. Crimp joints for round metal ducts shall have a contact lap of at least 1 ½ inches (38 mm). Round metal ducts shall be mechan-ically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. [1]	SMACNA HVAC Air Duct Leakage Test Manual
Pressures 1-inch water gauge or greater	Closure systems as described in Section 603.1.7: 1. Continuous welds. 2. Mastic or mastic-plus-embedded fabric systems. 3. Gaskets. The tested duct leakage class, at a test pressure equal to the design duct pressure class	Mechanical attachments approved: 1. Continuous welds Round metal ducts shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. [1]	

High pressure duct systems designed to operate at pressures greater than 3-inch water gauge (4-inch water gauge pressure class)	rating, shall be equal to or less than Leakage Class 6. Leakage testing may be limited to representative sections of the duct system but in no case shall such tested sections include less than 25 percent of the total installed duct area for the designated pressure class.		
Plastic duct	See Section 603.8.3.	Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions.	ASTM D 2412
Fibrous glass duct, rigid.	All joints, seams and duct wall penetrations between sections of duct and between duct and other distribution system components shall be sealed with closure systems as described in Section 603.1.7: 1. Heat-activated tapes. 2. Pressure-sensitive tapes. 3. Mastics or mastic-plus-embedded fabric systems.	Mechanically fastened per standard to secure the sections independent of the closure system(s). Attachments of ductwork to air-handling equipment shall be by mechanical fasteners in accordance with Section 603.1.1. Where access is limited, two fasteners on one side shall be acceptable.	NAIMA Fibrous Glass Duct Construction Standards. UL 181 UL 181A
Flexible duct systems, nonmetal.	All duct collar fittings shall have a minimum 5/8 inch (16 mm) integral flange for sealing to other components and a minimum 3-inch (76 mm) shaft for insertion into the inner duct core. Flexible ducts having porous inner cores shall not be used. **Exception:** Ducts having a nonporous liner between the porous inner core and the outer jacket. Fastening and sealing requirements shall be applied to such intermediate liners. The reinforced lining shall be	Flexible nonmetal ducts shall be joined to all other air distribution system components by either terminal or intermediate fittings. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C.	UL 181 UL 181B ADC FDPIS

Duct core to duct fitting	sealed to the duct fitting using one of the following sealing materials which conforms to the approved closure and mechanical attachment requirements of Section 603.1.7: 1. Gasketing. 2. Mastic, mastic-plus-embedded fabric, or mastic ribbons. 3. Pressure-sensitive tape. 4. Aerosol sealants, provided that their use is consistent with UL 181. The outer jacket of a flexible duct section shall be secured at the juncture of the air distribution system component and intermediate or terminal fitting in such a way as to prevent excess condensation. The outer jacket of a flexible duct section shall not be interposed between the flange of the duct fitting and the flexible duct, rigid fibrous glass duct board, or sheet metal to which it is mated.	The reinforced core shall be mechanically attached to the duct fitting by a drawband installed directly over the wire-reinforced core and the duct fitting. The duct fitting shall extend a minimum of 2 inches (51 mm) into each section of duct core. When the flexible duct is larger than 12 inches (303 mm) in diameter or the design pressure exceeds 1-inch water gauge, the drawband shall be secured by a raised bead or indented groove on the fitting.	
Duct outer jacket to duct collar fitting	The duct collar fitting's integral flange shall be sealed to the rigid duct board or sheet metal using one of the following closure systems/materials which conforms to the approved closure and mechanical attachment standards of Section 603.1.7: 1. Gasketing. 2. Mastic or mastic-plus-embedded fabric systems.		

Duct collar fitting to rigid duct	3. Mastic ribbons when used to attach a duct collar to sheet metal. 4. Pressure-sensitive tape. 5. Aerosol sealants, provided that their use is consistent with UL 181.	The duct collar fitting shall be mechanically attached to the rigid duct board or sheet metal by appropriate mechanical fasteners, either screws, spin-in flanges, or dovetail flanges.	
Terminal and intermediate fittings. **Fittings and joints between dissimilar duct types** **Terminal fittings and air ducts to building envelope components**	Approved closure systems shall be as designated by air distribution system component material type in Section 603.1.7. **Exception:** When the components of a joint are fibrous glass duct board and metal duct, including collar fittings and metal equipment housings, the closure systems approved for fibrous glass duct shall be used. Terminal fittings and air ducts which penetrate the building envelope shall be mechanically attached to the structure and sealed to the envelope component penetrated and shall use one of the following closure systems/materials which conform to the approved closure and mechanical application		

	requirements of Section 603.1.7: 1. Mastics or mastic-plus-embedded fabrics. 2. Gaskets used in terminal fitting/grille assemblies which compress the gasket material between the fitting and the wall, ceiling or floor sheathing.		
Air-handling units.	Air-handling units located outside the conditioned space shall be sealed using approved closure systems described in Section 603.1.7 for metallic ducts.	All air-handling units shall be mechanically attached to other air distribution system components.	

Return plenums.	Building cavities which will be used as return air plenums shall meet Section 603.1.8 and shall be lined with a continuous air barrier made of durable nonporous materials. All penetrations to the air barrier shall be sealed with a suitable long-life mastic material. **Exception:** Surfaces between the plenum and conditioned spaces from which the return/mixed air is drawn. Roof decks above building cavities used as a return air plenum shall be insulated to at least R-19.		
Mechanical closets.	All joints between the air barriers of walls, ceiling, floor and door framing and all pene-trations of the air barrier shall be sealed to the air barrier with approved closure systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight passageway. **Exception:** Air passageways into the closet from conditioned space that are specifically designed for return air flow. The following air barriers are approved for use in mechanical closets: 1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard,		

	~~taped and~~ sealed with joint compound over taped joints between gypsum wallboard panels. 2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier by one of the following: a. Sealants complying with the product and application standards of this table for fibrous glass ductboard or b. A suitable long-life caulk or mastic for all applications.	
Enclosed support platforms in unconditioned spaces.	Enclosed support platforms located between the return air inlet(s) from conditioned space and the inlet of the air-handling unit or furnace, shall contain a duct section constructed entirely of rigid metal, rigid fibrous glass duct board, or flexible duct which is constructed and sealed according to the applicable requirements of this table and insulated according to the requirements of Section 503.2.7.1 of the Florida Building Code, Energy Conservation. 1. No portion of the building structure, including adjoining walls, floors and ceilings, shall be in contact with the return air stream or function as a component of this duct section. 2. The duct section shall not be penetrated by a refrigerant line, chase, refrigerant line, wiring, pipe or any object other than a component of the air distribution system. 3. Through-wall, through-floor and through ceiling penetrations into the duct system shall contain a branch duct fabricated of rigid fibrous glass duct board or rigid metal and shall extend to and be sealed by both the duct section and the grille side wall surface.	

		The branch duct shall be fabricated and attached to the duct insert in accordance with requirements for the duct type used.

