

# 6th Edition (2017) Update to the Florida Building Code

## Proposed Code Modifications

# Triennial



## Fire

### Proposed Code Modifications

Including Comments

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

**Sub Code: Building**

Total Mods for Fire: 31

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	202	<b>Proponent</b>	Brad Schiffer
<b>Chapter</b>	2	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Revise definition of Horizontal Exit.

**Rationale**

While Horizontal Exit Section 1026.2 does discuss between buildings not having it noted in the definition, as in the past, could cause confusion with the ability to use this option.

**Fiscal Impact Statement**

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

Provide clarification to Code enforcement.

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

No cost to compliance. Cost could occur due to time lost due to confusion without clarification.

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

No cost to compliance. Cost could occur due to time lost due to confusion without clarification.

**Requirements**

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

Maintains equivalent compliance.

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

Maintains equivalent compliance.

**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**

Maintains equivalent compliance.

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

**HORIZONTAL EXIT.** An *exit* component consisting of fire-resistance-rated construction and opening protectives intended to compartmentalize portions of a building or another building thereby creating refuge areas that afford safety from the fire and smoke from the area of fire origin.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	202	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	2	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

1002.1

**Summary of Modification**

Carries forward definition of Means of Escape

**Rationale**

This proposal and the companion change to Section 1010 bring forward provisions that have been in the FBC since the first edition. The provisions are field tested and proven to be beneficial to Florida citizens.

**Fiscal Impact Statement**

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

The proposal will have no fiscal impact on code enforcement. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

**Requirements**

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not discriminate. Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not degrade the effectiveness of the code. Provisions are consistent with FBC-R, 5th Edition (2014).

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

YES

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

NO

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

OTHER

**Explanation of Choice**

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

**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

## 202 DEFINITIONS

**MEANS OF ESCAPE.** As used in Section 1010.1.4.5, a way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out. A means of escape consists of a door, stairway, passage or hall providing a way of unobstructed travel to the outside at street or ground level. It may also consist of a passage through an adjacent non-lockable space, independent of and remotely located from the means of egress, to any approved exit.

**1002.1 Definitions.** The following terms are defined in Chapter 2:

**MEANS OF ESCAPE.**

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	403.6.1	<b>Proponent</b>	Brad Schiffer
<b>Chapter</b>	4	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Allows 1 Fire Service Access Elevator serving four or less units in R-2 buildings.

#### Rationale

Residential Buildings designed with private elevators can have multiple cores serving a small occupant load. These cores have the private elevators serving the units with a service elevator meeting the Fire Service Access Elevator requirements. Since the areas served are smaller than cores which serve full floors and the Fire Department can take control of the private elevators there is not the need for two Fire Service Access Elevators.

Since the Fire Service Access Elevators provide Phase 1 recall on building alarm this allows the private elevators to be used until taken out of service.

#### Fiscal Impact Statement

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

No impact to enforcement.

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

Will reduce cost , especially in buildings with multiple cores. Will benefit designs with private elevators.

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

Will reduce cost , especially in buildings with multiple cores.

#### Requirements

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

While allowing Fire Service Access to the single Elevator the other elevators can be placed in control if the Fire Service. Since the Fire Service Elevator is placed in Phase 1 recall it allows the others to be used until taken out of service.

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

This is the equivalent compliance of FBC until the 5th Edition. No evidence of need in small cores.

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

No discrimination.

##### Does not degrade the effectiveness of the code

Does not degrade the ability to access small cores.

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

**403.6.1 Fire service access elevator.**

In buildings with an occupied floor more than 120 feet (36 576 mm) above the lowest level of fire department vehicle access, no fewer than two fire service access elevators, or all elevators, whichever is less, shall be provided in accordance with Section 3007. Each fire service access elevator shall have a capacity of not less than 3,500 pounds (1588 kg) and shall comply with Section 3002.4.

Exception : Only one Fire Service Access Elevator is required in R-2 Occupancies with cores/hoistways serving floor levels with four or less dwelling units.

<b>Date Submitted</b>	8/3/2015	<b>Section</b>	407.5	<b>Proponent</b>	Amanda Hickman
<b>Chapter</b>	4	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

The revision is more consistent with the current level of safety in 2014 FL code.

#### Rationale

See attached.

#### Fiscal Impact Statement

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

None. The revision is more consistent with the current level of safety in 2014 FL code.

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

This proposal will have not any impact on cost of smoke compartments in I-2 occupancies that are 22,500 sq. ft. It will reduce the cost of construction of smoke compartments that are permitted to be up to 40,000 sq. ft where permitted by this proposal.

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

This proposal will have not any impact on cost of smoke compartments in I-2 occupancies that are 22,500 sq. ft. It will reduce the cost of construction of smoke compartments that are permitted to be up to 40,000 sq. ft where permitted by this proposal.

#### Requirements

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

Yes. The revision is more consistent with the current level of safety in 2014 FL code.

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

Yes. The revision is more consistent with the current level of safety in 2014 FL code.

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

No. The revision is more consistent with the current level of safety in 2014 FL code.

##### Does not degrade the effectiveness of the code

No. The revision is more consistent with the current level of safety in 2014 FL code.

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

**407.5 Smoke barriers.** Smoke barriers shall be provided to subdivide every story used by persons receiving care, treatment or sleeping and to divide other stories with an occupant load of 50 or more persons, into no fewer than two smoke compartments. Such stories shall be divided into smoke compartments with an area of not more than 22,500 square feet (2092 m<sup>2</sup>) in Group I-2, ~~Condition 1, and not more than 40,000 square feet (3716 m<sup>2</sup>) in Group I-2, Condition 2, and.~~ The distance of travel from any point in a smoke compartment to a smoke barrier door shall be not greater than 200 feet (~~60.96 m~~ 60.96 m). The smoke barrier shall be in accordance with Section 709.

Exceptions:

1. A smoke compartment in Group 1-2, Condition 2, is permitted to have an area of not more than 40,000 square feet (3716 m<sup>2</sup>) provided all patient sleeping rooms within that smoke compartment are configured for single patient occupancy and any suite within the smoke compartment complies with Section 407.4.4 .
2. A smoke compartment in Group 1-2, Condition 2, without patient sleeping rooms is permitted to have an area of not more than 40,000 square feet (3716 m<sup>2</sup>).

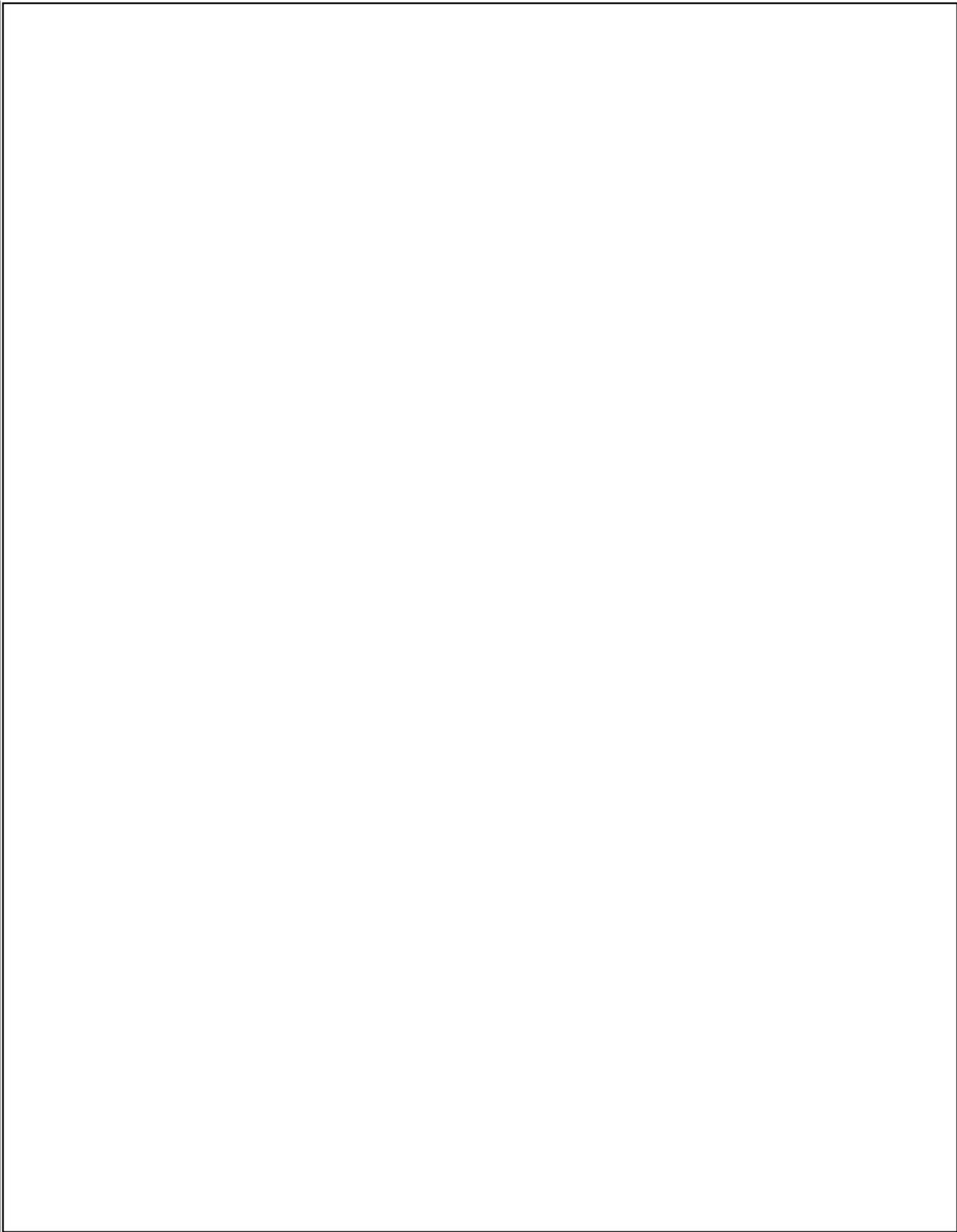
For the past 3 cycles of the ICC code development process, there has been debate over the appropriate size of a smoke compartment in a health care occupancy.

In the 2012 International Building Code, the size in a smoke compartment was 22, 50 sq. ft. with a travel distance to an smoke barrier door of 200 ft. This size was unsatisfactory for the health care industry. The 2015 International Building Code was revised by the health care industry to permit a smoke compartment to be increased to 40,000 sq. ft with the same travel distance. This change was unacceptable to fire service professionals and other fire and life safety advocates. In the 2018 International Building Code development cycle , all parties agreed on compromise language which is based on a comprehensive study by the Fire Protection Engineering Department at Worcester Polytechnic Institute (WPI) that studied patient egress times by hospital staff in various sizes of smoke compartments. The study indicated that the size of the compartment does have an impact on the egress times, but so does number of patients and more importantly, staff-to-patient ratios.

Most concerns were resolved which resulted in the following proposal. Although this proposal does not represent the answer to every question about the size of a smoke compartment, the American Society of Health Care Engineers, the National Association of State Fire Marshals, and the members of Fire Safe North America were able to reach an agreement that resolves the major concerns of most of the interested parties. This proposal was nearly unanimously recommended for approval by the ICC voting membership at the Public Comment Hearing held in Long Beach CA in September 2015. (The results of the Online Governmental Consensus was not known at the time of submittal of this process. )

This proposal addresses the following:

1. Limits the increase of smoke compartment size to hospitals only, which is what the current language states.
2. The travel distance to an exit is not permitted to exceed 200 feet inside the smoke compartment regardless of the size of the smoke compartment.
3. It allows the increase to 40,000 ft<sup>2</sup> to smoke compartments that have single occupancy sleeping rooms -or- smoke compartments without any patient sleeping rooms.
4. Allows the use of suites (which might contain multiple sleeping rooms) in all smoke compartments. However, it limits those smoke compartments that contained multiple patient sleeping rooms (whether they be inside of a suite or outside of a suite) to 22,500 ft<sup>2</sup>.
5. Clarifies that arrangements for single vs. multiple-occupancy rooms is intended to be by design, rather than an administrative decision. Thus, we have used the term "configured for single patient occupancy".



<b>Date Submitted</b>	8/3/2015	<b>Section</b>	717.5.5	<b>Proponent</b>	Amanda Hickman
<b>Chapter</b>	7	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Deletes exception 2 of section 717.5.5 Smoke barriers in order to maintain the current level of protection provided under the 5th edition of the Florida Building Code.

#### Rationale

Deleting exception 2 maintains the current level of protection provided under the 5th edition of the Florida Building Code Section 717.5.5.

