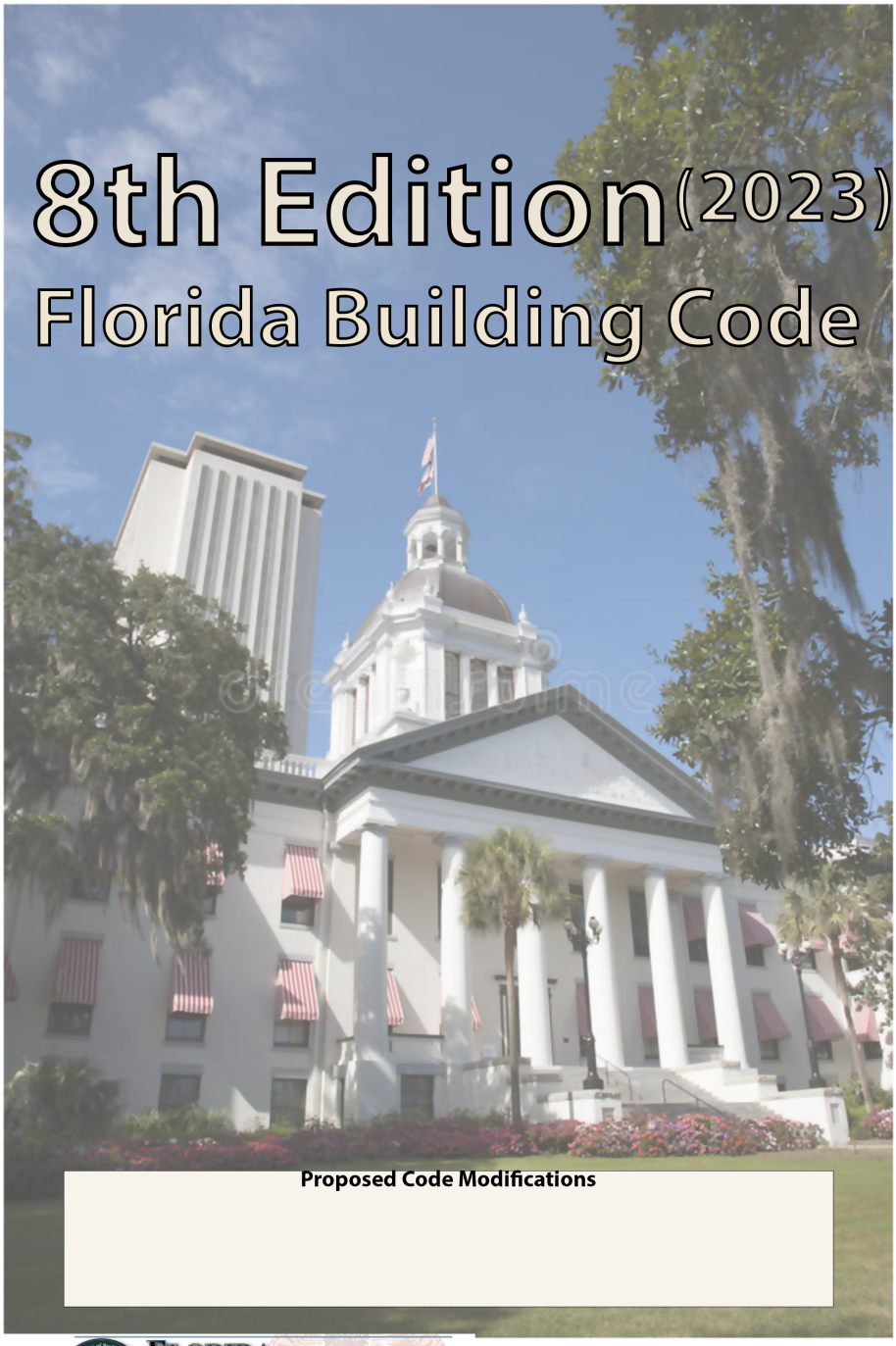


FLORIDA BUILDING COMMISSION
"Stronger Codes Through Science and Consensus"

dbpr Department of Business & Professional Regulation

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**850-487-1824**

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

1

### SP10335

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | Yes | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies the intent and application of the disaster preparedness construction standards for hospitals.

### Rationale

This clarifies to the user these requirements are not only to protect people inside the building, but also to protect the building from damage so it can remain functional as a health care facility after the emergency event has ceased and not have a prolonged impact of the ability to provide safe and functional health care facilities throughout the state.

### Fiscal Impact Statement

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

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

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

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

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

There is no impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

## Alternate Language

## 1st Comment Period History

P10335-A1

**Proponent** James gregory **Submitted** 4/13/2022 9:16:10 AM **Attachments** Yes

Rationale:

This comment and revised text deletes the word "substantial" from the proposed modification because the word "substantial" has a specific meaning in the FBC that was not intended to be applied to this section.

## Fiscal Impact Statement

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

There is no impact to local entity.

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

There is no impact to building and property owners.

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

There is no impact to industry. Comment is for clarification only.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Comment is for clarification and improves he health, safety, and welfare of the general public.

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

Comment is for clarification and improves the codes for that reason.

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

Comment does not discriminate against materials, products, methods, or systems of construction

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

Comment is for clarification of intent and does not degrade the effectiveness of the code.

**Mod SP10335, approved as modified A1 Only**

449.3. These minimum standards are intended to increase the ability of the facility to be structurally capable of serving as a shelter for patients, staff and the family of patients and staff, ~~and~~ equipped to be self-supporting during and immediately following a disaster, and to be protected from damage so the facility can be reoccupied and used for its intended purpose immediately after any required building evacuation.

(SP10335 A1)

449.3. These minimum standards are intended to increase the ability of the facility to be structurally capable of serving as a shelter for patients, staff and the family of patients and staff, ~~and~~ equipped to be self-supporting during and immediately following a disaster, and to be protected from ~~substantial~~ damage so the facility can be reoccupied and used for its intended purpose immediately after any required building evacuation.

449.4.2 Disaster preparedness construction standards.
The following construction standards are in addition to the physical plant requirements described in Sections 449.2 through 449.3. These minimum standards are intended to increase the ability of the facility to be structurally capable of serving as a shelter for patients, staff and the family of patients and staff, ~~and~~ equipped to be self-supporting during and immediately following a disaster, and to be protected from substantial damage so the facility can be reoccupied and used for its intended purpose immediately after any required building evacuation.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

2

### SP10338

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | Yes | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

**General Comments Yes** **Alternate Language Yes**

### Related Modifications

### Summary of Modification

Revises the hurricane surge requirements for the location of a new hospital.

### Rationale

As the events have shown over the past few years, flooding caused by more intense storm events has been increasing. Florida is very susceptible to this type of flooding from surge events and must take action now to protect the health care infrastructure from all storm and high water surge events for all categories of hurricanes including category 5.

### Fiscal Impact Statement

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

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

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

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

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

May require additional cost to build in a category 5 surge zone.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Improves the 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**

Strengthens or improves the code from high wind and flooding events.

**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**

Improves the effectiveness of the code for public safety.

## Alternate Language

# 1st Comment Period History

SP10338-A1

**Proponent** scott waltz **Submitted** 4/15/2022 3:51:28 PM **Attachments** Yes

Rationale:

Strengthens the code by requiring elevation to above the 500 year flood elevation and removes language that can be misinterpreted to apply these requirements only to facilities located in the flood hazard area as defined by section 1612.

## 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**

May increase costs of construction of new facilities in areas prone to flooding

**Impact to small business relative to the cost of compliance with code**

## 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**

It strengthens the code.

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

It does not.

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

It does not.

# 2nd Comment Period

SP10338-G1

Proponent James gregory Submitted 8/23/2022 2:30:11 PM Attachments No

Comment:

This comment is in support of this provision to raise the height of the surge inundation for hospital sites from Category 3 to Category 5 hurricanes. Category 3 was picked in 1995 as the original rule was being developed, not because it was thought Florida would never be impacted by another Category 5 hurricane, but because it was thought, at the time, the rule was going to apply to both new and existing hospitals. The rule, which became part of the Florida Building Code in 2000, does not include existing facilities that are not adding any building additions. And since that time, it is well recognized that weather events are becoming more severe, Sea Level is rising, and Category 5 storms do and will continue to impact Florida. It only makes sense to revise the level of hurricane surge inundation from Category 3 to Category 5 Hurricane inundation to help Florida continue to protect its essential health care facilities and to protect patients from flooding and displacement.

SP10338 A1

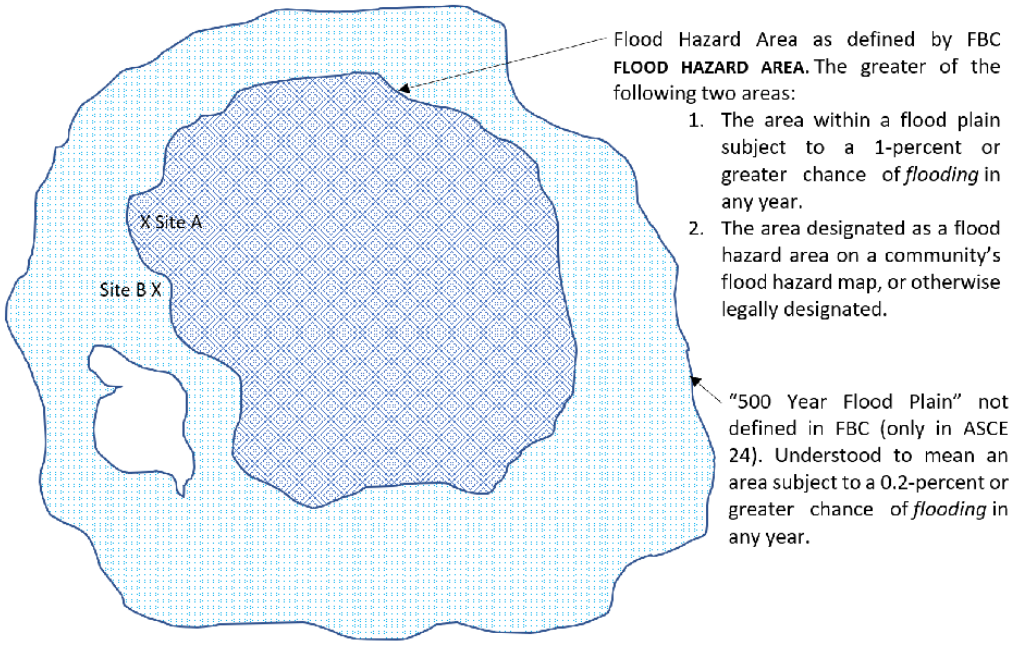
449.4.2.2.1

~~Except as permitted by Section 1612 of this code,~~ t<u>T</u>he lowest floor of all new facilities shall be elevated to <u>not lower than</u> the base flood elevation as defined in ~~Section 1612 of~~ this code, plus 2 feet, <u>the 500 year flood elevation as defined in ASCE 24,</u> or to the height of hurricane Category ~~3~~<u>5</u> (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

~~Except as permitted by Section 1612 of this code,~~ tThe lowest floor of all new facilities shall be elevated to not lower than the base flood elevation as defined in ~~Section 1612 of~~ this code, plus 2 feet, the 500 year flood elevation as defined in ASCE 24, or to the height of hurricane Category ~~3~~5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

449.4.2.2.1 Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category ~~3~~ 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

The current text's use of the base flood elevation as reference elevation for the +2 feet increase applies whether the site is a flood hazard area or not. At least that my understanding of the intent (although the "*Except as permitted by Section 1612 of this code*" language may nullify the requirement outside of flood hazard areas). Under this intent, both Site A and Site B in the diagram below require a floor elevation of 2 feet above the base flood elevation. The existing text does not address the 500 year flood elevation, so it may worth revising the text to capture that requirement as well for sites that are located outside of the 100 year flood plain, but in the 500 year flood plain.




If we use the reference to 1612 and Category 5 surge inundation elevation, we get the higher of the +2 above BFE and the 500 year flood elevation **only** for sites that located in a flood hazard area. Sites located in the 500 year flood plain but outside of the flood hazard area would not be subject to these requirements. It seems counter intuitive not to apply the requirements to the Site B facility as well.

Suggested modification:

~~Except as permitted by Section 1612 of this code,~~ ~~t~~The lowest floor of all new facilities shall be elevated to not lower than the base flood elevation as defined in ~~Section 1612 of~~ this code, plus 2 feet, the 500 year flood elevation as defined in ASCE 24, or to the height of hurricane Category ~~3~~5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

3

### SP10362

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | Yes | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

**General Comments Yes** **Alternate Language Yes**

### Related Modifications

### Summary of Modification

Revises the surge zone criteria for nursing homes.

### Rationale

As the events have shown over the past few years, flooding caused by more intense storm events has been increasing. Florida is very susceptible to this type of flooding from surge events and must take action now to protect the health care infrastructure from all storm and high water surge events for all categories of hurricanes including category 5.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

May require additional cost to build in a category 5 surge zone.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

improves 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**

Strengthens or improves the code from high wind and flooding events.