[1] Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

Date Submitted	7/19/2012	**Section**	M1305.1.3	**Proponent**	Jack Glenn
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Provides for installing air handlers in attics

Rationale

This is a change from previous editions of the code based on a settlement agree between the Florida Building Commission and the Florida Home Builders Association.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. Proposed language is consistent with the 2010 Florida Building Code.

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

None. Proposed language is consistent with the 2010 Florida Building Code.

Impact to industry relative to the cost of compliance with code

None. Proposed language is consistent with 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 consistent with 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 consistent with the 2010 Florida Building Code.

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

No, does not discriminate. Proposed language is consistent with the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

Does not degrade the code. Proposed language is consistent with 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 exihibits 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

Modifies Section M1305.1.3 and Add new Section M1305.1.3.1

M1305.1.3 Appliances in attics. Attics containing appliances shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the largest appliance, but not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 Feet (1096 mm) long measured along the centerline of the passageway from the opening to the appliance. Air handlers located in attics shall meet the criteria of Section M1305.1.3.1. The passageway shall have continuous solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance.

Exceptions:

l. The passageway and level service space are not required where the appliance can be serviced and removed through the required opening.

2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not more than 50 feet (15 250 mm) long.

M1305.1.3.1 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 6 feet (1829 mm) of an attic access.

2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.

3. The attic access opening is of sufficient size to replace the air handler.

4. A notice is posted on the electric service panel indicating to the homeowner 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 aTTrc. FoR pRopER, EFFTCIENT AND ECONOMIC OPERATION OF THEAIR 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.

Date Submitted	7/6/2012	**Section**	1308.1	**Proponent**	Michael Goolsby
Chapter	13	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections

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

Removes confusion by providing accurate direction regarding application of applicable code sections

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

M4973-G1

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

1st Comment Period History 08/09/2012 - 09/23/2012

M4973-G2

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M1308.1 Drilling and notching. Wood-framed structural members shall be drilled, notched or altered in accordance with the provisions of Sections R502.8, R602.6, R602.6.1 and R802.7. Holes in load-bearing members of cold-formed steel light-frame construction shall be permitted only in accordance with Sections R505.2.5, R603.2.5 and R804.2.5. In accordance with the provisions of Sections R505.3.5, R603.3.4 and R804.3.4, cutting and notching of flanges and lips of load-bearing members of cold-formed steel light frame construction shall not be permitted. Structural insulated panels (SIPs) shall be drilled and notched or altered in accordance with the provisions of Section R613.7.

Exception: Buildings and structures located within the High Velocity Hurricane Zone shall comply with the provisions of Chapter 44.

Date Submitted	7/6/2012	**Section**	1413.1	**Proponent**	Michael Goolsby
Chapter	14	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation with a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

M4974-G1

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M1413.1 General. Evaporative cooling equipment and appliances shall comply with UL 1995 and shall be installed:

1. According to the manufacturer's instructions.

2. On level platforms in accordance with Section M1305.1.4.1.

3. So that openings in exterior walls are flashed in accordance with Section R703.8 (the HVHZ shall comply with Chapter 44).

4. So as to protect the potable water supply in accordance with Section P2902.

5. So that air intake opening locations are in accordance with Section R303.5.1.

Date Submitted	7/6/2012	**Section**	1601.1.1	**Proponent**	Michael Goolsby
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** No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

M4975-G1

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M1601.1.1 Above-ground duct systems. Above-ground duct systems shall conform to the following:

1. Equipment connected to duct systems shall be designed to limit discharge air temperature to a maximum of 250°F (121°C).

2. Factory-made air ducts shall be constructed of Class 0 or Class 1 materials as designated in Table M1601.1.1(1).

3. Fibrous duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.

4. Minimum thickness of metal duct material shall be as listed in Table M1601.1.1(2). Galvanized steel shall conform to ASTM A 653. Metallic ducts shall be fabricated in accordance with SMACNA Duct Construction Standards Metal and Flexible.

5. Use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C) and exposed surfaces are not subject to condensation.

6. Duct systems shall be constructed of materials having a flame spread index not greater than 200.

7. Stud wall cavities and the spaces between solid floor joists to be used as air plenums shall comply with the following conditions:

7.1. These cavities or spaces shall not be used as a plenum for supply air.

7.2. These cavities or spaces shall not be part of a required fire-resistance-rated assembly.

7.3. Stud wall cavities shall not convey air from more than one floor level.

7.4. Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R602.8 the HVHZ shall comply with Chapter 44).

7.5. Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.

Date Submitted	7/6/2012	**Section**	1601.4.4	**Proponent**	Michael Goolsby
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** No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

M4976-G1

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M1601.4.4 Fireblocking. Duct installations shall be fireblocked in accordance with Section R602.8 the HVHZ shall comply with Chapter 44).

Date Submitted	7/6/2012	**Section**	1601.5.1	**Proponent**	Michael Goolsby
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 No

Related Modifications

Summary of Modification

Section formatting

Rationale

While this entire Chapter is applicable for the HVHZ it makes reference and provides direction to sections which are not applicable. The purpose of this proposed modification is to provide guidance to the applicable and equivalent HVHZ sections. In this way, compliance with the intent of these provisions can be maintained in all jurisdictions.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Removes confusion by providing accurate direction regarding application of applicable code sections.

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

Removes confusion by providing accurate direction regarding application of applicable code sections.

Impact to industry relative to the cost of compliance with code

Removes confusion by providing accurate direction regarding application of applicable code sections.

Requirements

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

It does so by ensuring direction to applicable sections of the code are provided.

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

It does so by ensuring direction to applicable sections of the code are provided.

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

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

Does not degrade the effectiveness of the code

This modification provides guidance to the applicable code sections and does not limit the use or compliance of materials.

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

1st Comment Period History 08/09/2012 - 09/23/2012

Proponent Jack Glenn **Submitted** 9/23/2012 **Attachments** No

M4977-G1

Comment:

This change is not necessary as Section R301.1 directs users to the provisions of Chapter 44 for structures located in the High Velocity Hurricane Zone.

M1601.5.1 General. The space shall be cleaned of loose combustible materials and scrap, and shall be tightly enclosed. The ground surface of the space shall be covered with a moisture barrier having a minimum thickness of 4 mils (0.1 mm). Plumbing waste cleanouts shall not be located within the space.

Exception: Plumbing waste cleanouts shall be permitted to be located in unvented crawl spaces that receive conditioned air in accordance with Section R408.3 the HVHZ shall comply with Chapter 44).

Date Submitted	7/25/2012	**Section**	1601	**Proponent**	Ann Stanton
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 No

Related Modifications

Summary of Modification

Add Florida-specific duct sealing and attachment criteria to be consistent with requirements from the Energy Conservation code to maintain Florida-specific efficiencies per Statute.

Rationale

Add Florida-specific duct sealing and attachment critieria from the Energy code to maintain consistency among codes and Florida-specific efficiencies.

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?

OTHER

Explanation of Choice

Florida-specific duct sealing and attachment criteria are much more detailed than those in the IRC.