HVAC duct is vulnerable to puncture, leakage, and disconnection due to falling debris, thermal damage, and other trauma associated with emergency events. Once the duct is breached, smoke is prone to enter the duct through such breaches and move past (or through) the smoke barrier to otherwise unaffected zones of the building. Thus negating and short-circuiting the intended protection provided by the smoke barrier.

Deleting Exception 2 maintains the requirement for smoke dampers at each point a duct penetrates a smoke barrier and as such protects those penetrations in the smoke barrier against smoke migration through the duct.

#### Fiscal Impact Statement

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

None. Already exists in previous code.

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

Using accepted methods of calculating construction costs the estimated installation cost of smoke dampers should not increase the cost of construction by more than one 100th of one percent of the cost of the building.

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

Using accepted methods of calculating construction costs the estimated installation cost of smoke dampers should not increase the cost of construction by more than one 100th of one percent of the cost of the building.

#### Requirements

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

Yes. Improves safety.

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

Yes. Improves safety.

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

No. Already in previous FL code.

##### Does not degrade the effectiveness of the code

No. Already in previous FL code.

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

**717.5.5 Smoke barriers.** A listed smoke damper designed to resist the passage of smoke shall be provided at each point a duct or air transfer opening penetrates a smoke barrier. Smoke dampers and smoke damper actuation methods shall comply with Section 717.3.3.2.

**Exceptions:**

1. Smoke dampers are not required where the openings in ducts are limited to a single smoke compartment and the ducts are constructed of steel.

~~2. Smoke dampers are not required in smoke barriers required by Section 407.5 for Group I-2, Condition 2— where the HVAC system is fully ducted in accordance with Section 603 of the International Mechanical Code and where buildings are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and equipped with quick-response sprinklers in accordance with Section 903.3.2.~~

<b>Date Submitted</b>	12/22/2015	<b>Section</b>	908.7	<b>Proponent</b>	scott waltz
<b>Chapter</b>	9	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

None

**Summary of Modification**

Moves exceptions to carbon monoxide protection and alarm placement from section 908.7.2 to 908.7. Exceptions are intended to apply broadly to the alarm requirements for carbon monoxide. The current code appears to limit the application of the exceptions to combination smoke/carbon monoxide alarms.

**Rationale**

This revision and relocation is needed because it is currently being misunderstood by code enforcing authorities and is not meeting the intent of the Florida statute chapter 553.885. Informal Interpretation from the Building Official Association of Florida, report numbers 7572 , 7618 (see attached) provide incorrect information to the user because of the location of this exception under the combination smoke/CO detectors. Chapter 553.885 (attached) clearly states the exception for hospitals, nursing homes and inpatient hospices is a general requirement to be located under Section 907.7. The slight revision of the existing language is meant to alert the user of this exception for those occupancies as excepted in Florida statute.

**Fiscal Impact Statement**

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

There is no fiscal impact on the local entity relative to enforcement.

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

There is no fiscal impact to building and property owners relative to cost of compliance

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

There is no fiscal impact to industry relative to the cost of compliance

**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 or improves the code by making the code requirements clearer to the user.

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

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

**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? No

**1st Comment Period History** 01/13/2016 - 02/25/2016

<b>Proponent</b>	Thomas Lasprogato	<b>Submitted</b>	2/3/2016	<b>Attachments</b>	No
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**Comment:**

Neutral

F6770-G1

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

Exceptions:

1. An approved operational carbon monoxide detector shall only be required to be installed inside or directly outside of each room or area where a fossil-fuel burning heater, engine, or appliance is located within a hospital, inpatient hospice facility or skilled nursing home facility licensed by the Agency for Health Care Administration, or a new state correctional institution. The carbon monoxide detector shall be connected to the fire-alarm system of the hospital, inpatient hospice facility, or nursing home facility as a supervisory signal.

2. This section shall not apply to existing buildings that are undergoing alterations or repairs unless the alteration is an addition as defined in Section 908.7.3.

908.7.1 Carbon monoxide alarm. The requirements of Section 908.7 shall be satisfied by providing for one of the following alarm installations:

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

908.7.2 Combination alarms. Combination smoke/carbon monoxide alarms shall be listed and labeled by a nationally recognized testing laboratory.

Exceptions:

1. An approved operational carbon monoxide detector shall be installed inside or directly outside of each room or area within a hospital, inpatient hospice facility or nursing home facility licensed by the Agency for Health Care Administration, or a new state correctional institution where a fossil-fuel burning heater, engine, or appliance is located. The carbon monoxide detector shall be connected to the fire-alarm system of the hospital, inpatient hospice facility, or nursing home facility as a supervisory signal.

2. This section shall not apply to existing buildings that are undergoing alterations or repair unless the alteration is an addition as defined in Section 908.7.3.

553.885 Carbon monoxide alarm required.—

(1) Every separate building or addition to an existing building, other than a hospital, an inpatient hospice facility, or a nursing home facility licensed by the Agency for Health Care Administration, constructed on or after July 1, 2008, and having a fossil-fuel-burning heater or appliance, a fireplace, an attached garage, or other feature, fixture, or element that emits carbon monoxide as a byproduct of combustion shall have an approved operational carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes in the new building or addition, or at such other locations as required by the Florida Building Code. The requirements of this subsection may be satisfied with the installation of a hard-wired or battery-powered carbon monoxide alarm or a hard-wired or battery-powered combination carbon monoxide and smoke alarm. **For a new hospital, an inpatient hospice facility, a nursing home facility licensed by the Agency for Health Care Administration, or a new state correctional institution, an approved operational carbon monoxide detector shall be installed inside or directly outside of each room or area within the hospital or facility where a fossil-fuel-burning heater, engine, or appliance is located. This detector shall be connected to the fire alarm system of the hospital or facility as a supervisory signal.** This subsection does not apply to existing buildings that are undergoing alterations or repairs unless the alteration is an addition as defined in subsection (3).



**Informal Interpretation  
Report Number 7572**



**Date:** Thu Aug 20 2015

**Report:** 7572

**Code:** Building      **Code Year:** 2010

**Section:** 916.1.2

**Question:**

Is it the intent of 916.1.2 Exception #1 to not require carbon monoxide alarm installed within 10 feet of each room used for sleeping purposes of nursing homes facility licensed by the Agency for Health Care Administration

**Comment:**

None

**Answer:**

No. The alarm is required inside or directly outside, based on agency requirements.

**Commentary:**

Please careful about the location of the requirement for the interpretation. The Exception is from the provision allowing a combination smoke/CO detector; not from the requirement for the CO detector. The provisions are found at Section 908.7 in the FBC-B 5th Edition.

**Notice:**

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



**Informal Interpretation  
Report Number 7618**



**Date:** Wed Sep 16 2015

**Report:** 7618

**Code:** Building      **Code Year:** 2010

**Section:** 916.1.2

**Question:**

Is it the intent of 916.1.2, Exceptions #1 to not require carbon monoxide detectors within 10 feet of rooms used for sleeping purposes within nursing home facility licensed by AHCA having no fossil-fuel burning appliances located in sleeping rooms?

**Comment:**

None

**Answer:**

The Section cited is for combination alarms. If there is no fossil fuel-burning heater, engine, or appliance, there is no code requirement for a CO detector.

**Commentary:**

None

**Notice:**

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

<b>Date Submitted</b>	1/1/2016	<b>Section</b>	1010.1.10	<b>Proponent</b>	Jennifer Hatfield
<b>Chapter</b>	10	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Reinstates language from the 2010 Code that was not included in the 5th edition. This is needed to ensure pool safety barrier requirements are addressed and there are not conflicting code requirements.

**Rationale**

Reinstates language from the 2010 Code that was not included in the 5th edition. This is needed to ensure pool safety barrier requirements are addressed and there are not conflicting code requirements.

**Fiscal Impact Statement**

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

None

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

None

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

None

**Requirements**

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

Yes, addresses the safety of the public.

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

Yes strengthens the code by making this necessary clarification.

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

Does not discriminate.

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

Does not degrade the effectiveness of the code.

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

YES

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

NO

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

NO

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

NO

**1010.1.10 Panic and fire exit hardware.**

Doors serving a Group H occupancy and doors serving rooms or spaces with an *occupant load* of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than *panic hardware* or *fire exit hardware*.

**Exceptions:**

1. A main *exit* of a Group A occupancy shall be permitted to be locking in accordance with Section 1010.1.9.3, Item 2.
2. Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.
3. Outdoor gates from residential and commercial swimming pools or swimming pool decks, except where the pool deck serves as a portion of the means of egress of a building or has an occupant load of 300 or greater.

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide, and that contain overcurrent devices, switching devices or control devices with *exit* or *exit access doors*, shall be equipped with *panic hardware* or *fire exit hardware*. The doors shall swing in the direction of egress travel.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	1010.1.4.5	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	10	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Carry forward provisions to allow protection of all openings during threat of storm; with clarifying change.

#### Rationale

The lack of specificity in the language has resulted in A misunderstanding of the intent of the section. Some jurisdictions and some designers refuse to allow protection of the required egress door which is contrary to the intent of the original change. (See Uploaded Rationale.)

#### Fiscal Impact Statement

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

The proposal will have no fiscal impact on code enforcement. The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

#### Requirements

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

The proposal does not discriminate. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

##### Does not degrade the effectiveness of the code

The proposal does not degrade the effectiveness of the code. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

YES

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

NO

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

OTHER

#### Explanation of Choice

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

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

**1010.1.4.5 Protection devices for emergency escape and rescue openings. The temporary installation or closure of storm shutters, panels and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings and egress doors in Group R occupancies during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section 1030.4 or 1010.1.9. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without passing through a lockable door not under their control**

The definition was taken from the Florida Fire Prevention Code. A major difference between the building and fire prevention code is that the building code requires a single exit from dwellings and dwelling units while the fire prevention code does not require an exit. The fire prevention code requires two means of escape, one of which may be an emergency escape and rescue opening. The fact that the only required egress for dwellings in the fire prevention code is the means of escape indicates this arrangement is adequate for life safety.

The intent of the original submittal was to allow all openings to be protected. It does not make a lot of sense to protect all the openings except one of the largest openings in the exterior wall. The modification to reference egress doors is intended to clarify this intent. In the majority of the cases there has been no problem. However, the lack of specificity in the language has resulted in some jurisdictions and some designers to refuse to allow protection of the required egress door which is contrary to the intent of the original change. This is a special provision applicable only during the threat of a storm. The intent was to allow the protection of all exterior openings while providing a single means of escape from the dwelling. The proposed change will clarify that intent.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	1010.1.4.5	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	10	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Carries forward Florida specific amendment allowing protection of all opening during the threat of a storm.

#### Rationale

The proposal carries forward provisions that have been in the Florida Building Code since the first edition. There have been no reported problems or incidents.

#### Fiscal Impact Statement

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

The proposal will have no fiscal impact on code enforcement. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014).

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014).

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

The proposal does not discriminate. The proposal is consistent with the Florida Building Code, 5th Edition (2014).

##### Does not degrade the effectiveness of the code

The proposal does not degrade the effectiveness of the code. The proposal is consistent with the Florida Building Code, 5th Edition (2014).

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

YES

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

NO

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

OTHER

#### Explanation of Choice

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

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

**1010.1.4.5 Protection devices for emergency escape and rescue openings. The temporary installation or closure of storm shutters, panels and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings in Group R occupancies during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section 1030.4. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without**

**passing through a lockable door not under their control**

<b>Date Submitted</b>	9/4/2015	<b>Section</b>	1017.2	<b>Proponent</b>	Katie McKay
<b>Chapter</b>	10	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Change travel distance for Occupancy S-1 from 250' with Sprinkler System to 400' as in 2010 FBC and 2015/5th Edition Florida Fire Prevention Code.

#### Rationale

The travel distance for S1 prior to 2004, was 400'; for Sprinklered Buildings. The 2004 code changed the travel distance to 250', which became a problem for large warehouse users. A change was proposed to The Florida Building Code at that time to match The Fire Prevention Code and was approved for the 2007 and 2010 Florida Building Code cycles. The 2014 (5th Edition)FBC does not include the Florida Specific change to 400'.

The current Florida Fire Prevention Code 2015/ 5th Edition has the travel distance for Sprinklered, Ordinary Storage at 400'. This proposed change would be consistent with the FFPC, past Florida Building Codes and be more practical for S1 users.

#### Fiscal Impact Statement

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

We foresee no impact relative to code enforcement.

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

Construction costs increase when wall-to-floor area ratio increases. To capture desired sq. ft; a square building is most efficient, cost increases as the building aspect ratio increases. Long skinny buildings are a lot more expensive to build than square/deeper ones for the same sq.ft.