**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**

Improves the effectiveness of the code by clarifying requirements.

## Alternate Language

# 2nd Comment Period

SP10362-A2

**Proponent** James gregory **Submitted** 8/23/2022 2:49:43 PM **Attachments** Yes

Rationale:

Strengthens the code by requiring elevation to above the 500 year flood elevation and removes language that can be misinterpreted to apply these requirements only to facilities located in the flood hazard area as defined by section 1612.

## Fiscal Impact Statement

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

No imact

**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**

May increase costs of construction of new facilities in areas prone to flooding

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Strengthens the Code.

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

Strengthens the Code.

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

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

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

Improves the Code.

# 2nd Comment Period

SP10362-G1

Proponent James gregory Submitted 8/23/2022 2:24:06 PM Attachments No

Comment:

This comment is in support of this provision to raise the height of the surge inundation for nursing home sites from Category 3 to Category 5 hurricanes. Category 3 was picked in 1995 as the original rule was being developed, not because it was thought Florida would never be impacted by another Category 5 hurricane, but because it was thought, at the time, the rule was going to apply to both new and existing nursing homes The rule, which became part of the Florida Building Code in 2000, does not include existing facilities that are not adding any building additions. And since that time, it is well recognized that weather events are becoming more severe, Sea Level is rising, and Category 5 storms do and will continue to impact Florida. It only makes sense to revise the level of hurricane surge inundation from Category 3 to Category 5 Hurricanes inundation to help Florida continue to protect its health care facilities and to protect residents in nursing homes that serve the elderly from flooding and displacement

A2

450.4.2.2.1

~~Except as permitted by Section 1612 of this code,~~ t<u>T</u>he lowest floor of all new facilities shall be elevated to <u>not lower than</u> the base flood elevation as defined in ~~Section 1612 of~~ this code, plus 2 feet, <u>the 500 year flood elevation as defined in ASCE 24,</u> or to the height of hurricane Category ~~3~~<u>5</u> (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher. Strengthens the code by requiring elevation to above the 500 year flood elevation and removes language that can be misinterpreted to apply these requirements only to facilities located in the flood hazard area as defined by section 1612.

~~Except as permitted by Section 1612 of this code,~~ tThe lowest floor of all new facilities shall be elevated to not lower than the base flood elevation as defined in ~~Section 1612 of~~ this code, plus 2 feet, the 500 year flood elevation as defined in ASCE 24, or to the height of hurricane Category ~~3~~5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.Strengthens the code by requiring elevation to above the 500 year flood elevation and removes language that can be misinterpreted to apply these requirements only to facilities located in the flood hazard area as defined by section 1612.

450.4.2.2 Site standards.
450.4.2.2.1 Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet (607 mm), or to the height of hurricane Category ~~3~~ 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH)
from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

4

### SP10367

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Revises the PACU requirements in outpatient surgical centers.

**Rationale**

The revision coordinates with the agency's licensing rules to count recovery "beds" or stations. It clarifies that a recovery position will be counted whether or not it is shared with the pre procedure station. Further, the new section does not make the Phase II recovery area a basic requirements because many ASC do not have the need for such a step down recovery area.

**Fiscal Impact Statement**

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

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

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

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

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

**Requirements**

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

**Mod SP10367, approved as modified for staff to correct typo**

451.3.3 ~~Recovery area~~ Pre- and post-procedure patient care. Reference *The Guidelines* for other requirements not specifically described in this section.

451.3.3.1 ~~Only the phase I post-anesthesia recovery positions~~, All post-procedure patient care stations as described in *The Guidelines*, including Phase I Post-Anesthesia Recovery, whether or not combined with pre-procedure positions, and if provided, Phase II Recovery will be ~~listed~~ counted as recovery positions for purposes of licensure.

451.3.3.2 A Phase II Recover Room or Area is not required.

(SP10367)

451.3.3 ~~Recovery area~~ Pre- and pos-procedure patient care. Reference *The Guidelines* for other requirements not specifically described in this section.

451.3.3.1 ~~Only the phase I post-anesthesia recovery positions~~, All post-procedure patient care stations as described in *The Guidelines*, including Phase I Post-Anesthesia Recovery, whether or not combined with pre-procedure positions, and if provided, Phase II Recovery will be ~~listed~~ counted as recovery positions for purposes of licensure.

451.3.3.2 A Phase II Recover Room or Area is not required.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

5

### SP10369

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Adds section as an alternative method of compliance

### Rationale

The intent of the new section is to provide alternative safe guards to patients who require assistance to evacuate a single story building during a fire emergency event. As explained in the ICC Handbook,The IFC and ICC developed section 903.2.2 to insure first responders could access the ASC during a fire event to assist in relocating patients who cannot relocate themselves and to provide a safe passage from the ASC to the exterior. This is especially relevant in a multi-story building and 903.2.2 section requires the floors of and below the ASC to be fully sprinklered. But in a single story building with direct exits and exit access to the exterior of the building, other methods can be employed to protect the fully sprinklered ASC from the other unsprinklered parts of the building. This can occur when an ASC locates into an existing single story business occupancy. By providing a Fire Barrier, that is defined in the FBC as the required barrier to separate sprinkler from nonsprinklered sections of a building, and by still requiring the ASC to be full sprinklered in a single story building, this alternate method is equivalent to or exceeds the active fire protection system required by section 903.2.2.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
Reduces impact to industry relative to the cost of compliance with code
**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Provides for equivalent or better method to assure patient safety.

**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**

Improves the effectiveness of the code by clarifying requirements.

## Alternate Language

# 2nd Comment Period

SP10369-A1

**Proponent** James gregory **Submitted** 8/11/2022 2:24:18 PM **Attachments** Yes

Rationale:

1. This modification is necessary to clarify Section 903.2.2 in regards to ambulatory surgical centers located in single story buildings in Florida and addresses a fully sprinklered ambulatory surgical center when located in a single story unsprinklered building. 2. The use of a Fire Barrier to separate sprinklered areas from unsprinklered areas in a building is the correct barrier to use as required by the FBC. The hourly rating of the Fire Barrier is determined by Section 707 Fire Barriers. 3. This modification enforces the intent of Section 903.2.2 by requiring direct exits from the ASC without traversing any other part of the unsprinklered building.

## Fiscal Impact Statement

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

No impact to local entity relative to enforcement.

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

No impact to building and property owners relative to cost of compliance.

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

No impact to industry relative to the cost of compliance.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Improve the code for 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**

Provides a clarification of the code that works to improve it.

**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**

Make the code more effective by addressing a condition not previously addressed.

A1

451.3.4.7

Where a fully sprinklered ambulatory surgical center is located in a single story unsprinklered building, a Fire Barrier designed and constructed in accordance with section 707 Fire Barriers and *paragraph 707.3.10 Fire areas*, of this Code, may be used to separate the sprinklered ambulatory surgical center Fire Area from the Fire Area of the remainder of the unsprinklered single story building only when all exits from the ambulatory surgical center lead directly to the exterior of the building or to an exit passageway designed and constructed in accordance with *Section 1024 Exit Passageways* of this Code.

Where a fully sprinklered ambulatory surgical center is located in a single story unsprinklered building, a Fire Barrier designed and constructed in accordance with section 707 Fire Barriers and *paragraph 707.3.10 Fire areas*, of this Code, may be used to separate the sprinklered ambulatory surgical center Fire Area from the Fire Area of the remainder of the unsprinklered single story building only when all exits from the ambulatory surgical center lead directly to the exterior of the building or to an exit passageway designed and constructed in accordance with *Section 1024 Exit Passageways* of this Code.

SP10369Text Modification

451.3.4.7

Where a fully sprinklered ambulatory surgical center is to be located in a single story unsprinklered building that is required to be fully sprinklered in accordance with other sections of this code, a 2 hour rated fire barrier in accordance with Section 707 may be used to separate the sprinklered ambulatory surgical center from the remainder of the unsprinklered building in lieu of sprinklering the entire single story building when all of the following are met:

1. The ASC is fully sprinklered.
2. There are no utility penetrations through the Fire Barrier
3. The unsprinklered section of the building does not contain a hazardous occupancy.
4. All exits and exit access routes from the ASC either lead directly to the exterior of the building or are protected by the Fire Barrier from the other sections of the building.

Rational for Modification:

This revision is meant to clarify section 903.2.2 for Ambulatory Surgical Centers in Florida and does not conflict with either the language or with the intent of Section 903.2.2. In fact, this modification strengthens Section 903.2.2 for a single story building in which an ASC may be located as follows:

Ambulatory Care Centers are required to be sprinklered by *Section 903.2.2 Ambulatory care facilities* where "…four or more care recipients are incapable of self-preservation…" and where "One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge…"

Previous editions of the Code required a sprinklered system be installed "…throughout **all fire areas** containing a Group B ambulatory health care facility…"

In 2009, it was recognized this language did not take into account ambulatory care facilities that were located in multi-story buildings. Revision F68-09/10 by proponent Tom Lariviere, Chairman of the Joint Fire Service Review Committee, was submitted to Section 903.2.2 that includes the following current language.

Current Language in FBC 7th Edition:

> *903.2.2 Ambulatory Care Facilities. An automatic sprinkler system shall be installed throughout **the entire floor** containing an ambulatory care facility where either of the following conditions exist at any time:*

The reason given by Mr. Lariviere to revise the language from ***"throughout all fire areas"*** to ***"the entire floor"*** was as follows: (See Attached for full text of Modification F68-09/10)

> *Reason: The current language would allow Ambulatory Surgical Centers to be placed in a **high-rise structure**, but would only require that the surgical center is to be sprinklered. In a fire, occupants would have to exit through spaces that lack sprinkler protection. If sprinklers are required to protect occupants in ambulatory surgical centers, it is illogical to expect them to evacuate through unprotected spaces.*
>
> *Therefore, this proposal will require that **when an Ambulatory Health Care Facility is located in a multi-story building**, that the entire floor is protected with fire sprinklers and every floor between that level and the level of exit discharge will also be protected with fire sprinklers. This will provide a safe route for evacuation of patients to the exterior of the building.*

Clearly it was the intent of this proposal to address a situation when an Ambulatory Care Facility is located in a "multi-story building". That is why the terminology uses the word "floor" that indicates a multi-story building with multiple "floors".

However, because this section does not clearly state the intent was to only address a situation in a multi-story building, some authorities having jurisdiction do not recognize this intent. Unfortunately, this section does not address the situation where an Ambulatory Care Facility is located in a single story building and where the "floor" of the building is commonly referred to as the "slab" of the building, not a "floor" and where all egress is through direct exits at grade level.

An opinion obtained from the International Code Council (ICC) states in part: (See Attached for full text of the Opinion)

> *While Section 903.2.2 states that the sprinkler system would be required to be installed throughout the entire floor in which the ambulatory care facility is located, in my opinion, the section was not intending to apply to an ambulatory care facility located in a strip mall. Typically, ambulatory care facilities are either stand alone facilities or are associated with hospitals or medical office buildings. For your information, the passage of Code Changes F68-09/10 (a copy of which is enclosed) and G15-09/10, which resulted in the current text of the IBC, deleted the reference to "all fire areas" containing a Group B ambulatory care facility.*
> *Therefore, under the current IBC, an automatic sprinkler system, again, is literally required throughout the entire floor where the ambulatory care facility is located and not just within the fire area that the ambulatory care facility is located. With that being said, the reason statement for the change in the aforementioned language was to ensure the occupants of the ambulatory care facility, especially in multi-story buildings, were always egressing through a protected sprinklered environment to the exit discharge.*
> *With all that being said, admittedly, the code does not specifically address the sprinkler system requirements for an ambulatory care facility in a strip mall where each tenant has independent means of egress regardless of the level of fire separation provided. While the ambulatory care facility would be required to be sprinklered if there are at least four people who are incapable of self-preservation, in my opinion, the remaining portions of the strip mall would not be required to be sprinklered solely due to the presence of the ambulatory care facility. Final evaluation of the extent of sprinkler protection for the strip mall containing an ambulatory care facility is subject to the approval of the building official.*

Section 706.3.9 of the *International Building Code*, that would not be required to be protected by an approved automatic sprinkler system. This exception shall not apply where other provisions of this code would otherwise require the installation of an approved automatic sprinkler system.

**Reason:** There is a lack of clear direction as to how the thresholds in 903.2 are to be applied where a fire area is created by construction of fire barriers as allowed in Assembly and other occupancies.