The amendment demonstrates by evidence or data that the geographical jurisdiction of Florida exihibits 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

M1601.1 Duct design. Revise to read as shown:

M1601.1 Duct design. Duct systems serving heating, cooling and ventilation equipment shall be fabricated in accordance with the provisions of this section and ACCA Manual D or other approved methods based on the following:

1. Calculation of the supply air for each room shall be based on the greater of the heating load or sensible cooling load for that room.

2. Duct size shall be determined by the supply air requirements of each room, the available static pressure and the total equivalent length of the various duct runs.

3. Friction loss data shall correspond to the type of material used in duct construction.

-

M1601.1.1 Above-ground duct systems. Above-ground duct systems shall conform to the following:

1. Equipment connected to duct systems shall be designed to limit discharge air temperature to a maximum of 250°F (121°C) and shall meet the applicable requirements of Section M1601.4 and Table M1601.4.
2. Factory-made air ducts shall be constructed of Class 0 or Class 1 materials as designated in Table M1601.1.1(1) and shall meet the applicable requirements of Section M1601.4 and Table M1601.4.
3. Fibrous duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards and shall meet the applicable requirements of Section M1601.4 and Table M1601.4.
4. Metallic ducts shall meet the applicable requirements of Section M1601.4 and Table M1601.4. Minimum thickness of metal duct material shall be as listed in Table M1601.1.1(2). Galvanized steel shall conform to ASTM A 653. Metallic ducts shall be fabricated in accordance with SMACNA Duct Construction Standards Metal and Flexible.
5. Use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C), that ~~and~~ exposed surfaces are not subject to condensation, and that applicable criteria of Section M1601.4 and Table M1601.4 are met.
6. [No change to IRC section]
7. [No change to IRC section]
8. Cavities designed to deliver air from or return air to the conditioning system such as plenums, mechanical closets, enclosed support platforms, cases, air shafts, etc. shall be lined with an air barrier and sealed in accordance with the applicable requirements of Section M1601.4 and Table M1601.4 and shall be insulated in accordance with Section R403.2.1 of the *Florida Building Code, Energy Conservation.*

M1601.4 Installation. Change to read as shown.

M1601.4 Duct i~~I~~nstallation. . ~~Duct installation shall comply with Sections M1601.4.1 through M1601.4.7~~. An air distribution system shall be designed and installed to supply the required distribution of air. The installation of an air distribution system shall not affect the fire protection requirements specified in the building code. Ducts shall be constructed, braced, reinforced and installed to provide structural strength and durability. All transverse joints, longitudinal seams and fitting connections shall be securely fastened and sealed in accordance with the applicable standards of this section.

All enclosures which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers and shall be constructed and sealed in accordance with the applicable criteria of Table M1601.4 and this section. Duct installation shall comply with Sections M1601.4.1 through M1601.4.13.

See Section R403.2.2.1 of the Florida Building Code, Energy Conservation, for duct testing requirements

M1601.4.1 Duct installation, general.

M1601.4.1.1 Mechanical fastening. All joints between sections of air ducts and plenums, between intermediate and terminal fittings and other components of air distribution systems, and between subsections of these components shall be mechanically fastened to secure the sections independently of the closure system(s).

M1601.4.1.2 Sealing. Air distribution system components shall be sealed with approved closure systems in accordance with specific criteria in Table M1601.4.

M1601.4.1.3 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 M1601.4; (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.

M1601.4.1.4 Product application. Closure products shall be applied to the air barriers of air distribution system components being joined in order to form a continuous barrier or they may be applied in accordance with the manufacturer's instructions or appropriate industry installation standard where more restrictive.

M1601.4.1.5 Surface preparation. The surfaces upon which closure products are to be applied shall be clean and dry in accordance with the manufacturer's installation instructions.

M1601.4.1.6 Approved mechanical attachments. Approved mechanical attachments for air distribution system components include screws, rivets, welds, interlocking joints crimped and rolled, staples, twist in (screw attachment), and compression systems created by bend tabs or screw tabs and flanges or by clinching straps. Mechanical attachments shall be selected from Table M1601.4 to be appropriate to the duct system type.

M1601.4.1.7 Approved closure systems. The following closure systems and materials are approved for air distribution construction and sealing for the applications and pressure classes shown in Table M1601.4.

1. Metal closures.

a. Welds applied continuously along metal seams or joints through which air could leak.

b. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams, as defined by SMACNA, as well as all other rolled mechanical seams. All seams shall be rolled or crimped.

2. Gasketing, which achieves a 25/50 flame spread/smoke-density-development rating under ASTM E 84 or UL 723, provided that it is used only between mated surfaces which are mechanically fastened with sufficient force to compress the gasket and to fill all voids and cracks through which air leakage would otherwise occur.

3. Mastic closures. Mastics shall be placed over the entire joint between mated surfaces. Mastics shall not be diluted. Approved mastics include the following:

a. Mastic or mastic-plus-embedded fabric systems applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part III.

b. Mastic or mastic-plus-embedded fabric systems applied to nonmetal flexible duct that are listed and labeled in accordance with UL 181B, Part II.

c. Mastic ribbons, which achieve a 25/50 flame spread/smoke density development rating under ASTM E 84 or UL 723, provided that they may be used only in flange-joints and lap-joints, such that the mastic resides between two parallel surfaces of the air barrier and that those surfaces are mechanically fastened.

4. Tapes. Tapes shall be applied such that they extend not less than 1 inch onto each of the mated surfaces and shall totally cover the joint. When used on rectangular ducts, tapes shall be used only on joints between parallel rigid surfaces and on right angle joints. Approved tapes include the following:

a. Pressure-sensitive tapes.

1) Pressure-sensitive tapes applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part I.

2) Pressure-sensitive tapes applied to nonmetal flexible duct that are listed and labeled in accordance with UL 181B, Part I.

b. Heat-activated tapes applied to fibrous glass ductboard that are listed and labeled in accordance with UL 181A, Part II.

5. Aerosol sealant. Such sealants shall be installed by manufacturer-certified installers following manufacturer instructions and shall achieve 25/50 flame spread/smoke-density-development ratings under ASTM E 84 or UL 723.

6. Spray polyurethane foam shall be permitted to be applied without additional joint seals.

M1601.4.1.8 Cavities of the building structure. Cavities in framed spaces, such as dropped soffits and walls, shall not be used to deliver air from or return air to the conditioning system unless they contain an air duct insert which is insulated in accordance with Section 403.2.1 of the Florida Building Code, Energy Conservation, and constructed and sealed in accordance with the requirements Table M1601.4 appropriate for the duct materials used.

Exception: Return air plenums.