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

The code restricts large Distribution Centers efficiency. Current businesses can't expand facilities as planned. Users are re-considering large DC's in Fl. Many are deep buildings 450'-600' +/- with loading doors, loading areas and bulk or high piled storage. Logistics are severely compromised.

#### Requirements

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

No adverse impact. The general public benefits. They are a necessary part of our economic infrastructure; most of the goods we use and consume at home and work have passed through a distribution center. They also provide jobs from unskilled labor to upper management and several related industries.

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

This change improves the code by allowing large storage facilities to exist, while maintaining safety requirements set forth by NFPA.

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

The code in its' current state (250' for S1 sprinklered) discriminates in the method of logistical operations used by many companies. The proposed code change would remove the current discrimination discouraging companies from locating their DC's in Florida, where they are needed.

##### Does not degrade the effectiveness of the code

This change does not degrade code effectiveness.

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

YES

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

NO

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

YES

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

NO

<b>Proponent</b>	Brune Matt	<b>Submitted</b>	1/26/2016	<b>Attachments</b>	No
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**Comment:**

F6409-G1

As a developer operating nationwide, I can attest that we continue to see a trend towards larger (deeper) distribution and warehousing facilities. As our tenants become more efficient operationally, they can operate larger facilities and actually require less loading docks through automation and scheduling. Tenants in the market for a facility of this size will look for deeper cross-dock facilities across their footprint so all facilities have similar functionality.

As this petition mentions, costs do increase for a longer, skinnier building. Estimates could vary widely since tenants will have different needs. However inefficiencies with floor/wall ratio and HVAC systems will increase costs if all other items are equal.

A, E, F-1, M, R, S-1 200 250b

S-1 200 400b

### Florida Building Code Proposed Modification

**Mod #** 6409

**Code Change Cycle** 2017 Triennial Original Modification 07/01/2015 - 01/02/2016

**Code Version** 2017

**Sub Code** Building

**Chapter & Topic** Chapter 10 - Means of Egress

**Section** 1016.2

**Original Modifications Needs More Information, More Information Requested:**

Please provide for quantitative estimate for reduction in cost or additional cost to construction due to the proposed code change. Thanks Mo Madani 850-717-1825

**Requested By** Mo Madani

**Date Requested** 09/13/2015

November 24, 2015

Mr Modani,

Providing a quantitative estimate for additional cost is difficult, since it would vary with each building configuration; however I am attaching a general example for your reference and offer more information below.

Since my submittal of this Proposed Modification, I have learned that the IBC has added a section in the 2015 Code that would allow for the 400' travel distance in F1 and S1 occupancies. I have attached a copy for your reference.

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

The actual "hard" cost of current S-1 limited 250' travel distance code compliance would need to be evaluated on a building/project specific basis, based on the unique physical characteristics for each one. A general statement of negative cost impact with the current code is that construction costs increase with the current travel distance because the building's wall-to-floor area ratio increases in order to capture the desired square footage; a square building is most efficient, and the wall-to-floor area ratio, and cost, increases as the building aspect ratio increases. Simply put, long skinny buildings are a lot more expensive to build than square/deeper ones for the same square footage. Operational costs for shallow depth/long buildings are addressed below.

Land owners that have planned for large distribution centers are finding that businesses can no longer build the size and depth of buildings for S-1 Storage that have been allowed before the 2014 code change. Many of such parcels are not easily converted to other uses as the large DC sites do not generally share property lines with smaller depth sites for non-related uses.

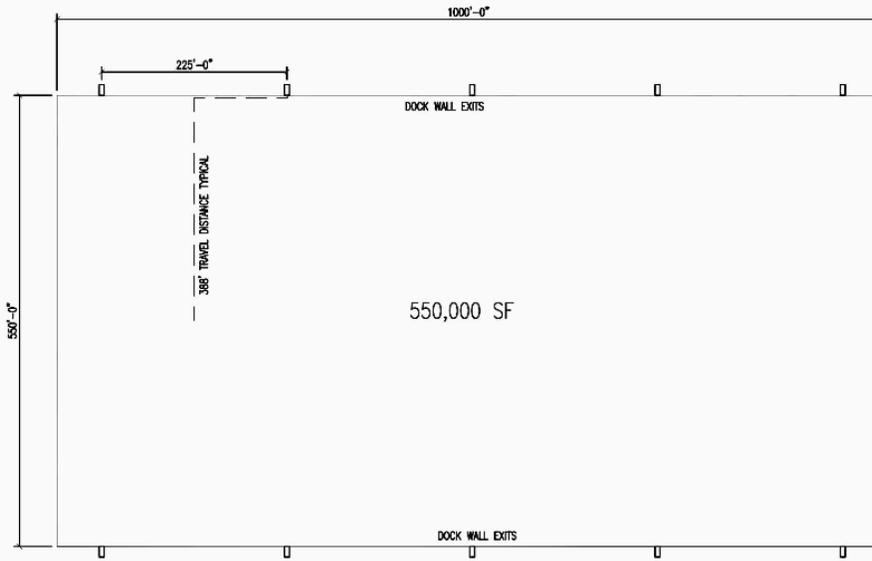
Going back to 400' allowed travel distance for S-1 in sprinkled buildings will allow for a relative reduction in construction costs due to greater building efficiency.

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

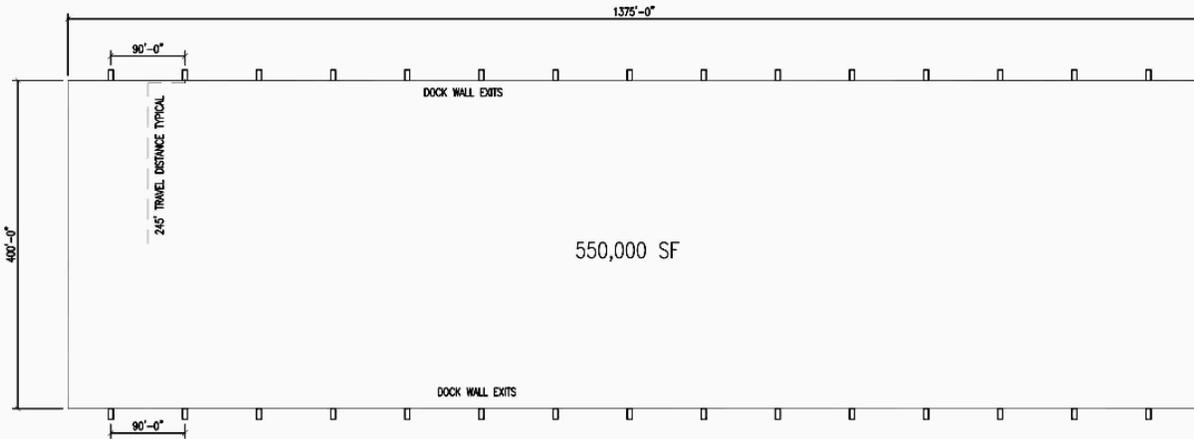
We are currently seeing the code restrict the layout of large Distribution Centers that can no longer be built for operational efficiency. The trend for several decades in the U.S. has been to create very large distribution centers (i.e. 250,000 GSF - 1M+ SF). Most of the existing Distribution Centers would not be allowed today due to the travel distance restriction of 250' max. Some businesses can not expand their current facilities as planned for previously under the current code and maintain building continuity.

The bigger picture is that we are seeing people re-consider putting their large Distribution Centers (DC's) in Florida. Most are confounded when we explain and/or show them the code restricting their travel distances to 250'. Many of the DC's are deep buildings (450'-600' +/-) with loading doors on each side, with large staging/unloading areas adjacent to the doors with the bulk and/or high piled storage in between. By seriously limiting the building depth, the logistical operations are severely compromised, or not practical at all.

Allowing 400' allowed travel distance for S-1 in sprinkled buildings will allow companies with large Distribution Center, needs to operate more efficiently.



EXAMPLE A  
FBC 2010 (PROPOSED FOR 2017) - 400' TRAVEL DISTANCE FOR S-1 SPRINKLERED



EXAMPLE B  
FBC 2014 - 250' TRAVEL DISTANCE FOR S-1 SPRINKLERED

## Building Cost Comparison (stairs and floor to wall ratio only)

**Example A**

**TRAVEL DISTANCE @ 400 LF**

550' Wide Building by 1,000' Long

Dock wall exit costs

Concrete forming & reinforcing	10 ea	\$ 750	\$ 7,500
Steel Stairs, dock high	10 ea	\$ 7,200	\$ 72,000
Hollow Metal Frames, Doors & Hardware	10 ea	\$ 1,300	\$ 13,000
Paint Stairs and HM Frames & Doors	10 ea	\$ 600	\$ 6,000
			<b>Example A: \$ 98,500</b>

**Example B**

**TRAVEL DISTANCE @ 250 LF**

400' Wide Building by 1,375' Long

Dock wall exit costs

Concrete forming & reinforcing	30 ea	\$ 750	\$ 22,500
Steel Stairs, dock high	30 ea	\$ 7,200	\$ 216,000
Hollow Metal Frames, Doors & Hardware	30 ea	\$ 1,300	\$ 39,000
Paint Stairs and HM Frames & Doors	30 ea	\$ 600	\$ 18,000
			stair total: \$ 295,500
Example B Wall floor ratio difference*:	550,000 sf	\$1.75	\$ 962,500
			<b>Example B: \$ 1,258,000</b>

Example B cost is 12% more than A.		Difference:	\$ 1,159,500
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\* There is approximately %15 more wall area in example B, which increases costs of Example B by approximately \$1.75 per square foot

TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE<sup>a</sup>

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, F-1, M, R, S-1	200	250 <sup>b</sup>
I-1	Not Permitted	250 <sup>b</sup>
B	200	300 <sup>c</sup>
F-2, S-2, U	300	400 <sup>c</sup>
H-1	Not Permitted	75 <sup>d</sup>
H-2	Not Permitted	100 <sup>d</sup>
H-3	Not Permitted	150 <sup>d</sup>
H-4	Not Permitted	175 <sup>d</sup>
H-5	Not Permitted	200 <sup>c</sup>
I-2, I-3, I-4	Not Permitted	200 <sup>c</sup>

For SI: 1 foot = 304.8 mm.

a. See the following sections for modifications to *exit access* travel distance requirements:

Section 402.8: For the distance limitation in malls.

Section 404.9: For the distance limitation through an atrium space.

Section 407.4: For the distance limitation in Group I-2.

Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.

Section 411.4: For the distance limitation in special amusement buildings.

Section 412.7: For the distance limitations in aircraft manufacturing facilities.

Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.

Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.

Section 1006.3.2: For buildings with one exit.

Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.

Section 1029.7: For increased limitation in assembly seating.

Section 3103.4: For temporary structures. Section 3104.9: For pedestrian walkways.

b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.

c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

d. Group H occupancies equipped throughout with an *automatic sprinkler system* in accordance with Section 903.2.5.1.

### 1017.2.1 Exterior egress balcony increase.

*Exit access* travel distances specified in Table 1017.2 shall be increased up to an additional 100 feet (30 480 mm) provided the last portion of the *exit access* leading to the *exit* occurs on an exterior egress balcony constructed in accordance with Section 1021. The length of such balcony shall be not less than the amount of the increase taken.

### 1017.2.2 Group F-1 and S-1 increase.

The maximum *exit access* travel distance shall be 400 feet (122 m) in Group F-1 or S-1 occupancies where all of the following conditions are met:

1. The portion of the building classified as Group F-1 or S-1 is limited to one story in height.
2. The minimum height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet (7315 mm).
3. The building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

### 1017.3 Measurement.

*Exit access* travel distance shall be measured from the most remote point within a story along the natural and unobstructed path of horizontal and vertical egress travel to the entrance to an *exit*.

**Exception:** In *open parking garages*, *exit access* travel distance is permitted to be measured to the closest riser of an *exit access stairway* or the closest slope of an *exit access ramp*.



<b>Date Submitted</b>	1/1/2016	<b>Section</b>	606	<b>Proponent</b>	Cheryl Harris
<b>Chapter</b>	6	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Eliminates duplication of Smoke Detectors in both the supply and return side of air distribution systems and other changes to be in compliance with the Florida Fire Code.

**Rationale**

Eliminates conflicts of Smoke Detectors in both the supply and return side of air distribution systems and other changes to be in compliance with the Florida Fire Prevention Code and NFPA 90.

**Fiscal Impact Statement**

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

Simplifies enforcement.

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

Eliminates the cost of a duplicate smoke detector system and wiring to Fire Alarm systems which could save \$500 to \$2000 in cost per system.