**Cost Impact:** The code change proposal will not increase the cost of construction.

Public Hearing: Committee: AS AM D
Assembly: ASF AMF DF

ICCFILENAME: COLLINS-F1-903.2.DOC

## F67–09/10
### 903.2.1.2 (IBC [F] 903.2.1.2)

**Proponent:** Kelly P. Reynolds representing Chick-Fila-A and McDonald's Corporation

**Revise as follows:**

**903.2.1.2 (IBC [F] 903.2.1.2) Group A-2.** An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 $m^2$);
2. The fire area has an occupant load of ~~100~~ 150 or more;
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

**Reason:** The three legacy codes (BOCA, ICBO & SBCCI) did not classify restaurants as A-2 (assembly) use groups, until the 2000 edition of the IBC (International Building Code). Even then, fire sprinklers were not required until the building was more than 5,000 sq. ft. or had an occupancy load of more than 300 persons. This same requirement appeared in the Life Safety Code (NFPA No. 101).
The sprinkler threshold dramatically changed to more than 100 persons in the 2006 IBC and 2006 IFC (International Fire Code).

Historically, the 300 person fire sprinkler threshold was based on tragic night club fires such as the Cocoanut Grove in Boston in 1942 that killed 492 persons and the Beverly fire in Kentucky in 1977 claimed 150 lives that were both over crowded beyond their legal capacity.

In 2003, The Station Nightclub fire in Rhode Island took 100 lives. It was over crowded by more than 200 persons. Through an apparent over-reaction, the code made a dramatic change of the fire sprinkler threshold for A-2 Use Groups from 300 persons down to 100 persons.

The intent of this code change proposal is to change that threshold to a more reasonable 150 persons to accommodate quick-serve restaurants. A quick-serve restaurant is "defended in place" and does not have the same conditions that these three infamous fire tragedies had. They do not have overcrowding, loud noise (music), and low lighting levels.

No alcohol or potential reaction/judgment impairing consumption's occur in quick-service restaurants, unlike nightclubs or full-service restaurants. Furthermore, they are "easy to navigate" and "well lit". The grease-laden cooking equipment is the only area of real concern and that is protected throughout by pre-engineered, self contained, approved fire suppression systems.

The 150 person threshold for fire sprinklers is more reasonable than the current 100 persons for these types of operations. Furthermore, there are no recorded fire deaths in any such type of quick-serve operations based on N FPA Fire Statistics .

**Cost Impact:** The code change proposal will reduce cost for A-2 uses under 150 people.

Public Hearing: Committee: AS AM D
Assembly: ASF AMF DF

ICCFILENAME: REYNOLDS-F1-903.2.1.2

## F68–09/10
### 903.2.2 (IBC [F] 903.2.2)

**Proponent:** Tom Lariviere, Chairman, Joint Fire Service Review Committee

**Revise as follows:**

**903.2.2 (IBC [F] 903.2.2) Group B Ambulatory health care facilities.** An *automatic sprinkler system* shall be installed throughout ~~all *fire areas*~~ the entire floor containing a Group B ambulatory health care facility ~~occupancy~~ and all floors between the ambulatory health care facility and the *level of exit discharge* serving such a facility, including the *level of exit discharge* serving such a facility when either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self preservation.
2. One or more care recipients that are incapable of self preservation are located at other than the *level of exit discharge* serving such an facility ~~occupancy~~.

**Reason:** The current language would allow Ambulatory Surgical Centers to be placed in a high-rise structure, but would only require that the surgical center is to be sprinklered. In a fire, occupants would have to exit through spaces that lack sprinkler protection. If sprinklers are required to protect occupants in ambulatory surgical centers, it is illogical to expect them to evacuate through unprotected spaces.

Automatic sprinkler systems are required in Ambulatory Health Care Facilities because the patients could be incapable of self-preservation. When assistance is necessary for evacuation, the evacuation time increases. The current code will require sprinklers within the Ambulatory Health Care Facility, so when the employees start to evacuate the patients they are in a protected, sprinklered, environment. But as they leave the Ambulatory Health Care Facility and continue to the exit, they would be leaving the sprinklered area. This is contrary to the reasoning to provide fire sprinklers in the first place. The patients in these facilities will take longer to evacuate, and will need assistance to evacuate.

Therefore, this proposal will require that when an Ambulatory Health Care Facility is located in a multi-story building, that the entire floor is protected with fire sprinklers and every floor between that level and the level of exit discharge will also be protected with fire sprinklers. This will provide a safe route for evacuation of patients to the exterior of the building.

The term "occupancy" is deleted after "ambulatory health care facility" because it is not needed and becomes redundant when it is referred to as a "facility occupancy."

**Cost Impact:** The code change proposal will increase the cost of construction.

| Public Hearing: | Committee: | AS | AM | D |
|---|---|---|---|---|
| | Assembly: | ASF | AMF | DF |

ICCFILENAME: LARIVIERE-F8-903.2.2.DOC

# F69–09/10

## 903.2.4 (IBC [F] 903.2.4), 903.2.7 (IBC [F] 903.2.7), 903.2.9 (IBC [F] 903.2.9)

**Proponent:** Robert J Davidson, Code Consultant/Alan Shuman, President, representing the National Association of State Fire Marshals (NASFM)

**Revise as follows:**

**903.2.4 (IBC [F] 903.2.4) Group F-1.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. Where a Group F-1 fire area exceeds 12,000 square feet (1115 $m^2$);
2. Where a Group F-1 fire area is located more than three stories above grade plane; or
3. Where the combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 $m^2$).
4. Where a Group F-1 occupancy is used for the manufacture of upholstered furniture or mattresses.

**903.2.7 (IBC [F] 903.2.7) Group M.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 12,000 square feet (1115 $m^2$);
2. Where a Group M fire area is located more than three stories above grade plane; or
3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 $m^2$). ; or
4. Where a Group M occupancy is used for the display and sale of upholstered furniture or mattresses.

**903.2.9 (IBC [F] 903.2.9) Group S-1.** An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 12,000 square feet (1115 $m^2$);
2. A Group S-1 fire area is located more than three stories above grade plane; or
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 $m^2$).
4. A Group S-1 fire area used for the storage of commercial trucks or buses where the fire area exceeds 5,000 square feet (464 $m^2$).
5. A Group S-1 occupancy is used for the storage of upholstered furniture or mattresses.

**Reason:** Last cycle the upholster furniture industry submitted a proposal to require the installation of automatic sprinkler systems in mercantile occupancies that contain upholstered furniture regardless of the size of the occupancy. The committee agreed and accepted the proposal. The hazard presented by the upholstered furniture in the mercantile occupancy is greater in an F-1 occupancy where the furniture is being manufactured and in an S-1 occupancy where the fuel load contribution of the upholstered furniture is greater than in the mercantile group. For this reason both the F-1 and S-1 involving upholstered furniture should be protected with an automatic sprinkler system regardless of the size of the occupancy.

Mattresses has been added to the F-1, M and S-1 Groups requiring the automatic sprinkler systems because the polyfoam that presents the hazard in the upholstered furniture presents the same hazard in the mattresses and should have similar protection levels.

**Reason:** Casinos are being constructed across the country. These occupancies are sometimes very large. The current code does not specify the occupancy classifications for casinos. Therefore, different classifications are given by building departments and there is inconsistency between jurisdictions. Some jurisdictions classify casinos as Group A-2 and other classify them as Group A-3. This proposal designates casinos as A-2 occupancies. This is the occupancy that is used by the Southern Nevada area including the Las Vegas and Clark County. The A-2 occupancy classification is also appropriate because the casinos have similar hazard characteristics of the other uses in this category. There are distracting lights, sounds, decorations and in some cases alcohol being served. The occupants can become disoriented and confused in an emergency condition and have difficulty finding the exits. Therefore, it seems reasonable to place casinos in the Group A-2 Occupancy Classification.

**Cost Impact:** The code change will not increase the cost of construction.

Public Hearing: Committee: AS AM D
Assembly: ASF AMF DF

ICCFILENAME: THOMAS-G4-303.1

## G15–09/10

### 202, 304.1 (IFC [B] 202), 304.1.1 304.2, 422, 710.5, [F] 903.2.2, [F] 903.3.2, [F] 907.2.2, [F] 907.2.2.1 (IFC 903.2.2, 903.3.2, 907.2.2, 907.2.2.1)

**Proponent:** Paul K. Heilstedt, PE, Chair, representing ICC Code Technology Committee (CTC)

**1. Revise as follows:**

**304.1 (IFC [B] 202) Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Ambulatory ~~health~~ care facilities
Clinic – outpatient

(Portions of list not shown remain unchanged)

~~**304.1.1**~~ **304.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

*(Relocate definition for Ambulatory Health Care Facilities from Section 202, and revise)*

**AMBULATORY HEALTH CARE FACILITY.** Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided.

**CLINIC-OUTPATIENT.** Buildings or portions thereof used to provide medical care on less than a 24-hour basis to individuals who are not rendered incapable of self-preservation by the services provided.

**SECTION 422**
**AMBULATORY HEALTH CARE FACILITIES**

**422.1 General.** Occupancies classified as ~~Group B~~ ambulatory health care facilities shall comply with the provisions of Sections 422.1 through ~~422.6~~ 422.7 and other applicable provisions of this code.

**422.2 Separation.** Ambulatory care facilities where the potential for four or more care recipients are to be incapable of self preservation at any time, whether rendered incapable by staff or staff accepted responsibility for a care recipient already incapable, shall be separated from adjacent spaces, corridors or tenants with a fire partition installed in accordance with Section 708.

~~**422.2**~~ **422.3 Smoke barriers compartments.** ~~Smoke barriers shall be provided to~~ subdivide every Where the aggregate area of one or more ambulatory health care facilities ~~greater than~~ exceeds 10,000 square feet on one story, the story shall be provided with a smoke barrier to subdivide the story into not less than into a minimum of two smoke compartments ~~per story~~. The area of any one such smoke compartment shall not exceed 22,500 square feet (2092 $m^2$). The travel distance from any point in a smoke compartment to a smoke barrier door shall not exceed 200 feet (60 960 mm). The smoke barrier shall be installed in accordance with Section 710 with the exception that smoke barriers shall be continuous from outside wall to an outside wall, a floor to a floor, or from a smoke barrier to a smoke barrier or a combination thereof.

~~422.3~~ 422.4 **Refuge area.** At least 30 net square feet (2.8 $m^2$) per nonambulatory patient care recipient shall be provided within the aggregate area of corridors, ~~patient~~ care recipient rooms, treatment rooms, lounge or dining areas and other low-hazard areas ~~on each side of each smoke~~ barrier within each smoke compartment. Each occupant of an ambulatory care facility shall be provided with access to a refuge areas without passing through or utilizing adjacent tenant spaces.

~~422.4~~ 422.5 **Independent egress.** A means of egress shall be provided from each smoke compartment created by smoke barriers without having to return through the smoke compartment from which means of egress originated.

**422.5** 422.6 **Automatic sprinkler systems.** Automatic sprinklers systems shall be provided for ambulatory care facilities in accordance with Section 903.2.2.

~~422.6~~ 422.7 **Fire alarm systems.** A fire alarm system shall be provided for ambulatory care facilities in accordance with Section 907.2.2.1.

**710.5 Openings.** Openings in a *smoke barrier* shall be protected in accordance with Section 715.

**Exceptions:**

1. In Group I-2 and ambulatory care facilities, where doors are installed across *corridors*, a pair of opposite-swinging doors without a center mullion shall be installed having vision panels with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested. The doors shall be close fitting within operational tolerances, and shall not have undercuts in excess of 3/4-inch, louvers or grilles. The doors shall have head and jamb stops, astragals or rabbets at meeting edges and shall be automatic closing by smoke detection in accordance with Section 715.4.8.3. Where permitted by the door manufacturer's listing, positive-latching devices are not required.
2. In Group I-2 and ambulatory care facilities, horizontal sliding doors installed in accordance with Section 1008.1.4.3 and protected in accordance with Section 715.

**[F] 903.2.2 (IFC 903.2.2) Group B ambulatory health care facilities.** An automatic sprinkler system shall be installed throughout all fire areas containing an ~~Group B~~ ambulatory ~~health~~ care facility ~~occupancy~~, when either of the following conditions exist at any given time:

1. Four or more care recipients are incapable of self preservation, whether rendered incapable by staff or staff have accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self preservation are located at other than the level of exit discharge.

In buildings where care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed on the entire floor where care is provided as well as all floors below, and all floors between the level of care and the closest level of exit discharge.

**[F] 903.3.2 (IFC 903.3.2) Quick-response and residential sprinklers.** Where automatic sprinkler systems are required by this code, quick-response or residential automatic sprinklers shall be installed in the following areas in accordance with Section 903.3.1 and their listings:

1. Throughout all spaces within a smoke compartment containing ~~patient~~ sleeping units in Group I-2 in accordance with this code.
2. Throughout all spaces within a smoke compartment containing treatment rooms in ambulatory care facilities.
3. ~~2.~~ Dwelling units, and sleeping units in Group R and I-1 occupancies.
4. ~~3.~~ Light-hazard occupancies as defined in NFPA 13.

**[F] 907.2.2 (IFC 973.2.2) Group B.** A manual fire alarm system shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B *occupant load* of all floors is 500 or more.
2. The Group B *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.
3. The ~~Group B~~ *fire area* contains a ~~Group B~~ ambulatory ~~health~~ care facility.