~~**M1601.4.1 Joints and seams.** Joints of duct systems shall be made substantially airtight by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL181A and shall be marked 181A-P for pressure-sensitive tape, 181A-M for mastic or 181-A-H for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure-sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1 1/2 inches (38 mm) and shall be mechanically fastened by means of at least three sheet metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer's installation instructions.~~

~~**Exceptions:**~~

~~1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.~~

~~2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally~~

~~spaced on the exposed portion of the joint so as to prevent a hinge effect.~~

~~3. Continuously welded and locking type longitudinal joints and seams in ducts operating at static pressures less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.~~

TABLE M1601.4

DUCT SYSTEM CONSTRUCTION AND SEALING

DUCT TYPE/CONNECTION	SEALING REQUIREMENTS	MECHANICAL ATTACHMENT	TEST STANDARD
Metal duct, rigid and flexible **Pressures less than 1-inch water gauge**	Closure systems as described in Section M1601.4.1.7: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. 3. Mastic, mastic-plus-embedded fabric, or mastic ribbons. ` 4. Gaskets. 5. Pressure-sensitive tape. 6. Aerosol sealant	Mechanical attachments approved: 1. Continuous welds. 2. Snaplock seams, and grooved, standing, double-corner, single-corner and Pittsburgh-lock seams and all other rolled mechanical seams. Crimp joints for round metal ducts shall have a contact lap of at least 1 ½ inches (38 mm). Round metal ducts shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint. [1] Mechanical attachments approved: 1. Continuous welds	SMACNA HVAC Air Duct Leakage Test Manual
Pressures 1-inch water gauge or greater	Closure systems as described in Section M1601.4.1.7: 1. Continuous welds. 2. Mastic or mastic-plus-embedded fabric systems.	Round metal ducts shall be mechanically fastened by means of at least three sheet-metal screws or rivets equally spaced around the joint.[1]	

High pressure duct systems designed to operate at pressures greater than 3-inch water gauge (4-inch water gauge pressure class)	3. Gaskets. The tested duct leakage class, at a test pressure equal to the design duct pressure class rating, shall be equal to or less than Leakage Class 6. Leakage testing may be limited to representative sections of the duct system but in no case shall such tested sections include less than 25 percent of the total installed duct area for the designated pressure class.		
Plastic duct	See Section M1601.1.2.	Joints between plastic ducts and plastic fittings shall be made in accordance with the manufacturer's installation instructions.	ASTM D 2412
Fibrous glass duct, rigid.	All joints, seams and duct wall penetrations between sections of duct and between duct and other distribution system components shall be sealed with closure systems as described in Section M1601.4.1.7: 1. Heat-activated tapes. 2. Pressure-sensitive tapes. 3. Mastics or mastic-plus-embedded fabric systems.	Mechanically fastened per standard to secure the sections independent of the closure system(s). Attachments of ductwork to air-handling equipment shall be by mechanical fasteners in accordance with Section M1601.4.1.1. Where access is limited, two fasteners on one side shall be acceptable.	NAIMA Fibrous Glass Duct Construction Standards. UL 181 UL 181A
Flexible duct systems, nonmetal.	All duct collar fittings shall have a minimum 5/8 inch (16 mm) integral flange for sealing to other components and a minimum 3-inch (76 mm) shaft for insertion into the inner duct core. Flexible ducts having porous inner cores shall not be used. **Exception:** Ducts having a nonporous liner between the	Flexible nonmetal ducts shall be joined to all other air distribution system components by either terminal or intermediate fittings. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C.	UL 181 UL 181B ADC FDPIS

	porous inner core and the outer jacket. Fastening and sealing requirements shall be applied to such intermediate liners.		
Duct core to duct fitting	The reinforced lining shall be sealed to the duct fitting using one of the following sealing materials which conforms to the approved closure and mechanical attachment requirements of Section M1601.4.1.7: 1. Gasketing. 2. Mastic, mastic-plus-embedded fabric, or mastic ribbons. 3. Pressure-sensitive tape. 4. Aerosol sealants, provided that their use is consistent with UL 181.	The reinforced core shall be mechanically attached to the duct fitting by a drawband installed directly over the wire-reinforced core and the duct fitting. The duct fitting shall extend a minimum of 2 inches (51 mm) into each section of duct core. When the flexible duct is larger than 12 inches (303 mm) in diameter or the design pressure exceeds 1-inch water gauge, the drawband shall be secured by a raised bead or indented groove on the fitting.	
	The outer jacket of a flexible duct section shall be secured at the juncture of the air distribution system component and intermediate or terminal fitting in such a way as to prevent excess condensation. The outer jacket of a flexible duct section shall not be interposed between the flange of the duct fitting and the flexible duct, rigid fibrous glass duct board, or sheet metal to which it is mated.		
Duct outer jacket to duct collar fitting	The duct collar fitting's integral flange shall be sealed to the rigid duct board or sheet metal using one of the following closure systems/materials which conforms to the approved		

Duct collar fitting to rigid duct	closure and mechanical attachment standards of Section M1601.4.1.7: 1. Gasketing. 2. Mastic or mastic-plus-embedded fabric systems. 3. Mastic ribbons when used to attach a duct collar to sheet metal. 4. Pressure-sensitive tape. 5. Aerosol sealants, provided that their use is consistent with UL 181.	The duct collar fitting shall be mechanically attached to the rigid duct board or sheet metal by appropriate mechanical fasteners, either screws, spin-in flanges, or dovetail flanges.	
Terminal and intermediate fittings. **Fittings and joints between dissimilar duct types** **Terminal fittings and air ducts to building envelope components**	Approved closure systems shall be as designated by air distribution system component material type in Section M1601.4.1.7. **Exception:** When the components of a joint are fibrous glass duct board and metal duct, including collar fittings and metal equipment housings, the closure systems approved for fibrous glass duct shall be used. Terminal fittings and air ducts which penetrate the building envelope shall be mechanically attached to the structure and sealed to the envelope component penetrated and shall use one of the following closure systems/materials which conform to the approved closure and mechanical application requirements of Section		

	M1601.4.1.7: 1. Mastics or mastic-plus-embedded fabrics. 2. Gaskets used in terminal fitting/grille assemblies which compress the gasket material between the fitting and the wall, ceiling or floor sheathing.		
Air-handling units.	Air-handling units located outside the conditioned space shall be sealed using approved closure systems described in Section M1601.4.1.7 for metallic ducts.	All air-handling units shall be mechanically attached to other air distribution system components.	
Return plenums.	Building cavities which will be used as return air plenums shall meet Section M1601.4.1.8 and shall be lined with a continuous air barrier made of durable nonporous materials. All penetrations to the air barrier shall be sealed with a suitable long-life mastic material. **Exception:** Surfaces between the plenum and conditioned spaces from which the return/mixed air is drawn. Roof decks above building cavities used as a return air plenum shall be insulated to at least R-19.		
Mechanical closets.	All joints between the air barriers of walls, ceiling, floor and door framing and all penetrations of the air barrier shall be sealed to the air barrier with approved closure systems. Through-wall, through-floor and through-ceiling air passageways into the closet shall be framed and sealed to form an air-tight passageway. **Exception:** Air passageways into the closet from conditioned space that are specifically designed for return air flow.		