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

Reduces the cost in time and materials to install duplicate smoke detector systems and wiring to Fire Alarm systems. Savings could range from \$500 to \$2000 per system on average.

**Requirements**

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

Modification follows Florida Fire Code requirements for life and safety.

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

Modification improves the code by eliminating conflicting requirements for Fire Alarm placement in air distribution systems.

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

There are no proprietary materials, products, methods required and follows Florida Fire Code requirements.

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

Eliminating requirement for smoke detectors in both the return and supply side of an air distribution system does not degrade the effectiveness of the code as it follows Florida Fire Code.

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

YES

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

NO

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

NO

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

YES

**Alternate Language**

**1st Comment Period History**

01/13/2016 - 02/25/2016

**Rationale**

1. The exception in 606.2 states that smoke detectors shall not be required for air distribution systems that are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated; however, this exception does not take into account the importance of student safety in educational areas. Student areas require close supervision and monitoring systems to ensure hazards are quickly identified and reported to the appropriate agencies. Therefore, smoke detectors should be required in such occupancies. 2. Smoke detectors are currently required in the supply ducts under NFPA 90A; therefore, the FBC, Building, 606 should be updated to include this requirement for smoke detectors in the supply ducts. However, smoke detectors should also be considered as necessary in the return ducts for the following reasons: a. Smoke contaminates can be more difficult to detect in the turbulent air which is discharged from the supply ducts. b. Smoke detectors in the return ducts can allow for faster recognition of the smoke's point of origin. 3. Because student areas require close supervision and monitoring, it is necessary to provide appropriate systems to prevent the oversight of hazardous conditions. Therefore when facilities are monitored by supervising stations; although it may be permissible to allow one (1) duct smoke detector signal to be reported as a supervisory signal, two (2) signals would indicate a high probability that an actual hazard exists and a fire alarm should be activated.

**Fiscal Impact Statement**

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

No change from current requirement.

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

No change from current requirement.

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

No change from current requirement.

**Requirements**

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

No change from current requirement.

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

No change from current requirement.

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

No change from current requirement.

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

No change from current requirement.

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

## SECTION 606

### SMOKE DETECTION SYSTEMS CONTROL

#### 606.1 Controls required.

Air distribution systems shall be equipped with smoke detectors *listed* and *labeled* for installation in air distribution systems, as required by this section. Duct smoke detectors shall comply with UL 268A. Other smoke detectors shall comply with UL 268.

**606.2 Where required.** Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.3.

**Exception:** ~~Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.~~

#### 606.2.1

**To prevent the recirculation of dangerous quantities of smoke, a detector approved for air duct use shall be installed on the Supply side of air-handling systems as required by NFPA 90A, *Standard for the Installation of Air Conditioning and Ventilating Systems*. Smoke detectors listed for use in air distribution systems shall be located downstream of the air filters and ahead of any branch connections in air supply systems having the capacity greater than 2000 cuft/min.**

#### ~~Return air systems.~~

~~Smoke detectors shall be installed in return air systems with a design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s), in the return air duct or *plenum* upstream of any filters, *exhaust air* connections, outdoor air connections, or decontamination *equipment* and appliances.~~

**Exception:** Smoke detectors are not required in the ~~return~~ supply air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detection system shall comply with Section 606.4.

#### **606.2.2 Common supply and ~~return~~ air systems.**

Where multiple air-handling systems share common supply ~~or return air ducts or plenums~~ with a combined design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s), ~~the~~ each supply ~~return~~ air system shall be provided with smoke detectors in accordance with Section 606.2.1.

**Exception:** Individual smoke detectors shall not be required for each fan-powered

terminal unit, provided that such units do not have an individual design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s) and will be shut down by activation of one of the following:

1. Smoke detectors required by Sections 606.2.1 and 606.2.3.
2. An *approved* area smoke detector system located in the return air *plenum* serving such units.
3. An area smoke detector system as prescribed in the exception to Section 606.2.1.

In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

### **606.2.3 Return air risers.**

Where return air risers serve two or more stories and serve any portion of a return air system having a design capacity greater than 15,000 cfm (7.1 m<sup>3</sup>/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums.

### **[F] 606.3 Installation.**

Smoke detectors required by this section shall be installed in accordance with NFPA 72. The required smoke detectors shall be installed to monitor the entire airflow conveyed by the system

~~including return air and exhaust or relief air.~~ **Smoke detectors shall not be required for fan units whose sole function is to remove air from the inside of the building to the outside of the building.** Access shall be provided to smoke detectors for inspection and maintenance.

### **[F] 606.4 Controls operation.**

Upon activation, the smoke detectors shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of appliances used in the system.

Air distribution systems that are part of a smoke control system shall switch to the smoke control mode upon activation of a detector.

**[F] 606.4.1 Supervision.**

The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by Section 907.2 of the *International Fire Code*. The actuation of a duct smoke detector shall activate a visible and audible supervisory signal at a constantly attended location. **In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal, not as a fire alarm.**

**Exceptions:**

1. The supervisory signal at a constantly attended location is not required where the duct smoke detector activates the building's alarm-indicating appliances.
  2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an *approved* location.
- Duct smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.

## SECTION 606 – SMOKE DETECTION SYSTEMS CONTROL

**606.1 Controls required.**

Air distribution systems shall be equipped with smoke detectors *listed and labeled* for installation in air distribution systems, as required by this section. Duct smoke detectors shall comply with UL 268A. Other smoke detectors shall comply with UL 268.

**606.2 Where required.**

Smoke detectors shall be installed where indicated in Sections 606.2.1 through 606.2.3.

~~**Exception:** Smoke detectors shall not be required where air distribution systems are incapable of spreading smoke beyond the enclosing walls, floors and ceilings of the room or space in which the smoke is generated.~~

**606.2.1 Return and supply air systems.**

Smoke detectors shall be installed in both supply and return air systems with a design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s); ~~in~~ . In the return air duct or plenum, detectors are to be installed upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances. In the supply air duct, detectors are to be located downstream of the air filters and ahead of any branch connections.

**Exception:** Smoke detectors are not required in the return and supply air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the *International Fire Code*. The area smoke detection system shall comply with Section 606.4.

**606.2.2 Common supply and return air systems.**

Where multiple air-handling systems share common supply or return air ducts or plenums with a combined design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s), the return air and supply air system shall be provided with smoke detectors in accordance with Section 606.2.1.

**Exception:** Individual smoke detectors shall not be required for each fan-powered terminal unit, provided that such units do not have an individual design capacity greater than 2,000 cfm (0.9 m<sup>3</sup>/s) and will be shut down by activation of one of the following:

1. Smoke detectors required by Sections 606.2.1 and 606.2.3.
2. An *approved* area smoke detector system located in the return air *plenum* serving such units.
3. An area smoke detector system as prescribed in the exception to Section 606.2.1.

In all cases, the smoke detectors shall comply with Sections 606.4 and 606.4.1.

**606.2.3 Return and supply air risers.**

Where return air and supply air risers serve two or more stories and are part of a return air and supply air system ~~serve any portion of a return air system~~ having a design capacity greater than 15,000 cfm (7.1 m<sup>3</sup>/s), smoke detectors shall be installed at each story. Such smoke detectors shall be located upstream of the connection between the return air riser and any air ducts or plenums and between the air supply source and the first branch or take-off to the areas served.

**[F] 606.3 Installation.**

Smoke detectors required by this section shall be installed in accordance with NFPA 72. The required smoke detectors shall be installed to monitor the entire airflow conveyed by the system ~~including return air and exhaust or relief air.~~ Smoke detectors shall not be required for fan units whose sole function is to remove air from the inside of

the building to the outside of the building. Access shall be provided to smoke detectors for inspection and maintenance.

**[F] 606.4 Controls operation.**

Upon activation, the smoke detectors shall shut down all operational capabilities of the air distribution system in accordance with the listing and labeling of appliances used in the system. Air distribution systems that are part of a smoke control system shall switch to the smoke control mode upon activation of a detector.

**[F] 606.4.1 Supervision.**

The duct smoke detectors shall be connected to a fire alarm system where a fire alarm system is required by Section 907.2 of the *International Fire Code*. The actuation of a duct smoke detector shall activate a visible and audible supervisory signal at a constantly attended location. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal, ~~not a fire alarm, unless verified by a second signal in which case the fire alarm shall be activated.~~

**Exceptions:**

1. The supervisory signal at a constantly attended location is not required where the duct smoke detector activates the building's alarm-indicating appliances.
2. In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and audible signal in an *approved* location. Duct smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.

**606.2 Where required.**

Strikethrough language in conflict with FFPC, NFPA 90 and NFPA 72  
Insert language directly from NFPA 90 and NFPA 72 corresponding with FFPC.

RATIONAL: Bring FBC 2014 into conformity with provisions of FFPC, NFPA 90 and NFPA 72 duct smoke detector requirements and eliminate conflicting language currently in FBC 2014.

NFPA 90 and NFPA 72 outline criteria for air distribution smoke detectors including location, air volume criteria, installation and connection to alarm systems and smoke control systems. These are the reference standards for the FFPC and they are not in conflict with any other sections of FBC 2014. Language taken directly from NFPA 90 and NFPA 72 are recommend.  
**Language Source Codes: NFPA90 6.4.2.1 and NFPA 72 17.7.5.3.1**

**606.2.1 Return air systems.**

Strikethrough language in conflict with FFPC, NFPA 90 and NFPA 72  
Other provisions exist in other sections of 606 ; no new language needed.

RATIONAL: Bring FBC 2014 into conformity with provisions of FFPC, NFPA 90 and NFPA 72 duct smoke detector requirements and eliminate conflicting language currently in FBC 2014.

NFPA 90 and NFPA 72 outline criteria for air distribution smoke detectors including location, air volume criteria, installation and connection to alarm systems and smoke control systems. These are the reference standards for the FFPC and they are not in conflict with any other sections of FBC 2014. Language taken directly from NFPA 90 is recommend.

**606.2.2 Common supply and return air systems.**

Strikethrough language in conflict with FFPC, NFPA 90 and NFPA 72  
Other provisions of FFPC, NFPA 90 and NFPA 72 determine requirements for air distribution systems ; no new language needed.

RATIONAL: Bring FBC 2014 into conformity with provisions of FFPC, NFPA 90 and NFPA 72 duct smoke detector requirements. Eliminate conflicting language currently in FBC 2014.

NFPA 90 and NFPA 72 outline criteria for air distribution smoke detectors including location, air volume criteria, installation and connection to alarm systems and smoke control systems. These are the reference standards for the FFPC and they are not in conflict with any other sections of FBC 2014. Language taken directly from NFPA 90 is recommend.

**606.3 Installation.**

Strikethrough language in conflict with FFPC, NFPA 90 and NFPA 72  
Insert language directly from NFPA 90 and NFPA 72 corresponding with FFPC.

RATIONAL: Bring FBC 2014 into conformity with provisions of FFPC, NFPA 90 and NFPA 72 duct smoke detector requirements and eliminate conflicting language currently in FBC 2014.

NFPA 90 and NFPA 72 outline criteria for air distribution smoke detectors including location, air volume criteria, installation and connection to alarm systems and smoke control systems. These are the reference standards for the FFPC and they are not in conflict with any other sections of FBC 2014. Language taken directly from NFPA 90 and NFPA 72 are recommend.  
**Language Source Code: NFPA90 6.4.2.3**

<b>Date Submitted</b> 1/1/2016	<b>Section</b> 12345678	<b>Proponent</b> Cheryl Harris
<b>Chapter</b> 15	<b>Affects HVHZ</b> No	<b>Attachments</b> No
<b>TAC Recommendation</b> Pending Review		
<b>Commission Action</b> Pending Review		

**Related Modifications**

**Summary of Modification**

Incorporates the National Fire Codes as referenced standards as they are referenced in the Florida Fire Code to ensure consistency between codes.

**Rationale**

There should be consistency between the Building Code and Florida Fire Code. The National Fire Code is a referenced standard in the Florida Fire Code but not listed as a referenced standard in the Building Code.

**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**

No impact

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

No impact

**Requirements**

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

The NFPA standards have been part of our Code for many years. In specifying methods of fire and smoke control, consistency with the Fire Code is crucial. Life safety depends on this and NFPA90a, 90b are needed in Mechanical to mirror the Fire Code.

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

Makes Mechanical and Fire Prevention Code consistent with each other. Eliminates duplication of some smoke detectors which creates better system function.

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

Does not discriminate against materials, products, methods or systems.

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

Does not degrade the effectiveness of the code.