**Exception:** Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

**[F] 907.2.2.1 (IFC 907.2.2.1) Group B ambulatory ~~health~~ care facilities.** Fire areas containing Group B ambulatory ~~health~~ care facilities shall be provided with an electronically supervised automatic smoke detection system installed within the ambulatory ~~health~~ care facility and in public use areas outside of tenant spaces, including public *corridors* and elevator lobbies.

**Exception:** Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, provided the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

**Reason: Reason:** The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as "areas of study". Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April/2005, the CTC has held seventeen meetings - all open to the public.

This proposed change is a result of the CTC's investigation of the area of study entitled "Care Facilities". The scope of the activity is noted as: Study issues associated with Day Care/Adult Care, Ambulatory Health Care and Assisted Living facilities with an emphasis on the number of occupants in relation to the supervision, and the determination of the resident's capability of responding to an emergency situation without physical assistance from the facility's supervision.

The Code Technology Committee Study Group on Care Facilities has conducted a comprehensive review of current building and fire codes, federal regulations and prior code change proposals dealing with the provision of "care". "Care" as it relates to the scope of this work relates to an occupant of a building who is compromised (mentally or physically) and receives some type of support (care). These facilities encompass a full spectrum of acuity and span a wide range of occupancy types including Groups B, E, I and R. On the lower end of the spectrum, occupants may be aged and receive occasional day living assistance such as cooking and cleaning. On the opposite end of the spectrum, occupants may be completely bedridden and dependant on medical gases and emergency power to maintain life.

The proposed changes provide clear direction for design and construction by using terms and concepts consistently and clearly identifying thresholds related to the condition of an occupant. Federal regulations and state licensing provisions were considered, but primarily in terms of avoiding conflicting requirements. It is not the intent of these changes to address licensing or operational issues. We do believe that the proposed changes will provide consistent and correlated language between these multiple sources of regulations that will help design and code professionals address the needs of care recipients in the many different types of facilities.

A major goal is to provide clarity and consistency of terminology. New definitions are added to specifically describe each type of care or facility and identify the distinct differences in these. Some terms are consolidated to be more descriptive of a group of occupants, yet generic enough to be used interchangeably. For example: a "Patient" is now identified as a "care recipient" and "nurse" is now "care provider". People receive care of varying types but they are not always referred to as "patients". They receive care from a wide range of persons with different technical abilities, not just a "nurse" or "staff". Other definitions address existing terms not defined within current code. The study group believes that these changes bring a practical response to the recent developments within the healthcare delivery system.

**Ambulatory Care Facilities, Section 422 and related sections**

This public comment represents the collaborative efforts to address the more specifically concerns regarding these uses over the past several cycles.

Change modifying the existing language includes:

- Remove an unneeded reference to "Health" as the definition clearly expresses that these types of facilities are related to some form or care. Also relocate the definition to Section 304.2 to align with the formatting of other Groups that provide definitions for special occupancies within that specifically related section.
- Remove an unneeded reference to "Group B" whenever the term Ambulatory Health Care Facility is used.
- Added Section 422.2 to require fire partition separation from adjacent spaces in facilities with greater than 4 care recipients. The intent is to subdivide the floor to allow for a reasonable level of safety for care recipients who made need assistance to evacuate, or to allow for the option of protecting in place for a limited period of time.
- Modified the continuity requirements of a smoke barrier to deal with intersection or connection to adjacent tenants, and maintain the integrity and safety.
- Several of these changes are mindful of existing buildings to allow for renovations without going into other tenant spaces.
- Added 22,500 square foot limit to a smoke compartment, similar to Group I-2s.
- For multiple tenant spaces, language is added to the area of refuge requirements to clarify that the area of refuge must be accessed without going through adjacent tenant spaces.

Correlative changes to Sections 710, 903 and 907 are bringing consistency of terminology and provision cross references.

**Cost Impact:** The code change proposal will increase the cost of construction.

Public Hearing: Committee: AS (AM) D
Assembly: ASF AMF DF

ICCFILENAME: HEILSTEDT-G2-304.1.doc

AM per Public Comment #1

## *Individual Consideration Agenda*

**This item is on the agenda for individual consideration because a public comment was submitted.**

*Public Comment:*

**Joe Pierce, Dallas Fire Department, representing Joint Fire Service Review Committee, requests Approval as Modified by this Public Comment.**

**Modify the proposal as follows:**

**[F] 903.2.2 (IFC 903.2.2) Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout ~~all fire areas~~ the entire floor containing an ambulatory care facility, when either of the following conditions exist at any given time:

1. Four or more care recipients are incapable of self preservation, whether rendered incapable by staff or staff have accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self preservation are located at other than the level of exit discharge.

In buildings where care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed on the entire floor where care is provided as well as all floors below, and all floors between the level of care and the closest level of exit discharge, including the level of exit discharge.

*(Portions of proposal not shown remain unchanged)*

**Commenter's Reason:** Item F68-09/10 was Approval as Submitted and addresses several of the same issues as this revision in G15-09/10. Item F68 was approved as follows:

**903.2.2 (IBC [F] 903.2.2) Group B Ambulatory health care facilities.** An *automatic sprinkler system* shall be installed throughout ~~all fire~~ areas the entire floor containing a Group B ambulatory health care facility ~~occupancy~~ and all floors between the ambulatory health care facility and the *level of exit discharge*, including the *level of exit discharge* when either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self preservation.
2. One or more care recipients that are incapable of self preservation are located at other than the *level of exit discharge* serving such an occupancy.

As you can see, both code change proposals revised the following items:

1. Deletion of the word "occupancy"
2. Requirement to have the fire sprinkler installed from the floor of the ambulatory care facility and the level of exit discharge; however each proposal worded this in a different fashion.

G15 additionally revised the title of the facility to simply "ambulatory care facility".
F68 also required the fire sprinkler system to be installed on the entire floor, not just the fire area. G15 also requires the entire floor to sprinklered when on a floor other than the level of exit discharge.

This Public Comment combines all the revisions between the two code changes. The last phrase in the final paragraph is added to ensure that the level of exit discharge is included in the floors requiring fire sprinklers.

Final Action: AS AM AMPC____ D

From: **Mike Giachetti** mgiachetti@iccsafe.org
Subject: RE: 2018 IBC Section 903.2.2
Date: July 11, 2022 at 4:28 PM
To: gregoryskip@gmail.com
Cc: Chris Reeves creeves@iccsafe.org

GM

Mr. Gregory:

This e-mail is in response to your e-mail, and our recent telephone conversation, regarding sprinkler requirements for an ambulatory care facility. All comments are based on the 2018 International Building Code (IBC) unless otherwise noted.

Per our telephone conversation, a single story ambulatory care facility is moving into a strip mall. The ambulatory care tenant space is separated from the other tenant spaces on either side by 2-hour fire barriers. Two direct exits to the public way are provided from the ambulatory care tenant space. You wish to know if the ambulatory care tenant space is required to be sprinklered.

As indicated in Section 903.2.2, sprinklers are based on the presence of four or more care recipients at any given time that are incapable of self-preservation or any number of care recipients that are incapable of self-preservation located on a floor other than the level of exit discharge that serves the ambulatory care facility. As such, a sprinkler system would be required in a single story facility if at least four people are incapable of self-preservation.

Also, if at least four people are incapable of self-preservation, ambulatory care facilities are required to be separated from adjacent spaces, including other tenants, by a 1-hour rated fire partition in accordance with Section 708. Based on your e-mail, 2-hour fire barriers are provided on each side of the ambulatory care facility.

While Section 903.2.2 states that the sprinkler system would be required to be installed throughout the entire floor in which the ambulatory care facility is located, in my opinion, the section was not intending to apply to an ambulatory care facility located in a strip mall. Typically, ambulatory care facilities are either stand alone facilities or are associated with hospitals or medical office buildings. For your information, the passage of Code Changes F68-09/10 (a copy of which is enclosed) and G15-09/10, which resulted in the current text of the IBC, deleted the reference to "all fire areas" containing a Group B ambulatory care facility. Therefore, under the current IBC, an automatic sprinkler system, again, is literally required throughout the entire floor where the ambulatory care facility is located and not just within the fire area that the ambulatory care facility is located. With that being said, the reason statement for the change in the aforementioned language was to ensure the occupants of the ambulatory care facility, especially in multi-story buildings, were always egressing through a protected sprinklered environment to the exit discharge.

With all that being said, admittedly, the code does not specifically address the sprinkler system requirements for an ambulatory care facility in a strip mall where each tenant has independent means of egress regardless of the level of fire separation provided. While the ambulatory care facility would be required to be sprinklered if there are at least four people who are incapable of self-preservation, in my opinion, the remaining portions of the strip mall would not be required to be sprinklered solely due to the presence of the ambulatory care facility. Final evaluation of the extent of sprinkler protection for the strip mall containing an ambulatory care facility is

subject to the approval of the building official.

Code opinions issued by ICC staff are based on ICC-published codes and do not include local, state or federal codes, policies or amendments. This opinion is based on the information which you have provided. We have made no independent effort to verify the accuracy of this information nor have we conducted a review beyond the scope of your question. This opinion does not imply approval of an equivalency, specific product, specific design, or specific installation and cannot be published in any form implying such approval by the International Code Council. As this opinion is only advisory, the final decision is the responsibility of the designated authority charged with the administration and enforcement of this code.



Sincerely,

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Code Reference

International Building Cod

International Building Code

Code Edition
2018

Code Section
903.2.2

Questions

According to the handbook, The IFC and ICC developed section 903.2.2 to insure first responders could access an ASC and assist patients who might require evacuation from a multi floor building during a fire emergency event. Therefore, this section requires the floor of the ASC and the floors below the ASC be fully sprinklered.

Is it the intent of this section to require a single story building, separated by a complying 2 hour fire barrier from a fully sprinkler ASC, that has two direct exits to the public way, be required to be fully sprinklered also?

If you have any questions, please contact:
Website Technical Support Team
International Code Council
----------
1-888-ICC-SAFE (1-888-422-7233) x4444
1-708-799-2300 x4444
websupport@ICCSafe.ORG

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Code Change
F68-0...CF.pdf

FBC 7th Edition:
[F] 903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:
1. Four or more care recipients are incapable of self preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.
In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest level of exit discharge, including the level of exit discharge.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

6

### SP10396

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Creates a new section for WAGD networks.

### Rationale

The new section describes when a WAGD system must be installed in an operating room and provides the correct reference for that installation if necessary.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

## Alternate Language

# 1st Comment Period History

FP10396-A1

**Proponent** James gregory **Submitted** 4/15/2022 5:54:21 AM **Attachments** Yes

Rationale:

This revised language more accurately defines the conditions when a WAGD system is to be installed in an operating room. It also makes it more clear to the users, coordinates with the FGI Guidelines and uses the correct terminology.

## Fiscal Impact Statement

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

There is no impact on local entity relative to enforcement of code

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Corrects terminology of the code for 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**

Strengthens or improves the code by making it more understandable.

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

It does not discriminate against materials, products, methods, or systems of construction

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

Improves the effectiveness of the code.

**Mod SP10396, approved as modified with A1**

451.3.16 As required by the Guidelines, a waste anesthetic gas disposal (WAGD) system, in accordance with NFPA 99, Health Care Facilities Code, shall be provided in operating rooms where nitrous oxide and/or inhalation anesthsia gas is intended to be administered.

(SP10396 A1)

451.3.16 As required by the Guidelines, ~~A~~ a waste anesthetic gas disposal (WAGD) ~~inlet~~ system, in accordance with NFPA 99, Health Care Facilities Code, shall be provided in operating rooms ~~270 SF or larger~~ where nitrous oxide and/or ~~halogenated anesthetic~~ inhalation anesthsia gas is intended to be administered.~~, as determined by the governing body of the facility, in accordance with NFPA 99 Health Care Facilities Code.~~

451.3.16 A waste anesthetic gas disposal (WAGD) inlet shall be provided in operating rooms 270 SF or larger where nitrous oxide or halogenated anesthetic gas is intended to be administered, as determined by the governing body of the facility, in accordance with NFPA 99 Health Care Facilities Code.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

7

### SP10478

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449.4.2.2 | **Proponent** | scott waltz |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

The modification clarifies existing requirements and updates the flood resistance requirements for new hospital facilities and modifications to existing facilities. It also provides new exceptions for non-patient related spaces.

### Rationale

The modification will add clarity to current requirements and provide necessary enhancements to strengthen the requirements for areas subject to storm inundation. The revised text also provides new exceptions for non-patient care related spaces where the facility design will allow for the continued operation of the facility by isolating effected areas and maintaining access to the facility and required egress.

### 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

**Impact to small business relative to the cost of compliance with code**

### 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 and provides clarity.

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

It does not

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

It does not.

## Alternate Language

# 2nd Comment Period

**Proponent** scott waltz **Submitted** 8/26/2022 1:37:54 PM **Attachments** Yes

SP10478-A3

Rationale:

Proposed modification clarifies existing language and strengthens requirements to better protect critical healthcare facilities from flood damage.