	The following air barriers are approved for use in mechanical closets: 1. One-half-inch-thick (12.7 mm) or greater gypsum wallboard, sealed with joint compound over taped joints between gypsum wallboard panels. 2. Other panelized materials having inward facing surfaces with an air porosity no greater than that of a duct product meeting Section 22 of UL 181 which are sealed on all interior surfaces to create a continuous air barrier by one of the following: a. Sealants complying with the product and application standards of this table for fibrous glass ductboard or b. A suitable long-life caulk or mastic for all applications.		
Enclosed support platforms in unconditioned spaces.	Enclosed support platforms located between the return air inlet(s) from conditioned space and the inlet of the air-handling unit or furnace, shall contain a duct section constructed entirely of rigid metal, rigid fibrous glass duct board, or flexible duct which is constructed and sealed according to the applicable requirements of this table and insulated according to the requirements of Section 403.2.1 of the Florida Building Code, Energy Conservation. 1. No portion of the building structure, including adjoining walls, floors and ceilings, shall be in contact with the return air		

	stream or function as a component of this duct section. 2. The duct section shall not be penetrated by a refrigerant line, chase, refrigerant line, wiring, pipe or any object other than a component of the air distribution system. 3. Through-wall, through-floor and through ceiling penetrations into the duct system shall contain a branch duct fabricated of rigid fibrous glass duct board or rigid metal and shall extend to and be sealed by both the duct section and the grille side wall surface.	The branch duct shall be fabricated and attached to the duct insert in accordance with requirements for the duct type used.	

1 Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

M1601.4.2 Plastic duct joints. Reserved.

M1601.4.3 Support. Revise to read as shown:

M1601.4.3 Support.

M1601.4.3.1 Metal ducts. Metal ducts shall be supported by ½-inch (13 mm) wide 1-gage metal straps or 12-gage galvanized wire at intervals not exceeding 10 feet (3048 mm) or other approved means.

M1601.4.3.2 Rigid nonmetal ducts. Rigid n~~N~~onmetallic ducts shall be supported in accordance with the manufacturer's installation instructions.

M1601.4.3.3 Flexible ducts. Flexible ducts shall be configured and supported so as to prevent the use of excess duct material, prevent duct dislocation or damage, and prevent constriction of the duct below the rated duct diameter in accordance with the following requirements:

1. Ducts shall be installed fully extended. The total extended length of duct material shall not exceed 5 percent of the minimum required length for that run.

2. Bends shall maintain a center line radius of not less than one duct diameter.

3. Terminal devices shall be supported independently of the flexible duct.

4. Horizontal duct shall be supported at intervals not greater than 5 feet (1524 mm). Duct sag between supports shall not exceed ½ inch (12.7 mm) per foot of length. Supports shall be provided within 1½ feet (38 mm) of intermediate fittings and between intermediate fittings and bends. Ceiling joists and rigid duct or equipment may be considered to be supports.

5. Vertical duct shall be stabilized with support straps at intervals not greater than 6 feet (1829 mm).

6. Hangers, saddles and other supports shall meet the duct manufacturer's recommendations and shall be of sufficient width to prevent restriction of the internal duct diameter. In no case shall the material supporting flexible duct that is in direct contact with it be less than 1½ inches (38 mm) wide.

Total Mods for **Mechanical** in **Withdrawn: 4**

Total Mods for report: 42

Sub Code: Mechanical

Date Submitted	7/25/2012	**Section**	306.3.2	**Proponent**	Ann Stanton
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Withdrawn
Commission Action Pending Review

Comments

General Comments No **Alternate Language** No

Related Modifications

Summary of Modification

Add FL-specific air handler in the attic criteria from the 2010 code.

Rationale

This requirement resulted from an administrative challenge to the 2001 Florida Building Code as an alternative to getting air handlers out of residential attics.

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 exihibits 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

M5652-G1

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

Comment:

This was submitted to the IMC change # M19-12 except “1. The service panel of the equipment is located within six (6) feet [1829 mm] of an attic access.” Was not part of the submittal.

2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
Is no longer needed as it is covered in 307.2.3 of the 2012 IMC

3. The attic access opening is of sufficient size to replace the air handler.
Is no longer needed as it is covered in 306.3 of the 2012 IMC

4. The notice is the only part needed to be added to the 2013 FMC.

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)

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

1. The service panel of the equipment is located within six (6) feet [1829 mm] of an attic access.

2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.

3. The attic access opening is of sufficient size to replace the air handler.

4. A notice is posted on the electric service panel indicating to the homeowner 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.

Date Submitted	7/23/2012	**Section**	601.5	**Proponent**	Jeff Sonne / FSEC
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Withdrawn
Commission Action Pending Review

Comments

General Comments No **Alternate Language** No

Related Modifications

Residential Section M1602.4

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 code 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.

M5397-G1

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

Comment:

This change is incomplete if compared to 601.4 FMC 2010 the 3rd option is missing “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.”

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.

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, 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.

601.5.1 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 cm^2) 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.

Date Submitted	7/25/2012	**Section**	M1305.1.3.2	**Proponent**	Ann Stanton
Chapter	13	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Withdrawn
Commission Action Pending Review

Comments

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

Related Modifications

5655, 5656

Summary of Modification

Add Florida-specific requirement to post notice that air handler is in the attic.

Rationale

This Florida-specific language resulted from resolution to an administrative challenge to the 2001 Florida Building Code and should be maintained.

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 exihibits 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

M1305.1.3.2 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 device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.

3. The attic access opening is of sufficient size to replace the air handler.

4. A notice is posted on the electric service panel indicating to the homeowner 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.

Date Submitted	7/20/2012	**Section**	M1305	**Proponent**	Ken Cureton
Chapter	13	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation Withdrawn
Commission Action Pending Review

Comments

General Comments No **Alternate Language** No

Related Modifications

None

Summary of Modification

Add SECTION M1305.1.3.2

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 provide for reference correlation to relevant Energy Conservation Codes, as well as to maintain the settlement agreement on the subject of AHU location with the Florida Homebuilder's Association.

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 exihibits 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 provide for reference correlation to relevant Energy Conservation Codes, as well as to maintain the settlement agreement on the subject of AHU location with the Florida Homebuilder's Association.

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

Add **SECTION M1305.1.3.2** as follows:

M1305.1.3.2 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 6 feet (1829 mm) of an attic access.

2.A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.

3.The attic access opening is of sufficient size to replace the air handler.

4.A notice is posted on the electric service panel indicating to the homeowner 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.

Total Mods for **Mechanical** in **No Affirmative Recommendation without a Second: 17**

Total Mods for report: 42

Sub Code: Mechanical

Date Submitted	7/17/2012	**Section**	202	**Proponent**	Ann Stanton
Chapter	2	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Propose Florida-specific definitions.

Rationale

These definitions maintain Florida-specific efficiencies from the FBC-Energy Conservation and/or Florida law.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. These definitions are in the 2010 Florida Building Code, Mechanical.

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

None. These definitions are in the 2010 Florida Building Code, Mechanical.

Impact to industry relative to the cost of compliance with code

None. These definitions 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. These definitions 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. These definitions are in the 2010 Florida Building Code, Mechanical.