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

YES

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

NO

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

NO

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

NO

**1st Comment Period History**

01/13/2016 - 02/25/2016

<b>Proponent</b> Cheryl Harris	<b>Submitted</b> 1/18/2016	<b>Attachments</b> No
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**Comment:**

Wording should be included that states the References NFPA 90A and 90B be the 2015 version.

F7022-G1

Insert the following standards in alphabetical order within the list:

Chapter 15

Referenced Standards

NFPA 90A

NFPA 90B



<b>Date Submitted</b>	12/28/2015	<b>Section</b>	202	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	2	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modify definition of Fire Separation Distance to include zero lot line.

#### Rationale

The escalating cost of real estate was the original reason zero lot line subdivisions were created. Zero lot line subdivisions allow a greater density of construction without increasing fire hazards or fire risks. The proposed modification will allow the continued development of previously approved zero lot line subdivisions and allow the approval and development of future zero lot line subdivisions without an added burden and cost for which there has been no demonstrated need. There are thousands of units built in zero lot line subdivisions and there has been no demonstrated fire problem with the fire separation distance measured between building walls and projections versus a lot line.

The FBC-R 2007 with 2009 Supplements and the FBC-R 2010 contained a Florida specific amendment permitting the measurement of fire separation distance to be between building walls and/or projections for zero lot line subdivisions. The Florida specific amendment was unintentionally not resubmitted for the FBC-R 5th Edition. Thousands of lots in subdivisions throughout the state were approved and were developed or are undergoing development based on the provisions related to zero lot lines of the former Florida specific amendment. The estimated cost caused by this unintended consequence in the southern portion of Florida alone is estimated to exceed \$50M for no demonstrated need. The proposed change to the definition will rectify this problem by allowing the fire separation distance to be measured between buildings for zero lot line subdivisions as previously permitted.

#### Fiscal Impact Statement

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

No impact on enforcement of code.

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

Will result in decreased cost of \$2000 to \$3000 per unit.

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

Will allow continued development of previously approved zero lot line subdivisions without added burden and cost of providing fire resistance rated walls and soffits.

#### Requirements

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

The change will allow keeping the cost of housing down, thereby allowing more members of the public the opportunity to purchase a home.

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

The change to the code was not intentional on the part of the original proponent or the Florida Building Commission. Adoption of the proposed change will strengthen the code by readopting a proven method of construction while maintaining fire safety.

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

The change does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

##### Does not degrade the effectiveness of the code

The proposed change does not degrade the effectiveness of the code. Thousands of units have been constructed as permitted by the proposed code change and there has been no demonstrated problem of fire spread in such subdivisions due to exposure from neighboring buildings.

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

**FIRE SEPARATION DISTANCE.** The distance measured from the building face to one of the following:

1. To the closest interior *lot line*; or
2. To the centerline of a street, an alley or public way; or
3. To an imaginary line between two buildings on the *lot*; or
4. To an imaginary line between two buildings on adjacent lots when the exterior wall of one building is located on a zero lot line.

The distance shall be measured at a right angle from the face of the wall.

<b>Date Submitted</b>	12/28/2015	<b>Section</b>	202	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	2	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Modify definition of townhouse to incorporate Ch. 481 F.S.

**Rationale**

Brings the definition of townhouse in line with that contained in Chapter 481.203(7), Florida Statute

**Fiscal Impact Statement**

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

None.

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

None.

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

None.

**Requirements**

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

Yes, the proposal incorporates statutory provisions defining townhouses.

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

Yes, the proposal incorporates statutory provisions defining townhouses.

**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? No

**R202 TOWNHOUSE. A single-family *dwelling unit* not exceeding three stories in height constructed in a group of three or more attached units with property lines separating such units in which each unit extends from foundation to roof and with a *yard* or public way on not less than two sides.**

Ch. 481.203, F.S. (7) "Townhouse" is a single-family dwelling unit not exceeding three stories in height which is constructed in a series or group of attached units with property lines separating such units. Each townhouse shall be considered a separate building and shall be separated from adjoining townhouses by the use of separate exterior walls meeting the requirements for zero clearance from property lines as required by the type of construction and fire protection requirements; or shall be separated by a party wall; or may be separated by a single wall meeting the following requirements:

- (a) Such wall shall provide not less than 2 hours of fire resistance. Plumbing, piping, ducts, or electrical or other building services shall not be installed within or through the 2-hour wall unless such materials and methods of penetration have been tested in accordance with the Standard Building Code.
- (b) Such wall shall extend from the foundation to the underside of the roof sheathing, and the underside of the roof shall have at least 1 hour of fire resistance for a width not less than 4 feet on each side of the wall.
- (c) Each dwelling unit sharing such wall shall be designed and constructed to maintain its structural integrity independent of the unit on the opposite side of the wall.

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	311.3.2	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	2	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Adds exception to requirement for landing at other exterior doors.

#### Rationale

The change carries forward a Florida specific amendment and is in keeping with the existing code language to allow an outswing door without a landing to minimize water intrusion at exterior doors while allowing outswing doors for better wind design protection.

#### Fiscal Impact Statement

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

No, change does not degrade the code. Proposed language is consistent with the Florida Building Code 5th Edition (2014).

##### Does not degrade the effectiveness of the code

No, change does not degrade the code. Proposed language is consistent with the Florida Building Code 5th Edition (2014).

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

YES

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

NO

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

YES

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

NO

**R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 7 3/4 inches (196 mm) below the top of the threshold.**

Exception: A landing is not required where a stairway of two or fewer risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

The amendment is needed to minimize water intrusion at exterior doors and enhance wind resistant design.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	202	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

R310.4

**Summary of Modification**

Carries forward definition of Means of Escape

**Rationale**

This proposal and the companion change to Section R310.4 bring forward provisions that have been in the FBC since the first edition. The provisions are field tested and proven to be beneficial to Florida citizens.

**Fiscal Impact Statement**

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

This proposal and the companion change to Section R310.4 bring forward provisions that have been in the FBC since the first edition. The provisions are field tested and proven to be beneficial to Florida citizens.

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

**Requirements**

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not discriminate. Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not degrade the effectiveness of the code. Provisions are consistent with FBC-R, 5th Edition (2014).

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

YES

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

NO

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

OTHER

**Explanation of Choice**

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

**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

**MEANS OF ESCAPE.** A way out of a building or structure that does not conform to the strict definition of means of egress but does provide an alternate way out. A means of escape consists of a door, stairway, passage or hall providing a way of unobstructed travel to the outside at street or ground level. It may also consist of a passage through an adjacent non-lockable space, independent of and remotely located from the means of egress, to any approved exit.

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	302.1	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

Table R302.1(1)  
Table R302.1(2)

**Summary of Modification**

Delete Tables R302.1(1) and R302.1(2) and add Table R302.1

**Rationale**

Thousands of houses have been built in Florida and around the country using the 3 feet fire separation distance standard and there is no indication or information demonstrating that there is a problem with fire spread by exposure to neighboring fires due to inadequate fire separation. The changes to the fire separation distance provisions of the foundation code were not justified. The reasons given in the ICC Code Change Hearings were unsupported. The proponent stated several times the reason for the changes was to provide an incentive to provide fire sprinklers. Stated differently, the reason could just as easily have been "Make one type of construction more expensive so the builder will provide sprinklers". Mention is made that a separation of 5 feet is safer than a separation of 3 feet, but no justification of the statement is provided. (See Reason RB184-09/10 following.) Again, thousands, if not tens of thousands, of homes have been built around the country using the fire separation distance standard of 3 feet and with no reported problems of fire spread by exposure to neighboring fires due to inadequate fire separation.

In addition, thousands of lots throughout Florida have been platted and subdivisions approved at the local level. The change of the fire separation distance provisions in the code have resulted in millions of dollars in costs to allowed continued development. Whether the costs be for fire rating the underside of soffits or adding sprinklers, they were not costs considered during the planning of the subdivisions. Once again, there is no demonstrated need for the increase in the minimum fire separation distance.

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

There is no impact to the local entity relative to enforcement of the code.

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

Reverting to the 3 feet versus 5 feet fire separation distance will lower costs \$2000.00 to \$3000.00 per house without sacrificing safety.

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

The industry conservatively estimates a cost of \$2000.00 to \$3000.00 per house to provide a fire resistance rating to the underside of projections. The proposed change will eliminate the cost.

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

The proposal provides for public health, safety and welfare by reducing the cost of construction while maintaining the time proven fire separation distance requirements and providing options to the builder and the public desiring fire sprinkler protection.

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

The proposal improves the code by providing time proven fire separation distance requirements while including options to builders or the public desiring to provide fire sprinkler systems.

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

The proposal does not discriminate against materials, products, methods, or systems of construction.

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

The proposal does not degrade the effectiveness of the code as proven safety measures are reinstated.

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

Delete Tables R302.1(1) and R302.1(2) and replace with new table.

**SEE UPLOADED SUPPORT FILE**

**Delete Tables R302.1(1) and R302.1(2) and replace with new table.**

**TABLE R302.1 EXTERIOR WALLS**

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from the outside or calculated per Florida Building Code Building	0 feet
	Not fire-resistance rated	0 hours	3 feet <sup>a</sup>
Projections	Not allowed	N/A	< 2 feet
	Fire-resistance rated	1 hour on the underside <sup>b, c</sup>	2 feet <sup>a</sup>
	Not fire-resistance rated	0 hours	3 feet
Openings in walls	Not allowed	N/A	< 3 feet
	Unlimited	0 hours	3 feet <sup>a</sup>
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet <sup>a</sup>

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable

a. For residential subdivisions where all *dwelling*s are equipped throughout with an automatic sprinkler system installed in a c c o r d a n c e with Section P2904, the *fire separation distance* for nonrated exterior walls and rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining *lot* provides an open setback *yard* that is 6 feet or more in width on the opposite side of the property line.

b. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.

c. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

Thousands of houses have been built in Florida and around the country using the 3 feet fire separation distance standard and there is no indication or information demonstrating that there is a problem with fire spread by exposure to neighboring fires due to inadequate fire separation. The changes to the fire separation distance provisions of the foundation code were not justified. The reasons given in the ICC Code Change Hearings were unsupported. The proponent stated several times the reason for the changes was to provide an incentive to provide fire sprinklers. Stated differently, the reason could just as easily have been "Make one type of construction more expensive so the builder will provide sprinklers". Mention is made that a separation of 5 feet is safer than a separation of 3 feet, but no justification of the statement is provided. (See Reason RB184-09/10 following.) Again, thousands, if not tens of thousands, of homes have been built around the country using the fire separation distance standard of 3 feet and with no reported problems of fire spread by exposure to neighboring fires due to inadequate fire separation.

The reason is further flawed when considering Florida's specific circumstances. The reason for the change as submitted to the foundation code stated the provision would reduce construction costs. While doubtful in any case, this may be true in states where the IRC is adopted as published since all dwellings are all required to have fire sprinklers. However, the Florida Legislature has prohibited the adoption the sprinkler provisions as contained in the foundation code at the state and local level. This provision is considered an attempt to avoid the direction of the Florida Legislature.

The Reason provided with the change to the foundation code states the provision will reduce the cost of construction. The requirement to provide fire sprinklers in single family dwellings is conservatively estimated at \$1.50 to \$1.75 per square foot under ideal conditions. The foundation code is not a reduction in the cost of construction in Florida, but is a major increase in the cost of dwelling construction. The industry estimates the added cost of providing a fire resistance rating to the underside of soffits to be \$2000.00 to \$3000.00 per house. Another problem is there are no properly tested methods to provide the fire resistance rating on the underside of soffits for residential construction. The other alternate, fire sprinklers, cost \$1.50 to \$1.75 or more per square foot under ideal conditions such as adequate water supply. While the alternate to provide fireblocking of the eave space at the wall line may be less costly, in conditions where the attic is not sealed, the fireblocking creates problems with other code sections requiring a percentage of attic ventilation openings to be in the bottom portion of the attic space.

In addition, thousands of lots throughout Florida have been platted and subdivisions approved at the local level. The change of the fire separation distance provisions in the code have resulted in millions of dollars in costs to allowed continued development. Whether the costs be for fire rating the underside of soffits or adding sprinklers, they were not costs considered during the planning of the subdivisions. Once again, there is no demonstrated need for the increase in the minimum fire separation distance.

The proposed change eliminates the problems by reverting to the time proven fire separation distance provisions of the FBC 2010 and earlier editions and includes the options provided in the foundation code for sprinklers and fireblocking. In addition, the proposal adds the calculated fire resistance provisions of the Florida Building Code-Building and permits NFPA 13D sprinkler systems as an acceptable method when providing fire sprinklers.