## 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**

May require additional first cost to build in a category 5 surge zone. Life cycle costs are unknown but may be reduced due to the mitigation of flood risks.

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

May require additional first cost to build in a category 5 surge zone. Life cycle costs are unknown but may be reduced due to the mitigation of flood risks.

**Impact to small business relative to the cost of compliance with code**

## 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**

The proposals strengthens the code and clarifies requirements.

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

It does not.

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

It does not.

A3

**449.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:

1. Two feet above the base flood elevation as defined in this code.
2. The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)
3. The design flood elevation as defined in this code.
4. The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.

**Exceptions:**

1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.
2. Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code's site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.

3. ~~**449.4.2.2.2**~~

   ~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 449.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 449.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 449.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 449.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**449.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:

1. Two feet above the base flood elevation as defined in this code.
2. The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)
3. The design flood elevation as defined in this code.
4. The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.

**Exceptions:**

1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.
2. Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code's site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.

3. ~~**449.4.2.2.2**~~

   ~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 449.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 449.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 449.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 449.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**449.4.2.2 Site standards.**

**449.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

The lowest finished floor of all new facilities, substantial improvements to existing facilities and the remediation of substantially damaged facilities, and their support utilities shall be located not less than the highest of the following elevations:

Two feet above the base flood elevation as defined in this code.

The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)

The flood hazard area elevation established in accordance with Section 1612.3 of this code including flood hazard areas established by local ordinance.

**Exceptions:**

1. 1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist displacement due to flood waters.

2. 2. Areas not intended for patient care or patient support are not subject to this requirement where the facility's design allows for the continued operation of the hospital following a flood event by isolating effected utilities and maintaining facility access and required life safety exiting.

**449.4.2.2.2**

~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 449.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 449.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 449.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 449.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

All other additions to an existing facility shall comply with Section 449.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.

**Exceptions:** Additions to an existing facility that was designed and constructed in accordance with site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

8

### SP10498

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 450.2.2 | **Proponent** | scott waltz |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

Updates and clarifies flood resistance requirements for nursing homes.

### Rationale

Proposed modification provides clarification and strengthens requirements as necessary. it also provides new exception for non-resident care related areas.

### 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.

**Impact to small business relative to the cost of compliance with code**

### 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 and clarifies.

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

it will not.

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

It does not.

## Alternate Language

# 2nd Comment Period

**Proponent** scott waltz **Submitted** 8/26/2022 1:50:25 PM **Attachments** Yes

RP10498-A1

Rationale:

Proposed modification clarifies existing language and strengthens requirements to better protect critical healthcare facilities from flood damage.

## 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**

May require additional first cost to build in a category 5 surge zone. Life cycle costs are unknown but may be reduced due to the mitigation of flood risks.

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

May require additional first cost to build in a category 5 surge zone. Life cycle costs are unknown but may be reduced due to the mitigation of flood risks.

**Impact to small business relative to the cost of compliance with code**

## 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**

It strengthens the code and clarifies requirements.

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

It does not.

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

It does not.

**A1**

**450.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

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2. The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)
3. The design flood elevation as defined in this code.
4. The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.

**Exceptions:**

1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.
2. Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code's site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.

**~~450.4.2.2.2~~**

~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 450.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 450.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 450.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 450.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**450.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:

1. Two feet above the base flood elevation as defined in this code.
2. The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)
3. The design flood elevation as defined in this code.
4. The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.

**Exceptions:**

1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.
2. Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code's site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.

~~**450.4.2.2.2**~~

~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 450.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 450.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 450.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 450.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**450.4.2.2.1**

~~Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.~~

The lowest finished floor of all new facilities, substantial improvements to existing facilities and the remediation of substantially damaged facilities, and their support utilities shall be located not less than the highest of the following elevations:

Two feet above the base flood elevation as defined in this code.

The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)

The flood hazard area elevation established in accordance with Section 1612.3 of this code including flood hazard areas established by local ordinance.

**Exceptions:**

1. Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist displacement due to flood waters.

2. Areas not intended for resident care or resident support are not subject to this requirement where the facility's design allows for the continued operation of the nursing home following a flood event by isolating effected utilities and maintaining facility access and required life safety exiting.

**450.4.2.2.2**

~~For all existing facilities, the lowest floor elevations of all additions, and all resident support areas including food service, and all resident support utilities, including mechanical, and electrical (except fuel storage as noted in Section 450.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 450.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 449.4 of this code or local flood-resistant requirements, then the addition and all resident support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 450.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

All other additions to an existing facility shall comply with Section 450.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.

-

**Exceptions:** Additions to an existing facility that was designed and constructed in accordance with site standards for a nursing home in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Building

9

### SP10505

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449.4.2.6.1 | **Proponent** | scott waltz |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

Requires replace of existing mechanical equipment to meet the same debris impact requirements as new construction.

### Rationale

The proposed modification clarifies that the debris impact requirement are applicable to the replacement of mechanical equipment and is not limited to a new facility.

### 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.

**Impact to small business relative to the cost of compliance with code**

### 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 and clarifies the code.

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

It does not.

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

It does not.

## Alternate Language

# 2nd Comment Period

SP10505-A2

**Proponent** scott waltz **Submitted** 8/24/2022 4:04:59 PM **Attachments** Yes

Rationale:

The proposed modification clarifies the intent of this requirement and the methods for compliance. This is in response to the proposed text in alternate #1.

## 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**

Could reduce cost by clarifying code intent and methods of compliance.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes.

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

Yes.

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

It does not.

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

It does not.

# 2nd Comment Period

SP10505-A1

**Proponent** Alfonso Fernandez-Fraga **Submitted** 8/15/2022 9:46:32 AM **Attachments** Yes

Rationale:

The reason for removing 1626.3 from the requirements is that it does not apply to anything lower than 30 feet, and 449.4.2.6.1.2 applies only to 30 feet and lower. It does not make sense for a paragraph that pertains only to installations 30 feet and lower to reference a paragraph that pertains only to installations higher than 30 feet. The reason for removing 1626.4 from the requirements is that it applies to myriad components, but none of them are mechanical rooftop equipment. It is unnecessary and confusing to reference a section that defines assemblies that are deemed to comply if none of them relate to mechanical rooftop equipment. The reason to eliminate TAS201 and TAS203 is that they were written for components such as windows, doors, walls, roofs, and cladding where the application of perpendicularly positive and negative pressures make sense. The application of positive and negative pressures to rooftop equipment makes no sense, since the Code only discusses lateral and uplift forces. TAS201 and TAS203 do not apply to mechanical rooftop equipment. Test protocols (for wind loading and/or missile impact) applicable to rooftop equipment do not presently exist. Industry standards are being developed, so we are suggesting the use of the term approved, where approved, by Code definition, means, “approved by the building official.” Should someone want to comply with Code using the 449.4.2.6.1.2 option, some manufacturer’s test data and test methodology would need to be submitted to the building official for approval. In the future, once the industry standard is available, we will propose additional Code modifications to specifically cite the applicable standard.

## 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**

There may be a cost reduction by, as a practical matter, making equipment available that meets Code without requiring an additional enclosure.

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

There may be a cost reduction by, as a practical matter, making equipment available that meets Code without requiring an additional enclosure.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

The requirement is already in the Code. The proposed change introduces a means to comply. There is really no proposed change in the Code or the Code intent.

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

The proposal definitely improves the Code by increasing consistency and allowing for clearer methods of complianace.

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

There is no discrimination, the proposal "opens up" options.

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

The proposal does not degrade the effectiveness of the Code. By making the means to comply clearer, it makes the Code more effective.

**SP10505 Original plus A2**

**449.4.2.5.4**

~~Critical s~~Systems and utilities identified in ~~this~~ ~~s~~Section 449.4.2 shall be protected from debris impact by an equipment housing or screening enclosure complying with the impact protection standards in accordance with Sections 1626~~.2 through 16.26.4~~ when located at or below 30 feet above the finished grade of the building. Where screening enclosures are used, the height of the enclosure shall be not less than the height of the protected equipment and shall provide clearances required for the maintenance and continuous operation of the equipment. Where the housing and louvers are designed to provide the required equipment protection, sufficient standoff shall be provided to prevent damage to internal components from deflection of the cladding as a result of impact. Roof mounted equipment shall have fastening systems designed to meet the wind load requirements of the *Florida Building Code, Building*.

**449.4.2.5.4**

~~Critical s~~Systems and utilities identified in ~~this~~ ~~s~~Section 449.4.2 shall be protected from debris impact by an equipment housing or screening enclosure complying with the impact protection standards in accordance with Sections ~~1626.2 through 16.26.4~~ when located at or below 30 feet above the finished grade of the building. Where screening enclosures are used, the height of the enclosure shall be not less than the height of the protected equipment and shall provide clearances required for the maintenance and continuous operation of the equipment. Where the housing and louvers are designed to provide the required equipment protection, sufficient standoff shall be provided to prevent damage to internal components from deflection of the cladding as a result of impact. Roof mounted equipment shall have fastening systems designed to meet the wind load requirements of the *Florida Building Code, Building*.

Proposed changes to Florida Building Code, 2023 Edition, Section 449.4.2.6.1:

Present verbiage of 449.4.2.6.1.2:

"They are protected in accordance with Section 449.4.2.5.4."

Proposed verbiage of 449.4.2.6.1.2:

"They are protected in accordance with Section 449.4.2.5.4, except that the references to Sections 1626.3 and 1626.4 in Section 449.4.2.5.4 shall not apply. References to test protocols TAS 201 and TAS 203 in Section 1626.2 shall also not apply. Test protocols shall be in accordance with *approved* industry standards or test protocols shall be in accordance with alternate means acceptable to the *building official*."

**449.4.2.6.1**

All new and replacement air-moving equipment, dx condensing units, through-wall units and other HVAC equipment located outside of, partially outside of, or on the roof of the facility at or below 30 feet above the finished grade of the building and providing service to the ~~new~~ facility shall be permitted only when either of the following are met:

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Existing Building

10

### SP10266

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 502.3 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 5 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

**General Comments Yes** **Alternate Language Yes**

### Related Modifications

### Summary of Modification

Provide that non-substantial additions in flood hazard areas do increase the nonconformity of buildings that do not conform to current flood requirements.

### Rationale

Based on FEMA 2024 IEBC proposal EB154-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Ed. FBCB includes requirements for alterations & additions (improvements) to existing buildings in floodplains. Compliance trigger is in definition for “substantial improvement” (50% rule); requires compliance if cost of improvements equals or exceeds 50% market value of the building before work is done. FEMA guidance, like EB 1103.3, distinguishes compliance of additions from compliance of existing (or base) buildings. EB 502.1 states alterations must be made to ensure existing buildings are “not less complying with” the code than the existing building was before the addition. EB 1101.2 echoes that: additions “shall not create or extend any nonconformity.” Buildings in floodplains built before communities adopted regs are usually nonconforming. Proposal reinforces existing reqmt by making clear that additions less than 50% of market value must not make nonconforming buildings more nonconforming. This is done by having specific reqmts stating additions must not be lower than the lowest floors of existing buildings because being lower renders the buildings more nonconforming. Also, non-substantial additions to conforming or compliant buildings must not make buildings nonconforming. Proposal accounts for buildings that are elevated higher than required by the code by specifying additions must be at least as high as the elevations required in FBCB 1612 or FBCR R322. Another scenario addressed is if owners of buildings elevated on columns/ pilings decide to enclose area underneath. Enclosing meets the definition of addition because it creates an “extension or increase in floor area.” Even when enclosing underneath is not a “substantial improvement” based on cost, the work is only allowed when the walls and use of the enclosure comply with requirements for enclosures. Otherwise, enclosing creates noncompliance or extends nonconformance.

### Fiscal Impact Statement

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

It makes it easier to enforce the general requirement in the existing building code that work must not make nonconforming buildings more nonconforming.

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

No change; clarifies the application of the existing requirement that work must not make a nonconforming building more nonconforming. The proposal is consistent with the existing requirement that additions must not create or extend any nonconformity.

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

No change in costs (same as impact on buildings and owners).

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, by making it clearer that nonconformities must not be extended.

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

Yes, by making it clearer that nonconformities must not be extended.

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

No change in materials or methods.

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

No, because it'll be clearer that nonconformities must not be extended.

## Alternate Language

# 2nd Comment Period

SP10266-A2

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 8/9/2022 8:40:26 AM **Attachments** Yes

Rationale:
This alternate starts with the original proposed language and does not change the intent of the original proposal. The alternative does two things. One, it fixes FDEM's original error to show correct 502.2 language for additions (we inadvertently used Sec. 503.2 for alterations). Two, it shows changes to Sec. 1103.5 and Sec. 1401.3.3 to match FEMA's changes made to the same proposal for the IEBC, which were Approved as Modified at the ICC Committee Action Hearing.

## Fiscal Impact Statement

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

Original, with amendments, makes it easier to enforce the general requirement in the existing building code that work must not make nonconforming buildings more nonconforming.