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

No. These definitions are in the 2010 Florida Building Code, Mechanical.

Does not degrade the effectiveness of the code

No. These definitions 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 exihibits 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

These definitions 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

1st Comment Period History 08/09/2012 - 09/23/2012

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

Comment:

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

M5204-G1

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

M5204-G2

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 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)

Chapter 2, Definitions

Section 201, General

Add to read as follows:

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 §R405.2.1 or C407.2.1 of the FBC-Energy Conservation

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

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 (kW).

2. A water temperature of 210 F.

3. A nominal water capacity of 120 gal (454 L).

Date Submitted	7/17/2012	**Section**	301.4	**Proponent**	Ann Stanton
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Move Florida-specific testing and labeling of materials, eqipment and appliance reuse from 2010 to 2013 FBC-Mechanical.

Rationale

Florida has maintained testing and labeling requirements for alternate materials and methods, equipment and appliances since the 2001 code. This proposal would move them to the 2013 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 exihibits 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 for the purpose of maintaining Florida-specific criteria.

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

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

Comment:

The proposal relocates certain sections of Chapter 1 to Chapter 3 as per the 2010 FBC format.

M5220-G1

M5220-G2

Proponent	BOAF CDC	Submitted	9/23/2012	Attachments	No

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)
This is covered in 104.10 of the building code and does not need to be repeated.

301.4.1 Alternative materials, methods, equipment and appliances. Add to read as shown.

301.4.2 Alternative materials, methods, equipment and appliances. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

301.4.2 Required testing. Add to read as shown.

301.4.2 Required Testing. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

301.4.2.1 Test methods. Add to read as shown.

301.4.3.1 Test methods. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall approve the testing procedures.

301.4.2.2 Testing agency. Add to read as shown.

301.4.2.2 Testing agency. All tests shall be performed by an approved agency.

301.4.2.3 Test reports. Add to read as shown.

301.4.2.3 Test reports. Reports of tests shall be retained by the code official for the period required for retention of public records.

301.4.3 Materials, equipment and appliance reuse. Add to read as shown.

301.4.3 Materials, equipment and appliance reuse. Materials, equipment, appliances and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.

Date Submitted	7/24/2012	**Section**	307.2.1	**Proponent**	Robert Cochell
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Condensate shall not.....cause a nuisance; but may be discharged to a green space.

Rationale

The addition of "green space" better clarifies in Florida where condensate may be discharged. This is Florida specific as there is a low probability that the area would freeze and cause a nuisance. It was at one time in the code but was deleted for unknown reasons.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

No impact.

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

More economical for property owners.

Impact to industry relative to the cost of compliance with code

More economical for industry.

Requirements

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

Neutral.

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

Strengthens the code by providing an economical discharge option for Florida.

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 effectiveness.

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

1st Comment Period History 08/09/2012 - 09/23/2012

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

M5606-G1

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)

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.

..... Condensate may be discharged into green space but shall not be discharged into a street, alley, or other areas so as to cause a nuisance.

Date Submitted	7/30/2012	**Section**	307.2.2	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

To maintain a Florida Specific exception to condensate drainage on wall mounted ductless mini units.

Rationale

To allow an exception for wall mounted ductless split units that are more commonly found in Florida and not addressed in the ICC.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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 by providing a better method for ductless mini units

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 exihibits 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

Alternate Language

1st Comment Period History 08/09/2012 - 09/23/2012

5752-A1

Proponent BOAF CDC **Submitted** 9/23/2012 **Attachments** Yes

Rationale

This mod would match the current submitted change to the base code M21-12.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

improve the enforcement, allowing flexability

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

reduce cost, allow for smaller drain.

Impact to industry relative to the cost of compliance with code

reduce cost, allow for smaller drain.

Requirements

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

Yes, allow for the drain to function as the unit was designed

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

Yes, allow for the drain to function as the unit was designed

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

No, allows for the drain to function as the unit was designed per the manufacturer

Does not degrade the effectiveness of the code

No, allows for the drain to function as the unit was designed per the manufacturer

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

1st Comment Period History 08/09/2012 - 09/23/2012

M5752-G1

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

Comment:

Something similar was submitted to the IMC change # M21-12 and would provide relief for oversizing the drains on ductless split units. M21-12

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.

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)

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 Florida Building Code, ~~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: On wall mounted ductless split units less than 36,001 Btu/h where the drain line is less than 10 feet (3048 mm) in length, the factory drain outlet size shall be acceptable from the equipment to the place of disposal.

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 *Florida Building Code, ~~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:** On wall mounted ductless split units less than 36,001 Btu/h where the drain line is less than 10 feet (3048 mm) in length, the factory drain outlet size shall be acceptable from the equipment to the place of disposal.~~

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.

Date Submitted	7/30/2012	**Section**	307.2.3	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

To maintain a current Florida specific code that allows an alternate to a separate drain line for overflow of condensate from a drain pan.

Rationale

Provides an economical alternate to a separate drain line for condensate overflow particularly for condomium applications that are prevalent in Florida.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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 by allowing an alternate method/system.

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

Does not discrimiante

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 exihibits 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

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

M5754-G1

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)
2012 IMC 307.2.3 4 covers this issue.

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.

307.2.3 Auxiliary and secondary drain systems. In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow

from the equipment primary condensate removal system, one of the following auxiliary protection methods shall be provided for each cooling coil or fuel-fired appliance that produces condensate:

1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall

have a minimum depth of 1 ½ inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steelpans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness

of not less than 0.0625 inch (1.6 mm).

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

As an alternative to a separate drain line, a water-level detection device that will shut off the equipment served prior to overflow of the pan shall be provided. The water level detection device shall connect to the drain pan at a higher level than the primary drain connection.

Date Submitted	7/30/2012	**Section**	307.2.3	**Proponent**	Cheryl Harris
Chapter	3	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

Maintain Florida Specific Code related to alternate method of condensate drainage pan overflow.

Rationale

This item is redundant if the Florida Specific modification to 307.2.3 is accepted.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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 exihibits 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

Alternate Language

1st Comment Period History 08/09/2012 - 09/23/2012

5755-A1

Proponent Oscar Calleja **Submitted** 9/23/2012 **Attachments** Yes

Rationale

Underlined additions to the Base Code for proper Code language.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective.

Impact to industry relative to the cost of compliance with code

More cost effective.

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.

Does not degrade the effectiveness of the code

Does not.

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 exihibits 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

1st Comment Period History 08/09/2012 - 09/23/2012

M5755-G1

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)
2012 IMC 307.2.3 4 covers this issue.

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.

307.2.3 Auxiliary and secondary drain systems. In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow

from the equipment primary condensate removal system, one of the following auxiliary protection methods shall be provided for each cooling coil or fuel-fired appliance that produces condensate:

1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall

have a minimum depth of 1 ½ inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steelpans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness

of not less than 0.0625 inch (1.6 mm).