REASON Code Change RB184-09/10:

“Reason: In the last code cycle, Proposal RB67-07/08 (which was withdrawn at the Final Action Hearings) provided as one of its sprinkler alternatives a reduction in exterior wall fire ratings that we believe still is a reasonable and justifiable sprinkler incentive. This proposal will provide a reasonable sprinkler alternative in the IRC when residential sprinkler systems are installed.

**This proposal provides a significant financial and design incentive for residential sprinklers.**

From a financial perspective, the proposal permits cost reductions related to exterior wall construction and, in the case of a planned community, could result in more developable lots. From a design advantage perspective, the proposal permits homes to have larger footprints without triggering fire-rated exterior walls and permits more flexible use of windows on walls facing property lines.

From a fire safety perspective, the proposed requirements under new Table R302.1(2) generally put the code back where it was in 2000 and 2003, so there is essentially no concession compared to how homes have been built under the IRC since the code was first published in 2000. In 2006, the IRC's fire separation distances for non-rated exterior walls were increased from 3 feet to 5 feet for the purpose of coordinating the IRC's residential separation distances with those in the IBC (Code Change G128-03/04).

History shows that residential sprinklers reliably limit fire spread to the room of origin, and with such protection, allowing the code to revert to a 3-foot separation distance provides a reasonable compensation for sprinklers. Certainly, the probability of a favorable outcome in the event of a fire is much better for a sprinklered building with a 3-foot separation versus a nonsprinklered building with a 5-foot separation, so encouraging sprinklers is a preferred approach.

The proposed garage requirement for R309.5 provides a limitation on the application of new Table R302.1(2) by only allowing use of sprinkler incentives in areas where sprinklers are provided. Normally, garages aren't required to have sprinklers; however, where a designer chooses to take advantage of reduced separation requirements for a garage wall, it is appropriate for the garage to be provided with sprinklers as a means of property protection. Proposed design criteria for sprinklers were derived from NFPA 13R Section 6.8.3.3, which addresses sprinkler protection for garages in buildings protected by NFPA 13R sprinkler systems. Often, garage protection is provided by dry pendent or dry sidewall sprinklers connected to a wet pipe sprinkler system.

The original Table R302.1(1) has been retained for jurisdictions that may adopt this edition of the Code without the mandatory sprinkler requirements that are presently in the 2009 IRC and for cases where there are additions or modifications to an existing non-sprinklered property.

**Cost Impact:** This code change proposal will decrease the cost of construction.”

<b>Date Submitted</b>	12/28/2015	<b>Section</b>	302.1	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

Table R302.1(1)  
Table R302.1(2)

**Summary of Modification**

Reinstates exception for zero lot line fire separation distance; Substitutes reference to Table R302.1 for reference to Tables R302.1(1) and R302.1(2).

**Rationale**

The proposal reinstates a previously adopted Florida specific amendment that was inadvertently not resubmitted for the current code. The escalating cost of real estate was the original reason zero lot line subdivisions were created. Zero lot line subdivisions allow a greater density of construction without increasing fire hazards or fire risks. The proposed modification will allow the continued development of previously approved zero lot line subdivisions and allow the approval and development of future zero lot line subdivisions without an added burden and cost for which there has been no demonstrated need. There are thousands of units built in zero lot line subdivisions and there has been no demonstrated fire problem with the fire separation distance measured between building walls and projections versus a lot line.

The FBC-R 2007 with 2009 Supplements and the FBC-R 2010 contained this Florida specific amendment permitting the measurement of fire separation distance to be between building walls and/or projections for zero lot line subdivisions. The Florida specific amendment was unintentionally not resubmitted for the FBC-R 5th Edition. Thousands of lots in subdivisions throughout the state were approved and were developed or are undergoing development based on the provisions related to zero lot lines of the former Florida specific amendment. The estimated cost caused by this unintended consequence in the southern portion of Florida alone is estimated to exceed \$50M for no demonstrated need. The proposed change to the definition will rectify this problem by reinstating the Florida specific amendment allowing the fire separation distance to be measured between buildings for zero lot line subdivisions as previously permitted.

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

No impact on enforcement of code.

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

Will result in decreased cost of \$2000 to \$3000 per unit.

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

Will allow continued development of previously approved zero lot line subdivisions without added burden and cost of providing fire resistance rated walls and soffits.

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

The change will allow keeping the cost of housing down, thereby allowing more members of the public the opportunity to purchase a home.

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

The change to the code was not intentional on the part of the original proponent or the Florida Building Commission. Adoption of the proposed change will strengthen the code by readopting a proven method of construction while maintaining fire safety.

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

The change does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

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

The proposed change does not degrade the effectiveness of the code. Thousands of units have been constructed as permitted by the proposed code change and there has been no demonstrated problem of fire spread in such subdivisions due to exposure from neighboring buildings.

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

YES

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

NO

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

OTHER

Explanation of Choice

The base code does not address the construction of zero lot line subdivisions. A considerable number of such subdivisions exist in South Florida and other regions of Florida. Thousands of lots have been previously approved through local development review processes. The cost of real estate was the original reason for the creation of zero lot line subdivisions to keep housing within the means of the public. The continued high cost of real estate, the fact that the base code does not address the situation, and the thousands of existing platted lots which have been approved at the local level demonstrate that there is a need to expand the foundation code to address zero lot line subdivisions.

**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

**R302.1 Exterior walls.** Construction, projections, openings and penetrations of *exterior walls* of *dwellings* and accessory buildings shall comply with Table R302.1(1); ~~or *dwellings* equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 shall comply with Table R302.1(2).~~

**Exceptions:**

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
2. Walls of *dwellings* and *accessory structures* located on the same *lot*.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the *lot*. Projections beyond the *exterior wall* shall not extend over the *lot line*.
4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.
6. Openings and roof overhang projections shall be permitted on the exterior wall of a building located on a zero lot line when the building exterior wall is separated from an adjacent building exterior wall by a distance of 6 feet or more, and the roof overhang projection is separated from an adjacent building projection by a distance of 4 feet or more, with 1-hour fire resistive construction on the underside of the overhang required, unless the separation between projections is 6 feet or more.

<b>Date Submitted</b>	1/1/2016	<b>Section</b>	302.1	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Retains exception from fire-resistance-rating for screen enclosure walls.

#### Rationale

This proposal retains a modification accepted in the 2010 FBC-R and in the current 5th Edition. A problem occurs when a homeowner wants to attach a screen enclosure to a two-family dwelling or townhouse. Some jurisdictions classify the screen enclosure wall as either an exterior wall or a dwelling unit separation wall requiring a one-hour fire resistant separation citing Section R302.1 or R302.3. Obviously, a fire rated wall of insect screen is not possible. A similar issue was addressed in the townhouse section at the ICC level by requiring the fire separation wall to be continuous through enclosed accessory structures (IRC &#167;R302.2.1)

IRC 2003 "R317.2.1 Continuity. The common wall for townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab and shall extend the full length of the common wall including walls extending through and separating attached accessory structures." (Emphasis provided.)

This proposal seeks to extend the allowance given to townhouses to single family dwellings. The proposal would allow roofs of insect screening, plastic, aluminum, or similar lightweight materials. However, the proposal specifies walls of insect screening and the use of wind break panels or other means of closing off the screen would not be permitted. The 25% flexible solid finishes is to allow for items such as kick plates.

#### Fiscal Impact Statement

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes, by providing a means for homeowners to attach a screen enclosure to the house without requiring fire resistance rating of the screen wall. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

The proposal improves the code by providing a means for a homeowner of a two family dwelling to attach a popular structure increasing the recreational space available to the homeowner and her or his family. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

The proposal does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014).

##### Does not degrade the effectiveness of the code

The proposal increases the effectiveness of the code by providing a means for a homeowner of a to attach a popular structure increasing the recreational space available to the homeowner and her or his family. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

YES

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

NO

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

OTHER

#### Explanation of Choice

The base code does not address the design of screen enclosures adequately and they are a common structure throughout Florida. The provisions were originally proposed to the code because some jurisdictions did not believe the code provided the flexibility for them to approve a wall of insect screening and aluminum columns between attached dwellings without a fire resistance-rating. The problem arose because of the large number of screen enclosures in the State of Florida requiring a Florida specific amendment to solve the problem

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

**R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).**

**Exceptions:**

- 1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.**
- 2. Walls of dwellings and accessory structures located on the same lot.**
- 3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.**
- 4. Detached garages accessory to a dwelling located within 2 feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding 4 inches (102 mm).**
- 5. Foundation vents installed in compliance with this code are permitted.**
- 6. Screen enclosure walls of insect screening with a maximum of 25% solid flexible finishes.**

<b>Date Submitted</b>	12/28/2015	<b>Section</b>	302.2	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modifies townhouse fire separation requirements to retain Florida specific amendment.

#### Rationale

The proposal: 1. Brings forward the provisions of the current code; 2. Incorporates statutory provisions related to townhouse construction and fire separation; 3. Clarifies that when providing walls per Section R302.1 the requirement is for separate walls meeting the requirements for zero clearance from the property line between units; 4. Brings the definition of townhouse in line with that contained in Florida Statute; and 5. Deletes an Exception to the requirements for structural independence for consistency with the other changes to the townhouse provisions and to agree with Florida Statute.

The statutory provisions related to townhouses must be considered by the code because adopting contrary provisions within the code creates a conflict for designers of townhouse projects. Townhouses are defined in Florida Statute and the statutory definition contains provisions addressing the property line between units, the fire resistant separation required, and the exception permitting a single two-hour fire resistance-rated wall. [Ch. 781.203(7)] There is no provision in statute permitting a reduction in the required two-hour fire resistance-rating of the common wall or the use of a when used to separate townhouses. There is no provision in statute permitting the use of a single one-hour fire resistance-rated wall to separate townhouse units. The Florida Legislature has spoken prohibiting the efforts to require fire sprinkler systems in single family dwelling construction.

#### Fiscal Impact Statement

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

No. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

##### Does not degrade the effectiveness of the code

No. the proposed amendment does not degrade the effectiveness of the code. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

YES

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

NO

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

OTHER

Explanation of Choice

The amendment incorporates statutory provisions related to town house construction.

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

~~R302.2 Townhouses. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Section R302.2, Item 1 or 2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.~~

~~1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263.~~

~~2. Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E~~

~~119 or UL 263.~~

Each townhouse shall be considered a separate building and shall be separated by separate fire-resistance rated exterior wall assemblies meeting the requirements of zero clearance from property lines of Section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119, UL 263, or in accordance with the *Florida Building Code-Building* Section 727 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall unless such materials and methods of penetration comply with Section R302.4. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

**R302.2.4 Structural independence. Each individual *townhouse* shall be structurally independent.**

**Exceptions:**

- 1. Foundations supporting *exterior walls* or common walls.**
- 2. Structural roof and wall sheathing from each unit fastened to the common wall framing.**
- 3. Nonstructural wall and roof coverings.**
- 4. Flashing at termination of roof covering over common wall.**
- 5. *Townhouses* separated by a common wall as provided in Section R302.2, Item 1 or 2.**

<b>Date Submitted</b>	12/28/2015	<b>Section</b>	302.2	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modifies townhouse fire separation requirements to retain Florida specific amendment.

#### Rationale

The proposal: 1. Brings forward the provisions of the current code; 2. Incorporates statutory provisions related to townhouse construction and fire separation; 3. Clarifies that when providing walls per Section R302.1 the requirement is for separate walls meeting the requirements for zero clearance from the property line between units; 4. Brings the definition of townhouse in line with that contained in Florida Statute; and 5. Deletes an Exception to the requirements for structural independence for consistency with the other changes to the townhouse provisions and to agree with Florida Statute.

The statutory provisions related to townhouses must be considered by the code because adopting contrary provisions within the code creates a conflict for designers of townhouse projects. Townhouses are defined in Florida Statute and the statutory definition contains provisions addressing the property line between units, the fire resistant separation required, and the exception permitting a single two-hour fire resistance-rated wall. [Ch. 781.203(7)] There is no provision in statute permitting a reduction in the required two-hour fire resistance-rating of the common wall or the use of a when used to separate townhouses. There is no provision in statute permitting the use of a single one-hour fire resistance-rated wall to separate townhouse units. The Florida Legislature has spoken prohibiting the efforts to require fire sprinkler systems in single family dwelling construction.