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

No change; amendment further clarifies the application of the existing requirement that work must not make a nonconforming building more nonconforming. The proposal is consistent with the existing requirement that additions must not create or extend any nonconformity.

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

No change in costs (same as impact on buildings and owners).

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, by making it clearer that nonconformities must not be extended.

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

Yes, by making it clearer that nonconformities must not be extended.

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

No change in materials or methods.

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

No, because it'll be clearer that nonconformities must not be extended.

# 1st Comment Period History

SP10266-A1

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 4/16/2022 11:33:05 AM **Attachments** Yes

Rationale:
Submitted on behalf of the FDEM State Floodplain Manager, we recommend alternate language. FEMA submitted the proposal for the International Existing Building Code as proposal EB50-22, which was Approved as Modified at the Committee Action Hearing. The modifications correct an error on FEMA's part and correct a typographical error on FDEM's part. The modifications make sure the requirements apply only to the non-substantial additions, not the entire existing building. Only Sec. 1103.3 and 1401.3.3 are modified; no change needed for the definition and Sec. 503.2.

## Fiscal Impact Statement

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

no change from original

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

no change from original

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

no change from original

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

no change from original

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

no change from original

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

no change from original

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

no change from original

# 2nd Comment Period

P10266-G1

Proponent Scott McAdam Submitted 8/21/2022 3:55:00 PM Attachments No

Comment:

BOAF CDC Committee supports this modification alternate 2

**Original plus A2**

**A2**

**LOWEST FLOOR.** The lowest floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612 of the Florida Building Code or Section R322 of the Florida Residential Code, as applicable.

**[BS] 502.2 ~~503.2~~ [Additions ~~Alterations~~] Flood hazard areas.** For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any addition ~~*alteration*~~ that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any additions ~~*alterations*~~ that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction provided that both of the following apply:

1. The addition shall not create or extend a nonconformity of the existing building or structure with the flood resistant construction requirements than the existing building or structure was prior to the addition

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or structure or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

**[BS] 1103.5 Flood Hazard Areas.** *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:

   1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.3 If the addition does not constitute substantial improvement the addition ~~existing structure~~ is not required to comply with the flood design requirements for new construction provided that both of the following apply.

      1.3.1 The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

      1.3.2 The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

2.1. The *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building,* or Section R322 of the *Florida Building Code, Residential*, as applicable.

5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *Florida Building Code, Building*,or Section R322 of the *Florida Building Code, Residential*, as applicable.

**[B]1401.3.3 Compliance with flood hazard provisions.** In *flood hazard areas*, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable if the work covered by this section constitutes *substantial improvement*. If the work covered by this section is a structurally connected horizontal addition that does not constitute substantial improvement, the ~~building~~ addition is not required to comply with the flood design requirements for new construction provided that both of the following apply.

1. The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

**LOWEST FLOOR.** The lowest floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612 of the Florida Building Code or Section R322 of the Florida Residential Code, as applicable.

**[BS] 502.2 ~~503.2~~ [Additions ~~Alterations~~] Flood hazard areas.** For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any addition ~~*alteration*~~ that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any additions ~~*alterations*~~ that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction provided that both of the following apply:

1. The addition shall not create or extend a nonconformity of the existing building or structure with the flood resistant construction requirements than the existing building or structure was prior to the addition

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or structure or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

**[BS] 1103.5 Flood Hazard Areas.** *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:

    1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

    1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

    1.3 If the addition does not constitute substantial improvement the addition ~~existing structure~~ is not required to comply with the flood design requirements for new construction provided that both of the following apply.

        1.3.1 The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

        1.3.2 The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

    2.1. The *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building,* or Section R322 of the *Florida Building Code, Residential*, as applicable.

5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *Florida Building Code, Building*,or Section R322 of the *Florida Building Code, Residential*, as applicable.

**[B]1401.3.3 Compliance with flood hazard provisions.** In *flood hazard areas*, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable if the work covered by this section constitutes *substantial improvement*. If the work covered by this section is a structurally connected horizontal addition that does not constitute substantial improvement, the ~~building~~ addition is not required to comply with the flood design requirements for new construction provided that both of the following apply.

1. The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

**[B] 1103.3 Flood hazard areas.** Additions and foundations in flood hazard areas shall comply with the following requirements:

1. For horizontal additions that are structurally interconnected to the existing building:

1.1. If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

1.2. If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

1.3. If the addition does not constitute substantial improvement the addition ~~existing structure~~ is not required to comply with the flood design requirements for new construction provided that both of the following apply.

1.3.1 The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

1.3.1 The lowest floor of the addition shall be at or above the ~~lower~~ lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

**[B] 1401.3.3 Compliance with flood hazard provisions.** In flood hazard areas, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable, if the work covered by this section constitutes substantial improvement. If the work covered by this section is a structurally connected horizontal addition that does not constitute substantial improvement, the ~~building~~ addition is not required to comply with the flood design requirements for new construction provide that both of the following apply.

1.3.1 The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

1.3.1 The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

**LOWEST FLOOR.** The lowest floor of the lowest enclosed area, including basement, but excluding any unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the structure in violation of Section 1612 of the Florida Building Code or Section R322 of the Florida Residential Code, as applicable.

**[BS] 503.2 [Alterations] Flood hazard areas.** For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *alteration* that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any alterations that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction provided that both of the following apply:

1. The addition shall not create or extend a nonconformity of the existing building or structure with the flood resistant construction requirements than the existing building or structure was prior to the addition

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or structure or the lowest floor elevation required in Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

**[BS] 1103.5 Flood Hazard Areas.** *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:

   1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.3 If the addition does not constitute substantial improvement the existing structure is not required to comply with the flood design requirements for new construction provided that both of the following apply.

      1.3.1 The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

      1.3.2 The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

2.1. The *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the *Florida Building Code, Building*,or Section R322 of the *Florida Building Code, Residential*, as applicable.

**[B] 1401.3.3 Compliance with flood hazard provisions.** In *flood hazard areas*, buildings that are evaluated in accordance with this section shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable if the work covered by this section constitutes *substantial improvement*. If the work covered by this section is a structurally connected horizontal addition that does not constitute substantial improvement, the building is not required to comply with the flood design requirements for new construction provided that both of the following apply.

1. The addition shall not create or extend any nonconformity of the existing building with the flood resistant construction requirements.

2. The lowest floor of the addition shall be at or above the lower of the lowest floor of the existing building or the lowest floor elevation required in Section 1612 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Existing Building

11

### SP10267

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 502.3 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 5 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

New, raised, and extended foundations in flood hazard areas should comply with requirements for type and height required for new construction.

### Rationale

Based on FEMA 2024 IEBC proposal EB50-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. Whether an existing building will have a new foundation, replacement foundation, or a foundation that is raised or extended in the vertical, the construction process is generally the same: the building must be detached from the existing foundation and jacked up to allow the foundation work to proceed. Then, after the foundation work is complete, the building is lowered and structurally attached to the foundation. The costs to detach the building, jack it up, and lower and attach it to the foundation, do not change significantly based on how tall the new foundation will be. The existing provisions in Section 502.3 and Section 1103.3 allow a building in a flood hazard area to remain below the required elevation (and possibly on an incompatible foundation type) if the work is determined to not constitute substantial improvement (a defined term). If a foundation is already being raised or extended in the vertical, it should be raised to the same elevation required for new construction in flood hazard areas. The Codes define “addition” to include an increase in height, which is why foundation work is included in the FBC Existing Building Sec. 1103.3 and why the proposed change amends a section in Chapter 5 Additions. When owners of buildings in flood hazard areas have already decided to invest in this type of extensive work, having the final foundation be resistant to identified flood conditions and flood loads is appropriate to protect that investment, as well as the investment in and safety of the building itself. The incremental cost of adding additional height to a foundation that is already being replaced or raised or extended in the vertical is off-set by the benefits of lower risk of flood damage and lower NFIP flood insurance policy premiums which are, in part, a function of elevation.

### Fiscal Impact Statement

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

No change in enforcement of permits for this type of foundation work (not dependent on height of foundation).

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

Costs increase if new foundations or raised/extended fdns don't trigger substantial improvement and now must be higher. Increased costs are only for added height to reach required elvn. Benefits are future damage avoided. NFIP flood insurance reduced because rating is based partially on elevation.

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

May be a slight increase in the cost of design to ensure new, raised, and extended foundations comply.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, because non-substantial additions will not extend nonconformity, and thus buildings will retain existing flood resilience.

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

Yes, because non-substantial additions will not extend nonconformity, and thus buildings will retain existing flood resilience.

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

No change in materials or methods.

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

Does not, because non-substantial additions will not extend nonconformity, and thus buildings will retain existing flood resilience.

## Alternate Language

## 1st Comment Period History

SP10267-A1

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 4/16/2022 11:36:10 AM **Attachments** Yes

Rationale:
Submitted on behalf of the FDEM State Floodplain Manager, we recommend alternate language. FEMA submitted the proposal for the International Existing Building Code as proposal EB50-22, which was Approved as Modified at the Committee Action Hearing. The modification clarifies that “in the vertical” was intended to only mean vertically upward. It was brought to FEMA’s attention that without clarifying “upward,” the provision could be taken to apply when micropiles are installed under a foundation to stabilize the foundation. Modify only Sec. 502.2, not 1103.5.

## Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
No change to original

**Impact to building and property owners relative to cost of compliance with code**
No change to original

**Impact to industry relative to the cost of compliance with code**
No change to original

**Impact to small business relative to the cost of compliance with code**

## Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
No change to original

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
No change to original

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
No change to original

**Does not degrade the effectiveness of the code**
No change to original

**Mod SP10267, approved as modified with A1 (Original plus A1)**

**[BS] 502.2 Flood hazard areas.** For buildings and structures in *flood hazard* areas established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *addition* that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design. For new foundations, foundations raised or extended upward, and replacement foundations, the foundations shall be in compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, as applicable, any *additions* that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

**[BS] 1103.5 Flood Hazard Areas.** *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:

   1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

   2.1. The *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

~~4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.~~

4 ~~5~~. For a new foundation, ~~or~~ replacement foundation, or a foundation raised or extended in the vertical, the foundation shall comply with Section 1612 of the *Florida Building Code, Building*,or Section R322 of the *Florida Building Code, Residential*, as applicable.

**[B] 502.2 Flood hazard areas.** For buildings and structures in flood hazard areas established in Section 1612.3 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable, any addition that constitutes substantial improvement of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design. For new foundations, foundations raised or extended ~~in the vertical~~ upward, and replacement foundations, the foundations shall be in compliance with the requirements for new construction for flood design.

For buildings and structures in flood hazard areas established in Section 1612.3 of the Florida Building Code, or Section R322 of the Florida Residential Code, as applicable, any additions that do not constitute substantial improvement of the existing structure are not required to comply with the flood design requirements for new construction.

**[BS] 502.2 Flood hazard areas.** For buildings and structures in *flood hazard* areas established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, any *addition* that constitutes *substantial improvement* of the existing structure shall comply with the flood design requirements for new construction, and all aspects of the existing structure shall be brought into compliance with the requirements for new construction for flood design. For new foundations, foundations raised or extended in the vertical, and replacement foundations, the foundations shall be in compliance with the requirements for new construction for flood design.

For buildings and structures in *flood hazard areas* established in Section 1612.3 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable, as applicable, any *additions* that do not constitute *substantial improvement* of the existing structure are not required to comply with the flood design requirements for new construction.

**[BS] 1103.5 Flood Hazard Areas.** *Additions* and *foundations* in *flood hazard areas* shall comply with the following requirements:

1. For horizontal *additions* that are structurally interconnected to the *existing building*:

   1.1. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   1.2. If the *addition* constitutes *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

2. For horizontal *additions* that are not structurally interconnected to the *existing building*:

   2.1. The *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

   2.2. If the *addition* and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* and the *addition* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

3. For vertical *additions* and all other proposed work that, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

~~4. For a raised or extended foundation, if the foundation work and all other proposed work, when combined, constitute *substantial improvement*, the *existing building* shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.~~

4 ~~5~~. For a new foundation, ~~or~~ replacement foundation, or a foundation raised or extended in the vertical, the foundation shall comply with Section 1612 of the *Florida Building Code, Building*,or Section R322 of the *Florida Building Code, Residential*, as applicable.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Residential

12

### SP10257

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 322.1.6 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

**General Comments Yes** **Alternate Language Yes**

**Related Modifications**

**Summary of Modification**

Exterior equipment in flood hazard areas that is flood damaged and replaced must be elevated.