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

As an alternative to a separate drain line, a water-level detection device that will shut off the equipment served prior to overflow of the pan shall be provided. The water level detection device shall connect to the drain pan at a higher level than the primary drain connection.

3. An auxiliary drain pan without a separate drain line shall be provided under the coils on which condensate will occur. Such pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.

~~4. A water-level detection device conforming to UL 508 shall be provided that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.~~

Exception: Fuel-fired appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

307.2.3 Auxiliary and secondary drain systems. In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow

from the *equipment* primary condensate removal system, one of the following auxiliary protection methods shall be provided for each cooling coil or fuel-fired *appliance* that produces condensate:

1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall

have a minimum depth of 1 ½ inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steelpans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness

of not less than 0.0625 inch (1.6 mm).

2. A separate overflow drain line shall be connected to the drain pan provided with the *equipment*. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

As an alternative to a separate drain line, a water-level detection device that will shut off the equipment served prior to overflow of the pan shall be provided. The water level detection device shall connect to the drain pan at a higher level than the primary drain connection.

3. An auxiliary drain pan without a separate drain line shall be provided under the coils on which condensate will occur. Such pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the *equipment* served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.

4. Reserved ~~A water-level detection device conforming to UL 508 shall be provided that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.~~

Exception: Fuel-fired appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

Date Submitted	7/30/2012	**Section**	504.3	**Proponent**	Cheryl Harris
Chapter	5	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code related to an alternate method for a clothes dryer exhaust vent cleanout.

Rationale

To provide a clarification on a means for cleanout that occurs frequently in Florida condomium and apartment complexes.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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

Strengthens 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 exihibits 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

M5758-G1

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

Comment:

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.

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.

504.3 Cleanout. Each vertical riser shall be provided with a means for cleanout. Such means may include the exhaust duct connection to an individual dryer outlet if it is accessible and readily disassembled.

Date Submitted	7/30/2012	**Section**	504.6.4.1	**Proponent**	Cheryl Harris
Chapter	5	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code as related to clothes dryer exhaust booster fans.

Rationale

To provide clarification and and alternative methods for clothes dryer booster fans in the Florida market that has frequent installations in condomium and apartment complexes.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

More cost effective

Impact to industry relative to the cost of compliance with code

More cost effective

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

Strengthens 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 exihibits 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

M5761-G1

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

Comment:

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.

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.:

504.6.4.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10 668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table 504.6.4.1.

Exception. Where a clothes dryer booster fan is installed and listed and labeled for the application, the maximum length of the exhaust duct, including any transition duct, shall be permitted to be in accordance with the booster fan manufacturer's installation instructions. Where a clothes dryer booster fan is installed and not readily accessible from the room in which the dryer is located, a permanent identifying label shall be placed adjacent to where the exhaust duct enters the wall. The label shall bear the words: "This dryer exhaust system is equipped with a remotely located booster fan."

Date Submitted	7/30/2012	**Section**	508.1.1	**Proponent**	Cheryl Harris
Chapter	5	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific code related to makeup air temperature

Rationale

To maintain current Florida specific code that is a more appropriate temperature differential for Florida climate.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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

Elimimates potential problems

Impact to industry relative to the cost of compliance with code

Eliminates potential problems

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 exihibits 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

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

M5767-G1

Comment:

this change does not match the language in 508.1 IMC 2012

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.:

508.1.1 Makeup air temperature. Reserved. ~~The temperature differential between makeup air and the air in the conditioned space shall not exceed 10°F~~

~~**Exceptions:**~~

~~1. Makeup air that is part of the air-conditioning system.~~

~~2. Makeup air that does not decrease the comfort conditions of the occupied space.~~

Date Submitted	7/30/2012	**Section**	510.8.1	**Proponent**	Cheryl Harris
Chapter	5	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida specific code related to duct joints.

Rationale

Provides needed clarification to the code.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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 effectivess 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 exihibits 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

Alternate Language

1st Comment Period History 08/09/2012 - 09/23/2012

5768-A1

Proponent Oscar Calleja **Submitted** 9/23/2012 **Attachments** Yes

Rationale

Provides needed clarification to the Code and language made consistent with the IMC

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Neutral

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 exihibits 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

1st Comment Period History 08/09/2012 - 09/23/2012

M5768-G1

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

Comment:

This change does not match the language in 510.8.1 IMC 2012

There is no justification show for this code change.

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)

510.8.1 Duct joints. Ducts shall be made tight with the male end of the duct overlapped a minimum of 1 inch (25 mm) with duct joints extending in the direction of airflow**.**

510.8.1 Duct joints. Ducts shall be made tight with the male end of the duct overlapped a minimum of 1 inch (25 mm) with duct joints extending in the direction of airflow. ~~lap joints having a minimum lap of 1 inch (25 mm).~~ Joints used in ANSI/SMACNA Round Industrial Duct Construction Standards and ANSI/SMACNA Rectangular Industrial Duct Construction Standards are also acceptable.

M5616

Date Submitted	7/24/2012	**Section**	601.5 Balanced Return Air.	**Proponent**	amador barzaga
Chapter	6	**Affects HVHZ**	Yes	**Attachments**	Yes

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Add Florida Specific design and performance requirement from the 2010 Florida Building Code

Rationale

Balance air return has been part of the Florida Building Code for the past three code cycles. Maintaining this Section is consistent with the Florida Statutes requirements for Energy Conservation, equipment performance and inclusion in the code is necessary to avoid diminishing the expected level of performance standards

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

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

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

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

Impact to industry relative to the cost of compliance with code

None. 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, this modification provides direction and 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, this modification provides direction and proposed language is in the 2010 Florida Building Code.

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

No, this modification provides direction and proposed language is in the 2010 Florida Building Code.

Does not degrade the effectiveness of the code

No, this modification provides direction and 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 exihibits 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

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

M5616-G1

Comment:

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.

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 11/2 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 (25.4 mm) undercut to achieve proper return air balance.

2. Transfer grilles shall use 50 square inches (322.6 cm2) (of grille area) to 100 cfm (of supply air) for sizing through-the-wall transfer grilles and using an unrestricted 1 inch (25.4 mm) 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.

The proposed language was in the 2010 Florida Building Code and is in accordance with the Florida Statutes for the purpose of maintaining Florida efficiencies.

Date Submitted	7/30/2012	**Section**	603.1.5	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments No

Alternate Language No

Related Modifications

Summary of Modification

Maintain Florida Specific Code as related to the application of closure products to air distribution systems.

Rationale

Provides needed clarification on the application of closure products for Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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

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 exihibits 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

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

M5779-G1

Comment:

No data or justification was provided.
Manufacturers installation has to be followed, code does not have to spell this out for every item.

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.

603.1.5 Surface preparation. The surfaces upon which closure products are to be applied shall be clean and dry in accordance with the manufacturer's installation instructions.

Date Submitted	7/30/2012	**Section**	603.1.6	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code as related to approved mechanical attachments to air distribution system components.

Rationale

To provide clarification on approved mechanical attachments for air distribution system componnents for Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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 exihibits 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

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

M5783-G1

Comment:

No data or justification was provided.