#### Fiscal Impact Statement

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

No. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

##### Does not degrade the effectiveness of the code

No. the proposed amendment does not degrade the effectiveness of the code. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

~~R302.2 Townhouses. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Section R302.2, Item 1 or 2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.~~

~~1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263.~~

~~2. Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E~~

~~119 or UL 263.~~

Each townhouse shall be considered a separate building and shall be separated by separate fire-resistance rated exterior wall assemblies meeting the requirements of zero clearance from property lines of Section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119, UL 263, or in accordance with the *Florida Building Code-Building* Section 727 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall unless such materials and methods of penetration comply with Section R302.4. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

**R302.2.4 Structural independence. Each individual *townhouse* shall be structurally independent.**

**Exceptions:**

- 1. Foundations supporting *exterior walls* or common walls.**
- 2. Structural roof and wall sheathing from each unit fastened to the common wall framing.**
- 3. Nonstructural wall and roof coverings.**
- 4. Flashing at termination of roof covering over common wall.**
- 5. *Townhouses* separated by a common wall as provided in Section R302.2, Item 1 or 2.**

<b>Date Submitted</b>	1/1/2016	<b>Section</b>	302.3	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Retains exception for two-family swellings fire rating of screen enclosure walls.

#### Rationale

This proposal retains a modification accepted in the 2010 FBC-R and in the current 5th Edition. A problem occurs when a homeowner wants to attach a screen enclosure to a two-family dwelling or townhouse. Some jurisdictions classify the screen enclosure wall as either an exterior wall or a dwelling unit separation wall requiring a one-hour fire resistant separation citing Section R302.1 or R302.3. Obviously, a fire rated wall of insect screen is not possible. A similar issue was addressed in the townhouse section at the ICC level by requiring the fire separation wall to be continuous through enclosed accessory structures (IRC &#167;R302.2.1)

IRC 2003 "R317.2.1 Continuity. The common wall for townhouses shall be continuous from the foundation to the underside of the roof sheathing, deck or slab and shall extend the full length of the common wall including walls extending through and separating attached accessory structures." (Emphasis provided.)

This proposal seeks to extend the allowance given to townhouses to single family dwellings. The proposal would allow roofs of insect screening, plastic, aluminum, or similar lightweight materials. However, the proposal specifies walls of insect screening and the use of wind break panels or other means of closing off the screen would not be permitted. The 25% flexible solid finishes is to allow for items such as kick plates.

#### Fiscal Impact Statement

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. Proposal is consistent with Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes, by providing a means for homeowners to attach a screen enclosure to the house without requiring fire resistance-rating of the screen wall. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

The proposal improves the code by providing a means for a homeowner of a two family dwelling to attach a popular structure increasing the recreational space available to the homeowner and her or his family. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

The proposal does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

##### Does not degrade the effectiveness of the code

The proposal increases the effectiveness of the code by providing a means for a homeowner of a to attach a popular structure increasing the recreational space available to the homeowner and her or his family. The provision is consistent with the Florida Building Code-Residential, 5th Edition (2014)

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

YES

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

NO

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

OTHER

#### Explanation of Choice

The base code does not address the design of screen enclosures adequately and they are a common structure throughout Florida. The provisions were originally proposed to the code because some jurisdictions did not believe the code provided the flexibility for them to approve a wall of insect screening and aluminum columns between attached dwellings without a fire resistance-rating. The problem arose because of the large number of screen enclosures in the State of Florida requiring a Florida specific amendment to solve the problem.

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

**R302.3 Two-family dwellings.** *Dwelling units* in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119 or UL 263. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the *exterior wall*, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

**Exceptions:**

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13.

2. Wall assemblies need not extend through *attic* spaces when the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board and an *attic* draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwellings*. The structural

framing supporting the ceiling shall also be protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

3. Screen enclosure walls of insect screening with a maximum of 25 percent solid flexible finishes.

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	302.5.2	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Allow Class 0 or Class 1 duct board for dwelling/garage penetration.

#### Rationale

This is a proposal to carry forward a Florida specific amendment that has been in the Florida Building Code-Residential since the 2004 Edition. The original proposal was based on testing showing the method to be equivalent in performance to the requirement of the foundation code. The data was submitted and accepted at the time. There have been no known reported problems or incidents in the many years the Florida Building Code has permitted the use of 1 inch (25.4 mm) minimum rigid nonmetallic Class 0 or Class 1 duct board for duct penetrations between dwellings and garages.

#### Fiscal Impact Statement

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

No fiscal impact on cost of enforcement. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

: No fiscal impact on building and property owners. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

No fiscal impact on industry. Proposed language is in the Florida Building Code, 5th Edition (2014).

#### Requirements

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

The proposal carries forward a long standing Florida specific amendment that has a reasonable and substantial connection with the health, safety, and welfare of the general public because it provides another tested method of duct penetration between a dwelling and a garage.

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

The proposal strengthens the code by providing an alternate that has demonstrated by testing that it provides an equivalent method to that contained in the foundation code.

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

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

##### Does not degrade the effectiveness of the code

Does not degrade the effectiveness of the code.

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

YES

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

NO

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

OTHER

#### Explanation of Choice

The proposal carries forward a Florida specific amendment allowing a method equivalent to that of the foundation code that has been in all editions of the code since the Florida Building Code-Residential. 2004 Edition. Approval of the proposal will continue to allow the option of an equivalent method of safeguarding penetrations between a dwelling and its garage by ductwork.

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 (25.4 mm) minimum rigid nonmetallic Class 0 or Class 1 duct board, or other *approved* material and shall have no openings into the garage.

<b>Date Submitted</b>	12/29/2015	<b>Section</b>	310.2	<b>Proponent</b>	Jeff Inks
<b>Chapter</b>	3	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

**Summary of Modification**

Incorporates a new section to R310.2 (R3102.5) regarding provisions for EERO window replacement that was approved by ICC for 2015 edition but was inadvertently excluded from the published edition but has been published by ICC for the 2015 edition as an errata.

**Rationale**

As noted in the summary, this new section was approved by the ICC for Section 310 of the 2015 IRC but was inadvertently excluded from the published edition as were a number of other amendments not related to this amendment, but have since been published by the ICC as an errata. The reason statement for the original ICC proposal (RB122-13) is being submitted as a support file as additional information/substantiation.

**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**

Will ensure property owners do not incur unnecessary costs when replacing windows that are provided to meet EERO requirements.

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

None

**Requirements**

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

Yes. Please see attached reason statement

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

Yes. Please see attached reason statement

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

Yes. Please see attached reason statement

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

Please see attached reason statement.

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

**R310.2.5 Replacement windows.** Replacement windows installed in buildings meeting the scope of this code shall be exempt from the requirements of Sections R310.2.1 and R310.2.2, provided the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
2. The replacement window is not part of a change of occupancy.

First, while this provision is applicable to existing construction (for the reasons stated below), it is being proposed for inclusion in the main body of the IRC because window replacements are more common than other significant changes made to existing one- or two-family homes and townhomes, and in addition, for consistency with what is being proposed for IRC Appendix J and IEBC Chap 7 by us and the ICC CTC.

The proposed provisions and language are also based on Minnesota's residential code which does effectively incorporate the provisions into the main body of the code in the same location (R310.1.5) being proposed above.

The provisions and language have also already been approved for IEBC Chap. 4 which occurred during the Group A proceedings.

Most importantly, it's important to note that the provisions do not allow for any decrease in safety and rather will help ensure improvements in safety can be made.

More specifically, the intent of this proposal is to ensure that the IRC does not discourage or prevent improvements in emergency escape and rescue openings, especially for fire safety, in older residential occupancies by requiring replacement windows to meet all of the provisions of Section 310 when doing so can only be accomplished by increasing the size of the rough opening or altering the interior wall.

Because many of these older buildings were constructed under codes that did not include the same emergency escape and rescue opening provisions that the IRC now requires for new construction, the only way to fully meet all of the requirements of Section 310 for new construction if required when windows are replaced is to enlarge the rough opening and/or make significant alterations to the interior wall in order to accommodate any increase in window size or lowering of a sill.

At the very least, the significant cost and design challenges of altering the rough opening and/or interior wall can discourage or prevent window replacement and at worst can discourage or prevent the replacement of older windows that are harder to operate or are inoperable all together because of their age or poor maintenance and, that are significantly less energy efficient. When that happens, improvements to safety as well as energy efficiency are needlessly compromised.

Furthermore and on the whole, while some bedroom windows in older homes may not provide the full clear opening that is required for new construction or may have a sill height above 44 inches, they nonetheless still provide a viable emergency and escape rescue opening which is the primary intent of the code. Replacement of these windows with the same type of operating window or other type that can provide an equal or greater clear opening than the existing window -- even if they do not fully meet the clear opening or sill height requirements of Section 310 -- is always an improvement in safety, especially when a replacement opening can provide a larger clear opening than the existing window. Such improvements in safety should not be discouraged or prevented by overly onerous requirements for replacement windows.

This proposal will help ensure that doesn't happen by providing limited exceptions to the requirements of Section 310 that can only be applied when certain conditions are met and that as already noted, will not result in a decrease in safety.

The requirements for new construction that emergency escape and rescue openings be provided as well as the operational requirements of Section 310.1.4 are maintained and still applicable to replacement windows.

First, while this provision is applicable to existing construction (for the reasons stated below), it is being proposed for inclusion in the main body of the IRC because window replacements are more common than other significant changes made to existing one- or two-family homes and townhomes, and in addition, for consistency with what is being proposed for IRC Appendix J and IEBC Chap 7 by us and the ICC CTC.

The proposed provisions and language are also based on Minnesota's residential code which does effectively incorporate the provisions into the main body of the code in the same location (R310.1.5) being proposed above.

The provisions and language have also already been approved for IEBC Chap. 4 which occurred during the Group A proceedings.

Most importantly, it's important to note that the provisions do not allow for any decrease in safety and rather will help ensure improvements in safety can be made.

More specifically, the intent of this proposal is to ensure that the IRC does not discourage or prevent improvements in emergency escape and rescue openings, especially for fire safety, in older residential occupancies by requiring replacement windows to meet all of the provisions of Section 310 when doing so can only be accomplished by increasing the size of the rough opening or altering the interior wall.

Because many of these older buildings were constructed under codes that did not include the same emergency escape and rescue opening provisions that the IRC now requires for new construction, the only way to fully meet all of the requirements of Section 310 for new construction if required when windows are replaced is to enlarge the rough opening and/or make significant alterations to the interior wall in order to accommodate any increase in window size or lowering of a sill.

At the very least, the significant cost and design challenges of altering the rough opening and/or interior wall can discourage or prevent window replacement and at worst can discourage or prevent the replacement of older windows that are harder to operate or are inoperable all together because of their age or poor maintenance and, that are significantly less energy efficient. When that happens, improvements to safety as well as energy efficiency are needlessly compromised.

Furthermore and on the whole, while some bedroom windows in older homes may not provide the full clear opening that is required for new construction or may have a sill height above 44 inches, they nonetheless still provide a viable emergency and escape rescue opening which is the primary intent of the code. Replacement of these windows with the same type of operating window or other type that can provide an equal or greater clear opening than the existing window -- even if they do not fully meet the clear opening or sill height requirements of Section 310 -- is always an improvement in safety, especially when a replacement opening can provide a larger clear opening than the existing window. Such improvements in safety should not be discouraged or prevented by overly onerous requirements for replacement windows.

This proposal will help ensure that doesn't happen by providing limited exceptions to the requirements of Section 310 that can only be applied when certain conditions are met and that as already noted, will not result in a decrease in safety.

The requirements for new construction that emergency escape and rescue openings be provided as well as the operational requirements of Section 310.1.4 are maintained and still applicable to replacement windows.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	310.4	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

R202

**Summary of Modification**

Carries forward provision allowing protection of openings during threat of storm.

**Rationale**

This proposal carries forward provisions that have been in the FBC since the first edition. The provisions are field tested and proven to be beneficial to Florida citizens.

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

The proposal will have no fiscal impact on code enforcement. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014).

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Yes, Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not discriminate. Provisions are consistent with FBC-R, 5th Edition (2014).

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

Does not degrade the effectiveness of the code. Provisions are consistent with FBC-R, 5th Edition (2014).

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

YES

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

NO

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

OTHER

**Explanation of Choice**

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

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

**R310.4 Bars, grilles, covers and screens.** Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.2.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening. The temporary installation or closure of storm shutters, panels, and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section R310.1.1. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side-hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without passing through a lockable door not under their control.

<b>Date Submitted</b>	12/30/2015	<b>Section</b>	310.4	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

**Related Modifications**

R202

**Summary of Modification**

Carries forward provision allowing protection of openings during threat of storm with clarifying modification.