**Rationale**

Based on FEMA 2024 IRC proposal RB136-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. Many buildings in floodplains were built before communities started regulating and requiring buildings to be elevated and constructed to minimize exposure to flooding. During a flood, exterior equipment that serves those buildings gets damaged, even when the building itself is not substantially damaged. When homes are flooded and elevated exterior equipment remains functional, clean up and drying out are easier and faster. This means dangerous mold conditions are less likely to develop and families can more quickly move back into safer homes. The code change requires replacement exterior equipment damaged by flood to be raised to or above the elevation required based on flood zone, unless the replacement equipment meets the limitations of the exception to be located below those elevations. Methods used to raise replacement exterior equipment are the same as the methods used when equipment is installed to serve new construction (pedestal, platforms, or platforms that are cantilevered from or knee braced to the structure). Photographs in an attachment to this proposal show typical methods of elevating equipment that serves dwellings. FEMA's Mitigation Assessment Team reports prepared after some significant flood events document widespread damage to non-elevated exterior equipment. Elevating equipment at the time of replacement also saves homeowners from having to pay for replacement equipment after the subsequent flood event.

**Fiscal Impact Statement**

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

No anticipated impact.

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

Increased costs for pedestal or platform to raise replacement equipment and minor costs to extend wiring & piping. Two long-term benefits offset upfront costs: damage avoided and cost of complete replacement if

flooded, and faster drying, cleanup, and reoccupancy after subsequent floods.

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

No anticipated impact.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, it facilitates drying, cleanup, and reoccupancy after flood events.

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

Improves the code by helping post-flood recovery.

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

No change in the type or size of equipment.

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

Improves the code by helping post-flood recovery.

## Alternate Language

# 2nd Comment Period

SP10257-A2

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 8/9/2022 8:55:01 AM **Attachments** Yes

Rationale:
Alternate language offered at the suggestion of a TAC member who suggested requirements for replacements (which occur at existing buildings) should be done in the FBC Existing Building. Many buildings in floodplains were built before communities started regulating and requiring buildings to be elevated and constructed to minimize exposure to flooding. During a flood, exterior equipment that serves those buildings gets damaged, even when the building itself is not substantially damaged. When homes are flooded and elevated exterior equipment remains functional, clean up and drying out are easier and faster. This means dangerous mold conditions are less likely to develop and families can more quickly move back into safer homes. The code change requires replacement exterior equipment damaged by flood to be raised to or above the elevation required based on flood zone, unless the replacement equipment meets the limitations of the exception to be located below those elevations. Methods used to raise replacement exterior equipment are the same as the methods used when equipment is installed to serve new construction (pedestal, platforms, or platforms that are cantilevered from or knee braced to the structure). Photographs attached to the original proposal show typical methods of elevating equipment that serves dwellings. FEMA's Mitigation Assessment Team reports prepared after some significant flood events document widespread damage to non-elevated exterior equipment. Elevating equipment at the time of replacement also saves homeowners from having to pay for replacement equipment after the subsequent flood event.

## Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
No anticipated impact.

**Impact to building and property owners relative to cost of compliance with code**
Increased costs for pedestal or platform to raise replacement equipment and minor costs to extend wiring & piping. Two long-term benefits off-set upfront costs: damage avoided and cost of complete replacement if flooded, and faster drying, cleanup, and reoccupancy after subsequent floods

**Impact to industry relative to the cost of compliance with code**
No anticipated impact.

**Impact to small business relative to the cost of compliance with code**

## Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Yes, it facilitates drying, cleanup, and reoccupancy after future flood events

**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
Improves the code by helping recovery after future flood events.

**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
No change in the type or size of equipment.

**Does not degrade the effectiveness of the code**
Improves the code by helping recovery after future flood events.

# 1st Comment Period History

SP10257-A1

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 4/16/2022 11:27:50 AM **Attachments** Yes

Rationale:

Submitted on behalf of the FDEM State Floodplain Manager, we recommend approval by the TAC and Commission because this will help many homeowners after the next flood. The frequency of flooding is increasing across the state. This proposal was submitted by FEMA for the International Residential Code as RB136-22, which was Disapproved at the Committee Action Hearing. FDEM has helped a number of Florida communities to prepare language for local technical amendments to require ALL new exterior equipment and ALL replacement exterior equipment to be elevated, regardless of whether there is other work on the building. FDEM supports that as a Florida-specific amendment to the residential code, and offers it as alternate language to replace the sentence shown in SP10257.

## Fiscal Impact Statement

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

Easier to enforce for ALL new/replacements, and not have to know whether the unit being replaced was damaged by flooding.

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

Initial increase in cost for more owners replacing units, not just those owners who experienced flooding

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

Same as original

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Broader benefits because any owner replacing units will avoid future flood damage, not just owners replacing flooded units.

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

Same as original

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

Same as original

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

Same as original

# 2nd Comment Period

P10257-G1

Proponent Rebecca Quinn obo FL Div Emerg Mgnt Submitted 8/9/2022 8:58:35 AM Attachments No

Comment:

Request Approve the original proposal as Submitted to limit application to exterior equipment that is damaged by flooding and needs to be replaced.

Original plus A2

A2

**701.3 Flood hazard areas.** In flood hazard areas~~,~~:

1. alterations that constitute substantial improvement shall require that the building comply with Section 1612 of the Florida Building Code, Building, or Section R322 of the Florida Building Code, as applicable.

2. Replacement of exterior equipment and exterior appliances damaged by flood shall meet the requirements of Section 1612 of the Florida Building Code, Building, or Section R322.1.6 of the Florida Building Code, as applicable.

**701.3 Flood hazard areas.** In flood hazard areas~~,~~:

1. alterations that constitute substantial improvement shall require that the building comply with Section 1612 of the Florida Building Code, Building, or Section R322 of the Florida Building Code, as applicable.

2. Replacement of exterior equipment and exterior appliances damaged by flood shall meet the requirements of Section 612 of the Florida Building Code, Building, or Section R322.1.6 of the Florida Building Code, as applicable.

**R322.1.6 Protection of mechanical, plumbing and electrical systems.** Electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the elevation required in Section R322.2 or R322.3. New exterior equipment, replacement exterior equipment, new exterior appliances, and replacement exterior appliances shall meet the requirements of this section. ~~Replacement of exterior equipment and exterior appliances damaged by flood shall meet the requirements of this section.~~ If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilating, air conditioning and plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

**R322.1.6 Protection of mechanical, plumbing and electrical systems.** Electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the elevation required in Section R322.2 or R322.3. Replacement of exterior equipment and exterior appliances damaged by flood shall meet the requirements of this section. If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilating, air conditioning and plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

**Exception:** Locating electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment is permitted below the elevation required in Section R322.2 or R322.3 provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the required elevation in accordance with ASCE 24. Equipment for pools, spas and water features shall be permitted below the elevation required in Section R322.2 or R322.3 provided it is elevated to the extent practical and is anchored to prevent floatation and resist flood forces and is supplied by branch circuits that have ground-fault circuit interrupter protection. Electrical wiring systems are permitted to be located below the required elevation provided that they conform to the provisions of the electrical part of this code for wet locations.

Attachment for INSERT
PROPOSAL NUMBER

Photographs from FEMA's proposal for the 2024 IRC used with permission.

Photographs are provided courtesy of: FEMA P-348, Rebecca Quinn, and Rebecca Quinn

**Cost Impact:** The code change proposal will increase the cost of construction
When nonconforming dwellings have non-elevated exterior equipment, this code change proposal requires compliance when the exterior equipment is replaced after being damaged by flooding. Most equipment is elevated; although most typical exterior equipment is not designed to satisfy the requirements and limitations of the exception, that option remains available. Increased costs incurred would be the cost of the pedestal or platform on which the replacement equipment is raised elevated and minor costs to extend wiring and piping, if necessary. The actual cost increase depends on the method of elevation (pedestal, platform, cantilevered/knee braced platform), how high above grade is necessary to meet the elevation requirements of R322.2 or R322.3, as applicable, and other factors such as soil type. The cost of a professionally built 6-foot high wooden platform is approximately $500, with an additional estimated $100 for 10 feet of copper refrigerant line, for a total of approximately $600. At least two long-term benefits off-set the upfront additional installation costs: damage avoided and cost of complete replacement if flooded, and faster drying, clean-up, and reoccupancy after subsequent flood events.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Modified : 13**

Total Mods for report: 70

## Sub Code: Residential

13

### SP10351

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 322.1.10 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Modified | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Building Section 1612, #10349, to add definition and make similar change to where elevation data are prepared and sealed.

### Summary of Modification

Clarify that licensed professional surveyors and mappers survey and seal elevation data and add a definition for Professional Surveyor and Mapper.

### Rationale

The FBC defines “registered design professional,” citing Florida Statutes for Chapter 471 (Engineering) and Chapter 481 (Architecture). The term does not include professional surveyors and mappers licensed pursuant to Chapter 472, Florida Statutes. In 2021, the Florida Board of Professional Surveyors and Mappers determined and verified that only Surveyors and Mappers with Florida licenses in good standing “may certify elevation data in Florida pursuant to 472.0366.” Therefore, it is appropriate to define ‘professional surveyor and mapper” in the FBC, Building and FBC, Residential, and clarify in the sections that specify which professionals may certify elevations. The FEMA NFIP Elevation Certificate relies on the laws of each state that specify which licensed professionals may certify elevations.

### Fiscal Impact Statement

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

Local entities should verify that a certifier of elevation data is a Professional Surveyor and Mapper licensed by the FBPSM.

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

None, certification of elevations is already required.

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

None, certification of elevations is already required.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, because the appropriately licensed professional is required to prepare certifications.

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

Yes, because the appropriately licensed professional is required to prepare certifications.

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

The change does not affect materials and methods of construction.

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

Improves effectiveness because the appropriately licensed professional is required to prepare certifications.

## Alternate Language

# 2nd Comment Period

SP10351-A1

**Proponent** Rebecca Quinn obo FL Div Emerg Mgnt **Submitted** 8/9/2022 8:24:47 AM **Attachments** Yes

Rationale:

To coordinate with #10349 which adds licensed professional surveyor and mapper to the FBC Building for certifying elevations (TACs recommended Approval). This alternate retains registered design professional based on TAC discussion, despite the 2021 determination of the Florida Board of Professional Surveyors and Mappers that only Surveyors and Mappers with Florida licenses in good standing “may certify elevation data in Florida pursuant to 472.0366.”

## Fiscal Impact Statement

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

None, certification of elevations is already required.

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

None, certification of elevations is already required.

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

None, certification of elevations is already required.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

No change

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

No change

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

No change

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

No change

**A1**

**202 Definitions.**

PROFESSIONAL SURVEYOR AND MAPPER. An individual who is licensed or registered to engage in the practice of surveying and mapping under Chapter 472, Florida Statutes.

**R322.1.10 As-built elevation documentation.** A licensed professional surveyor and mapper or registered design professional shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3.

**202 Definitions.**

PROFESSIONAL SURVEYOR AND MAPPER. An individual who is licensed or registered to engage in the practice of surveying and mapping under Chapter 472, Florida Statutes.

**R322.1.10 As-built elevation documentation.** A licensed professional surveyor and mapper or registered design professional shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3.

**202 Definitions.**

PROFESSIONAL SURVEYOR AND MAPPER. An individual who is licensed or registered to engage in the practice of surveying and mapping under Chapter 472, Florida Statutes.

**R322.1.10 As-built elevation documentation.** A licensed professional surveyor and mapper ~~registered design professional~~ shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3.

STATE OF FLORIDA

# DIVISION OF EMERGENCY MANAGEMENT

**Ron DeSantis**
Governor

**Kevin Guthrie**
Director

**MEMORANDUM**

TO: Florida Floodplain Managers and Building Officials

FROM: Conn Cole, Florida NFIP State Coordinator

DATE: November 11, 2021

RE: Certification of Elevation Data

Digitally signed by Conn Cole
DN: dc=org, dc=fleoc, ou=DEM_Users, ou=Mitigation, ou=HazardMitigationAssistance, cn=Conn Cole, email=Conn.Cole@em.myflorida.com
Date: 2021.11.11 10:06:30 -05'00'

From time to time, the State Floodplain Management Office is asked which professionals licensed in Florida are authorized to certify elevation data. In addition, most communities require submission of the FEMA/NFIP Elevation Certificate to satisfy the Florida Building Code requirements related to foundation inspections and final inspections (see FBC, Building, Sec. 110.3).

By email dated November 2, 2021 (attached), the Executive Director of the Board of Professional Surveyors and Mappers advises that "[o]nly Surveyors and Mappers licensed by the Board of Professional Surveyors and Mappers with licenses in good standing may certify elevation data in Florida according to 472.0366 [Florida Statutes] and verified by the board at the August 2, 2021 meeting."

The FEMA/NFIP Elevation Certificate clarifies that only professionals "authorized by law to certify elevation information" may sign and seal Section D of the Elevation Certificate. Therefore, the fact that the Elevation Certificate lists "land surveyor, engineer, or architect" does not, by itself, authorize all such licensed professionals to certify surveyed elevation data.