Manufacturers installation has to be followed, code does not have to spell this out for every item.

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.

603.1.6 Approved mechanical attachments. Approved mechanical attachments for air distribution system components include screws, rivets, welds, interlocking joints crimped and rolled, staples, twist in (screw attachment), and compression systems created by bend tabs or screw tabs and flanges or by clinching straps. Mechanical attachments shall be selected to be appropriate to the duct system.

Date Submitted	7/30/2012	**Section**	603.1.7	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code related to approved closure systems for air distribution systems.

Rationale

To provide clarification of approved closure systems for air distribution systems in Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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

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 exihibits 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

M5784-G1

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

Comment:

No data or justification was provided.

Manufacturers installation has to be followed, code does not have to spell this out for every item.

These item are covered in 603.9 IMC 2012.

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.

603.1.7 Approved closure systems. Closure system materials, including adhesives when used, shall have a flame spread rating not over 25 without evidence of continued progressive combustion and a smoke-developed rating not over 50 when tested in accordance with the ASTM E 84. The following closure systems and materials are approved for air distribution construction and sealing for the applications and pressure classes prescribed in Sections 603.2 through 603.10:

1. Metal Closures.

a. Welds applied continuously along metal seams or joints through which air could leak.

b. Snaplock seams, and grooved, standing, double-corner, and Pittsburgh-lock seams as defined by SMACNA, as well as all other rolled mechanical seams. All seams shall be rolled or crimped.

2. Gasketing, which achieves a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that it is used only between mated surfaces which are mechanically fastened with sufficient force to compress the gasket and to fill all voids and cracks through which air leakage would otherwise occur.

3. Mastic Closures. Mastic shall be placed over the entire joint between mated surfaces. Mastics shall not be diluted. Approved mastics include the following:

a. Mastic or mastic plus embedded fabric systems applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part III.

b. Mastic or mastic plus embedded fabric systems applied to nonmetal flexible duct that are listed and labeled in accordance with the UL 181B, Part II.

c. Mastic ribbons, which achieve a 25/50 flame spread, smoke density development rating under ASTM E 84 or UL 723, provided that they may be used only in flange-joints and lap-joints, such that the mastic resides between two parallel surfaces of the air barrier and that those surfaces are mechanically fastened.

4. Tapes. Tapes shall be applied such that they extend not less than 1 inch (25 mm) onto each of the mated surfaces and shall totally cover the joint. When used on rectangular ducts, tapes shall be used only on joints between parallel rigid surfaces and on right angle joints. Approved tapes include the following:

a. Pressure-sensitive tapes.

1) Pressure-sensitive tapes applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part I.

2) Pressure-sensitive tapes applied to nonmetal flexible duct that are listed and labeled in accordance with the UL 181B, Part I.

b. Heat-activated tapes applied to fibrous glass ductboard that are listed and labeled in accordance with the UL 181A, Part II.

5. Aerosol Sealant. Such sealants shall be installed by manufacturer-certified installers following manufacturer instructions and shall achieve 25/50 flame spread/smoke density development ratings under ASTM E 84 or UL 723.

6. Foams. Spray polyurethane foam shall be permitted to be applied without additional joint seals.

Date Submitted	7/30/2012	**Section**	603.10	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code as related to duct supports

Rationale

To provide clarification as to acceptable duct support in Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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 exihibits 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

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

M5787-G1

Comment:

No data or justification was provided.

Manufacturers installation has to be followed, code does not have to spell this out for every item.

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) these items are covered in 603.9 IMC 2012.

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.

603.10 Supports. Ducts shall be supported with approved hangers at intervals not exceeding 10 feet (3048 mm) in accordance with requirements of Sections 603.10.1 – 603.10.3, or by other approved duct support systems designed in accordance with the Florida Building Code, Building ~~International Building Code~~. ~~Flexible and other factory-made ducts shall be supported in accordance with the manufacturer's installation instructions.~~

603.10.1 Metal ducts. Metal ducts shall be supported by ½-inch (13 mm) wide 1-gage metal straps or 12-gage galvanized wire at intervals not exceeding 10 feet (3048 mm) or other approved means.

603.10.2 Rigid nonmetal ducts. Rigid nonmetallic ducts shall be supported in accordance with the manufacturer's installation instructions.

603.10.3Flexible ducts. Flexible ducts shall be configured and supported so as to prevent the use of excess duct material, prevent duct dislocation or damage, and prevent constriction of the duct below the rated duct diameter in accordance with the following requirements:

1. Ducts shall be installed fully extended. The total extended length of duct material shall not exceed 5 percent of the minimum required length for that run.

2. Bends shall maintain a center line radius of not less than one duct diameter.

3. Terminal devices shall be supported independently of the flexible duct.

4. Horizontal duct shall be supported at intervals not greater than 5 feet (1524 mm). Duct sag between supports shall not exceed ½ inch (12.7 mm) per foot of length. Supports shall be provided within 1½ feet (38 mm) of intermediate fittings and between intermediate fittings and bends. Ceiling joists and rigid duct or equipment may be considered to be supports.

5. Vertical duct shall be stabilized with support straps at intervals not greater than 6 feet (1829 mm).

6. Hangers, saddles and other supports shall meet the duct manufacturer's recommendations and shall be of sufficient width to prevent restriction of the internal duct diameter. In no case shall the material supporting flexible duct that is in direct contact with it be less than 1½ inches (38 mm) wide.

Date Submitted	7/30/2012	**Section**	603.2	**Proponent**	Cheryl Harris
Chapter	6	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

Summary of Modification

To maintain Florida Specific Code related to duct sizing.

Rationale

Provides clarification for equivalent computation method as it relates to Florida buildings.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Improves

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

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 exihibits 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

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

M5785-G1

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)

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.

603.2 Duct sizing. Ducts installed within a single dwelling unit shall be sized in accordance with ACCA Manual D or other approved methods. Ducts installed within all other buildings shall be sized in accordance with the ASHRAE Handbook of Fundamentals or other equivalent computation procedure based on the following:

1. Calculation of the supply air for each room shall be based on the greater of the heating load or sensible cooling load for that room.

2. Duct size shall be determined by the supply air requirements of each room, the available static pressure and the total equivalent length of the various duct runs.

3. Friction loss data shall correspond to the type of material used in duct construction.

Date Submitted	7/25/2012	**Section**	202	**Proponent**	Ann Stanton
Chapter	2	**Affects HVHZ**	No	**Attachments**	No

TAC Recommendation No Affirmative Recommendation without a Second

Commission Action Pending Review

Comments

General Comments **No**

Alternate Language **No**

Related Modifications

5655

Summary of Modification

Add definitions relative to duct sealing criteria common to the Energy, Mechanical and Residenital codes.

Rationale

Definitions common to Florida-specific duct sealing and attachment criteria from the Energy code are needed in explanation of terms not used in the base code.

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 exihibits 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

SECTION 202, Definitions

Add or change the following as read:

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 pby 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.