**Rationale**

The lack of specificity in the language has resulted in A misunderstanding of the intent of the section. Some jurisdictions and some designers refuse to allow protection of the required egress door which is contrary to the intent of the original change. (See Uploaded Rationale.)

**Fiscal Impact Statement**

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

No impact. The proposal is consistent with Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

**Requirements**

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

Yes. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening.

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

The proposal does not discriminate. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening

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

The proposal does not degrade the effectiveness of the code. The proposal is consistent with the Florida Building Code, 5th Edition (2014). The proposal is modified from previous editions to clarify the intent of the provision allowing protection of openings during the time a storm is threatening

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

YES

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

NO

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

OTHER

**Explanation of Choice**

The State of Florida is the only state of the contiguous states where the entire land mass is a hurricane prone region. Historically, Florida has endured numerous land falls from hurricanes and special attention is merited for the installation of hurricane protection. The provisions are carried over from previous editions and are field tested and proven to be effective. Provisions are consistent with FBC-R, 5th Edition (2014).

**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

**R310.4 Bars, grilles, covers and screens.** Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.2.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening. The temporary installation or closure of storm shutters, panels, and other approved hurricane protection devices shall be permitted on emergency escape and rescue openings and egress doors during the threat of a storm. Such devices shall not be required to comply with the operational constraints of Section R310.1.1 or R312.2. While such protection is provided, at least one means of escape from the dwelling or dwelling unit shall be provided. The means of escape shall be within the first floor of the dwelling or dwelling unit and shall not be located within a garage without a side-hinged door leading directly to the exterior. Occupants in any part of the dwelling or dwelling unit shall be able to access the means of escape without passing through a lockable door not under their control.

The definition was taken from the Florida Fire Prevention Code. A major difference between the building and fire prevention code is that the building code requires a single exit from dwellings and dwelling units while the fire prevention code does not require an exit. The fire prevention code requires two means of escape, one of which may be an emergency escape and rescue opening. The fact that the only required egress for dwellings in the fire prevention code is the means of escape indicates this arrangement is adequate for life safety.

The intent of the original submittal was to allow all openings to be protected. It does not make a lot of sense to protect all the openings except one of the largest openings in the exterior wall. The modification to reference egress doors is intended to clarify this intent. In the majority of the cases there has been no problem. However, the lack of specificity in the language has resulted in some jurisdictions and some designers to refuse to allow protection of the required egress door which is contrary to the intent of the original change. This is a special provision applicable only during the threat of a storm. The intent was to allow the protection of all exterior openings while providing a single means of escape from the dwelling. The proposed change will clarify that intent.

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	311.3.1	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	No	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Retain Florida specific amendment allowing exterior door to swing over step down,

#### Rationale

This is a proposal to carry forward a long standing Florida specific amendment from previous editions of the code. The change was previously approved and is needed because Florida is subject to high wind events such as hurricanes. In addition, thunderstorms with attendant high wind gusts lash the state frequently with wind driven rain. Exterior doors that swing out are more readily able to resist wind pressures due to the ability to provide a stop the full length of the jambs of the door. The step down is a very effective means for providing protection from wind driven rain which occurs during our frequent thunderstorms as well as hurricane and flooding events.

#### Fiscal Impact Statement

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

No fiscal impact to local entity relative to code enforcement. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

No fiscal impact to local entity relative to code enforcement. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

No fiscal impact to industry relative to the cost of compliance with the code. Proposed language is in the Florida Building Code, 5th Edition (2014).

#### Requirements

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

The proposal has a reasonable and substantial connection with the health, safety, and welfare of the general public by carrying forward a Florida specific amendment that provides exterior doors which more readily will resist wind pressures due to the arrangement of stops.

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

The proposal strengthens the code by carrying forward a Florida specific amendment that provides exterior doors which more readily will resist wind pressures due to the arrangement of stops.

##### 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

The proposal does not degrade the effectiveness of the code.

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

YES

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

NO

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

YES

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

NO

**R311.3.1 Floor elevations at required egress doors. Landings or finished floors at the required egress door shall not be more than 1-1/2 inches (38 mm) lower than the top of the threshold.**

**Exception: The landing or floor on the exterior side shall be not more than 7-3/4 inches (196 mm) lower than the top of the threshold ~~provided the door does not swing over the landing or floor.~~**

**Remainder of Section unchanged.**

The fact that the entire state is a hurricane prone region coupled with the frequent thunderstorms with attendant high winds that occur in Florida demand the use of exterior out-swing doors. The step down is frequently relied upon to provide protection against wind driven rain.

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	311.7.6	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	Yes
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Landings for stairways. Add reference to R311,3 for exterior door step down provisions.

#### Rationale

The change carries forward a Florida specific amendment and is in keeping with the existing code language to allow an outswing door without a landing to minimize water intrusion at exterior doors while allowing outswing doors for better wind design protection.

#### Fiscal Impact Statement

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

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

None. Proposed language is in the Florida Building Code, 5th Edition (2014).

#### Requirements

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

Yes. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

No. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

##### Does not degrade the effectiveness of the code

Does not degrade code. Proposed language is consistent with the Florida Building Code, 5th Edition (2014).

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

YES

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

NO

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

YES

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

NO

**R311.7.6 Landings for stairways.** There shall be a floor or landing at the top and bottom of each stairway. The minimum width perpendicular to the direction of travel shall be no less than the width of the flight served. Landings of shapes other than square or rectangular shall be permitted provided the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the minimum depth in the direction of travel shall be not less than 36 inches (914 mm).

**Exceptions:**

- 1. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.**
- 2. See Section R311.3 for exterior doors where a step down is provided.**

**Continued inclusion of the amendment is necessary due to Florida's climate to minimize water intrusion at exterior doors and enhance wind resistant design.**

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	312.1.1	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	No	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modify measurement for determining where guards are required.

#### Rationale

The requirement to measure the difference in elevation between a walking surface and the adjacent grade has been in the code for many years. When the requirement was changed in the base code there was no justification or proof that a problem existed. At no time during the public hearing, nor the Final Action Hearing was any technical justification presented to substantiate the change requiring the building official to measure 36 inches away from the leading edge of the walking surface or tread to determine when a guardrail should or should not be required. There are no studies that can support claims that this will have an effect on reducing possible injuries. While the proponent promoted this as a means for consistent enforcement of the guard requirements, there is no evidence of increased risk to the safety of the occupant if measuring from the edge of the walking surface to grade below as has been the practice for many, many years. This proposal is consistent with the intent expressed in Florida Statute of providing requirements which will allow effective and reasonable protection for public safety, health, and general welfare for all the people of Florida at the most reasonable cost to the consumer. [Ch. 553.72(1), F.S.]

#### Fiscal Impact Statement

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

The proposed change would reduce the time required for the inspection thereby reducing the cost to provide the inspection.

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

The cost of compliance would be reduced in cases where the difference in elevation was not located in an area posing an immediate fall danger.

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

The cost of compliance to industry would be reduced in cases where the difference in elevation was not located in an area posing an immediate fall danger.

#### Requirements

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

The proposal has a reasonable connection with the safety of the general public by continuing to require guards where an immediate danger from a fall is presented by the difference in elevation between a walking surface and the adjoining grade.

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

The proposal strengthens the code by eliminating the unnecessary extension of the horizontal distance from a walking surface to a difference in elevation to a point where no danger is presented.

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

The proposal does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

##### Does not degrade the effectiveness of the code

The proposal does not degrade the effectiveness of the code.

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

**R312.1.1 Where required. Guards shall be located along open-sided walking surfaces of all decks, porches, balconies, including stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be counted as a guard.**

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	312.2	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modify window fall protection provisions.

#### Rationale

This change will allow the builder and the building official to use their judgment for when these devices shall be installed and insure that where these devices are provided they will conform with the referenced industry standard.

During the 2007/2008 Code Development Cycle and the International Code Council's Code Technology Committee (CTC) meetings, the Window and Door Manufacturers Association (WDMA) presented credible information that raised questions and concerns regarding the established minimum window sill heights. Despite the Consumer Product Safety Commission (CPSC) reports indicating a decrease in the number of injuries and deaths from children falling from windows, WDMA had discovered that in Denver, Colorado, one of the few areas in the country that has had a minimum sill height requirement for the past decade, the number of child injuries and deaths were increasing. One of the many concerns is that there is the potential for the occupant to place furniture or other objects under the window that a child could climb upon. Code provisions cannot regulate the actions of building occupants once the construction is complete and the building is occupied.

It is our opinion that the foundation code body needs to earnestly review the information presented by the WDMA and reconsider their position on minimum window sill heights. Furthermore, the recommendation to require window opening limiting devices contradicts conclusions of the CTC Work Study Group. It was clear to many in the CTC Work Group that public education was the most effective means of reducing the number of falls by children through windows. The proposal provides for an option which may be exercised by home buyers with young children without placing the burden on home buyers that do not have small children.

#### Fiscal Impact Statement

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

Approval of the proposal will result in savings in time needed for inspections and verification of documentation to ascertain installed devices are approved and operate properly.

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

Approval of the proposed change will result in a savings by not requiring the installation of window fall protection, while leaving to option to the builder and consumer and providing guidance when the option is exercised.

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

Approval of the proposed change will result in a savings to the builder which will be passed on to the home buyer by not requiring the installation of window fall protection while leaving to option to the builder and consumer and providing guidance when the option is exercised.

#### Requirements

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

The proposal gives homeowners the option of providing fall protection and provides standards to follow when the option is exercised. Not all home buyers will have children in their homes and the provision is an added cost and inconvenience to those that have no need for the protection

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

The proposed change improves the code by making a universal requirement an option for home buyers having a need and desire for the protection. Where exercised, the proposal provides guidance for the devices.

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

The proposal does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

##### Does not degrade the effectiveness of the code

This proposal is consistent with the intent of the code expressed in Florida Statute of providing requirements which will allow effective and reasonable protection for public safety, health, and general welfare for all the people of Florida at the most reasonable cost to the consumer.

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

**R312.2 Window fall protection. Where window fall protection devices are provided, the device shall be provided installed in accordance with Sections R312.2.1 and R312.2.2.**

**~~R312.2.1 Window sills. In dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, the operable window shall comply with one of the following:~~**

**~~1. Operable windows with openings that will not allow a 4-inch diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.~~**

**~~2. Operable windows that are provided with window fall prevention devices that comply with ASTM F 2090.~~**

**~~3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.~~**

**R312.2.2 R312.2.1 Window opening control devices. Window opening control devices shall comply with ASTM F 2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit to less than the area required by Section R310.2.1.**

<b>Date Submitted</b>	12/27/2015	<b>Section</b>	325.5	<b>Proponent</b>	Joseph Belcher
<b>Chapter</b>	3	<b>Affects HVHZ</b>	Yes	<b>Attachments</b>	No
<b>TAC Recommendation</b>	Pending Review				
<b>Commission Action</b>	Pending Review				

#### Related Modifications

#### Summary of Modification

Modify wall height requirements; Add P2904 sprinkler system

#### Rationale

The intent of the proposal is to clarify that a wall height consistent with the height requirements for guards is allowable, and to provide the option of using the prescriptive sprinkler system contained within the code.

While the existing language says the wall shall be not more than 42 inches, it is feared that will be considered the minimum requirement. Further, with no lower limit specified a 24 inch wall arguably satisfies the requirement of not more than 42 inches. The intent is to clarify that a wall that is the same height as the requirement for guards is acceptable.

#### Fiscal Impact Statement

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

No impact to cost to local entity relative to enforcement.

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

No cost impact to owners relative to cost of compliance with code as proposal clarifies intent of section.

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

No impact to industry as changes are for clarification and to allow additional options.

#### Requirements

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

The proposal by clarifying the allowable wall height for a mezzanine and allowing an additional sprinkler system type has a positive influence on the health, safety, and welfare of the general public.

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

The proposal strengthens and improves the code by clarifying certain provisions and permitting the use of a type of sprinkler system established within the code.

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

The code does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.

##### Does not degrade the effectiveness of the code

The proposal does not degrade the effectiveness of the code.

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

**R325.5 Openness.**

Mezzanines shall be open and unobstructed to the room in which they are located except for walls not less than 36 inches (914 mm) in height and not more than 42 inches (1067 mm) in height, columns and posts.

**Exceptions:**

1. Mezzanines or portions thereof are not required to be open to the room in which they are located, provided that the aggregate floor area of the enclosed space is not greater than 10 percent of the mezzanine area.
2. In buildings that are not more than two stories above grade plane and equipped throughout with an automatic sprinkler system in accordance with NFPA 13R or NFPA 13D or P2904 of this code, a mezzanine having two or more means of egress shall not be required to be open to the room in which the mezzanine is located.