This memorandum and other guidance prepared by the State Floodplain Management Office is available online:

www.floridadisaster.org/dem/mitigation/floodplain/community-resources
(Guidance, Ordinance Amendments, FBC Amendments, and Sample Forms)

CHC/

Attachment: November 2, 2021 Email from Executive Director of the Board of Professional Surveyors and Mappers

DIVISION HEADQUARTERS
2555 Shumard Oak Blvd
Tallahassee, FL 32399-2100

Tel:850-815-4000
www.FloridaDisaster.org

STATE LOGISTICS RESPONSE CENTER
2702 Directors Row
Orlando, FL 32809-5631

**Rebecca C. Quinn**

**From:** Compton, Liz <Patricia.Compton@fdacs.gov>
**Sent:** Tuesday, November 02, 2021 10:55 AM
**To:** Conn Cole; Mckibben, Amanda
**Cc:** Kristabel Moore; Rebecca C. Quinn (rcquinn@earthlink.net)
**Subject:** RE: Elevation Data Certification

Dear Mr. Cole,

That is correct. Only Surveyors and Mappers licensed by the Florida Board of Professional Surveyors and Mappers with licenses in good standing may certify elevation data in Florida pursuant to 472.0366 and verified by the board at the August 2, 2021 meeting.

Sincerely,

**Liz Compton, CPM**
Executive Director
Board of Professional Surveyors and Mappers
Florida Department of Agriculture and Consumer Services

Liz.compton@FDACS.gov
850.410.3674

The Rhodes Building
2005 Apalachee Parkway
Tallahassee, FL 32399

www.FDACS.gov



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**From:** Conn Cole <Conn.Cole@em.myflorida.com>
**Sent:** Tuesday, November 2, 2021 8:45 AM
**To:** Compton, Liz <Patricia.Compton@fdacs.gov>; Mckibben, Amanda <Amanda.McKibben@fdacs.gov>
**Cc:** Kristabel Moore <Kristabel.Moore@em.myflorida.com>; Rebecca C. Quinn (rcquinn@earthlink.net) <rcquinn@earthlink.net>
**Subject:** [External] Elevation Data Certification



Liz and Ms. McKibben,

Thank you for your quick response and assistance in clearing up the confusion on this topic. Would you please reply to confirm that only Professional Surveyors and Mappers licensed by the Florida Board of Professional Surveyors and Mappers may certify elevation data in Florida?

Best regards,
Conn

Conn H. Cole, MBA/PA, CFM
Florida NFIP State Coordinator | State Floodplain Manager
State Floodplain Management Office
Florida Division of Emergency Management
(850) 815-4507 Desk
(850) 509-1813 Cell
Conn.Cole@em.myflorida.com

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

14

### SP9928

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 469 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies the application code references for surgery suites.

### Rationale

This section added so conflicts between these sections and the Guidelines do not take place and so that additional requirements from the Guidelines are not added to design of these facilities.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
Reduces impact to industry relative to the cost of compliance with code
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**

Improves the effectiveness of the code by clarifying requirements.

469.2.1.3 The architectural, mechanical, and electrical design criteria and processes as specified in the physical plant standards in this section shall take precedence over those in the Guidelines with no additional requirements.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

15

### SP10177

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/11/2022 | **Section** | 458.3.1 | **Proponent** | Doug Bell |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

To allow virtual inspections within DBPR's manufactured buildings program.

### Rationale

Section 553.79(6), F.S., allows virtual inspections to be performed at the discretion of a state or local enforcement agency. This modification would extend this discretion to third party agencies within DBPR's manufactured buildings program. Third party inspection agencies and manufacturers are currently required to submit their onsite inspection program/process to DBPR for approval as part of their quality assurance manual. Likewise, if this modification is approved, each manufacturer and third party inspection agency, within DBPR's manufactured buildings program, would have to submit their virtual inspection program/process to DBPR for approval as part of their quality assurance manual.

### 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. There is a potential decrease in costs because the cost of virtual inspections will likely be less than onsite inspections.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Yes. The modification incorporates an inspection type that has already been authorized by Florida Statute and will allow third party agencies and manufacturers to more efficiently inspect building construction within

DBPR's manufactured buildings program.

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

The modification provides additional options for inspections.

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

The modification provides additional options for inspections, and it does not discriminate against any materials products, methods, or systems of construction.

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

Virtual inspections are already authorized by Florida Statute for construction throughout the state. Allowing virtual inspections within the manufactured buildings program will not degrade the effectiveness of the Florida Building Code.

Inspections shall be conducted ~~at the manufacturing facility~~ by an appropriately licensed representative of an agency selected by the manufacturer. The inspections shall ensure that the buildings are being manufactured in compliance with the applicable codes and the approved plans. Once an agency has inspected a manufactured building, the manufacturer shall not seek to have the building inspected by another agency, nor shall any agency inspect a building that has already been inspected by another agency unless the subsequent inspection is at the direction of the department or unless the building or modification thereto is being inspected for recertification by the department.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

16

### SP10197

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/11/2022 | **Section** | 453 | **Proponent** | Don Whitehead |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

This modification will clarify the exterior envelope requirements.

### Rationale

To clarify the exterior envelope requirements.

### Fiscal Impact Statement

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

Enforcement of the code will be easier with clearer requirements.

**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

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This modification will clarify the requirements of the exterior building envelope that protects the safety of the general public that use the school for shelter during a hurricane or storm event.

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

This modification will strengthen and improve the code by providing clearer exterior building envelope requirements.

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

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

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

This modification does not degrade the effectiveness of the code.

**453.25.4.3 Exterior envelope.** The exterior envelope, louvers over air intakes and vents, and gooseneck-type intakes and vents of EHPAs shall be designed and installed to meet the wind load and missile impact criteria in accordance with ICC 500.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

17

### SP10207

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/11/2022 | **Section** | 468 | **Proponent** | Don Whitehead |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

This modification adds an alternative to the hose bibb requirement.

### Rationale

To provide an alternative to the hose bibb requirement.

### 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**

Cost will be the same or lower by allowing an alternative to the hose bibb requirement.

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

Cost will be the same or lower by allowing an alternative to the hose bibb requirement.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This modification will provide a healthy and safe alternative to the hose bibb requirement.

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

This modification improves the code by allowing an equivalent or better product.

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

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

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

This modification does not degrade the effectiveness of the code.

**468.3.5.6 Floor drains and hose bibbs.** All group toilet rooms shall be provided with at least one floor drain and one easily accessible hose bibb or wall hydrant. The floor shall be sloped down to the drain.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

18

### SP10332

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Clarifies where sliding doors may be used in a hospital.

**Rationale**

Sliding Pocket and folding doors often jamb and will not provide egress from an occupied room in time of emergencies. This could be an issue for emergency egress not only in the patient use toilets or baths but in any room that is capable of being occupied.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code
**Impact to small business relative to the cost of compliance with code**

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Improves 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**
Strengthens or improves the code for safety and egress
**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
Allows the use of many different door designs and configurations.

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

Improves the effectiveness of the code for public safety.

449.3.4.9 The use of pocket sliding or folding doors to ~~patient use toilet, baths, or shower rooms~~ any occupiable room shall not be permitted. A sliding door equipped with sliding door hardware located ~~on the patient room side of the wall~~ outside of the room and not equipped with a bottom door track shall be permitted.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

19

### SP10333

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies where the private operating mode is required in hospitals.

### Rationale

Some Authorities Having Jurisdiction will not permit a private operating mode fire alarm system to be installed in the hospital Emergency Departments because they assert the patients in the ER are outpatients, not inpatients. This revision makes it clear the requirement for private operating mode is for all patient areas in the hospital.

### Fiscal Impact Statement

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

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

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

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

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

There is no impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Improves the the health, safety, and welfare of the patients in hospitals.

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

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

449.3.12.2 In all inpatient and outpatient care rooms, spaces and areas, including sleeping, treatment, diagnostic, and therapeutic, the private operating mode as permitted and described in NFPA 72, National Fire Alarm and Signaling Code, shall be required. Only the attendants and other personnel required to evacuate occupants from a zone, area, room, floor, or building shall be required to be notified. Audible and visual notification devices shall only be permitted to be located at the care providers' stations, the soiled workroom, soiled holding room, clean workroom, staff lounge, medication preparation room, and nurse or supervisor's office, and other staff rooms or areas as determined by the governing body of the facility.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

20

### SP10342

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises language for clarification on consistency.

### Rationale

Revises the language to be consistent with the FGI Guidelines so there is no confusion by the user.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**
Improves the effectiveness of the code by clarifying requirements.

450.3.1.2 Skilled nursing units that are part of a hospital and licensed as a hospital bed but certified as a skilled nursing bed shall meet the requirements for an in-hospital skilled nursing patient care unit in the FGI Guidelines for Design and Construction of Hospitals as referenced in Chapter 35 of this code.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

21

### SP10343

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Corrects chapter reference.

### Rationale

Corrects chapter reverence to the Guidelines.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**
Improves the effectiveness of the code by clarifying requirements.

450.3.2 Resident rooms. In addition to the requirements of The Guidelines, Chapter 3.~~2~~1, each resident room shall meet the following minimum standards:

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

22

### SP10344

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies how to separate resident sleeping areas.

### Rationale

There has been some misunderstanding about the intent of this requirement . The intent is to provide acoustic and visual privacy and to not permit curtains or movable screens to separate these individual sleeping areas from each other. The allowance for full height rigid sliding or foldable partitions is to be able to open the room when it is shared by couples who would like to share one room with each other.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.2.1 In new construction and additions, the maximum room capacity of each resident room shall be two persons. In double occupancy resident rooms, sleeping areas shall be separated from each other by a full height wall or full height rigid sliding or foldable partition to increase acoustic and visual privacy. Each person lying in bed shall have direct visual access to an exterior window at all times. Either doors or cubicle curtains from the entry vestibule to these individual resident sleeping areas shall be provided.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

23

### SP10345

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises section to coordinate with the FGI interim amendment.

### Rationale

The inclusion of the FGI interim amendment makes these square footage requirements incorrect. The additional language defining clear floor area is necessary because the FGI Guidelines does not adequately reference these specific conditions.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.2.2 ~~Each resident room shall have a minimum of 100 square feet (9.29 m2) of clear floor area per bed in a double occupancy resident room and 120 square feet (11.15 m2) of clear floor area in a single occupancy resident room, exclusive of the space consumed by the toilet room, closet(s), wardrobe(s), lavatory(ies), alcove(s), and~~ The clear floor area excludes either the space for the room entrance door swing~~(s)~~ into the room or the space for ~~entrance~~ vestibule entry, whichever is greater. For the purpose of determining the minimum clear floor area, the ~~entrance~~ vestibule entry is defined as that floor area located between the room entrance door and the room floor area containing the resident bed(s).

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

24

### SP10346

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Deletes unnecessary and redundant language.

### Rationale

Deletes redundant and unnecessary language.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.3 Resident support areas and services. See The Guidelines for requirements.
~~450.3.3.1 Staff work area(s) (nurse station). See The Guidelines for requirements.~~
~~450.3.3.2 Clean utility room. See The Guidelines for requirements.~~
~~450.3.3.3 Soiled utility or soiled holding room(s). See The Guidelines for requirements.~~
~~450.3.3.4 Medication storage and distribution. See The Guidelines for requirements.~~
~~450.3.3.5 A nourishment room. See The Guidelines for requirements.~~
~~450.3.3.6 Ice for residents' consumption. See The Guidelines for requirements. Where the icemaker unit is accessible to residents or the public, it shall be a self dispensing type~~.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

25

### SP10347

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the use of sliding doors in a nursing home.

### Rationale

Sliding Pocket and folding doors often jamb and will not provide egress from an occupied room in time of emergencies. This could be an issue for emergency egress not only in the patient use toilets or baths but in any room that is capable of being occupied. This revision clears up what kind of sliding door is permitted in a nursing home and describes the operation of such a door when it is located on the exit access corridor.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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. Allows various sliding doors in a nursing home.

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

Improves the effectiveness of the code by clarifying requirements.

450.3.5.3 The use of pocket sliding or folding doors to any occupiable room shall not be permitted A sliding door equipped with sliding hardware located ~~on the resident room side of the wall~~ outside of the room and without a bottom track shall be permitted ~~on an individual resident toilet or bathroom~~. If a sliding door is used on a resident toilet or bathroom, a D-shaped handle at least 4 inches (10.16 cm) long shall be provided to open the door. A sliding door used for access to any room located on the exit access corridor may be manual or power operated and shall be smoke resistive and have latching hardware or other mechanism that prevents the door from rebounding to a partially open position if the door is forcefully closed.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

26

### SP10354

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Modifies how other references are applied to nurse call requirements.

### Rationale

This revision is necessary so that conflicting requirements between the FBC and other code references are not an issue in applying these requirements.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.17 Nurse call systems. Reference The Guidelines only for ~~other~~ requirements not specifically described in this section. Nurse call systems as described in NFPA 99 shall not apply.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

27

### SP10355

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the emergency call system requirements.

### Rationale

This revision clarifies where an emergency call station must be installed, allows various types of nurse call systems and provides for the facility to add more call stations at their determination for the safety of their residents.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.17.4 Emergency call system. An emergency call~~ing~~ station of the pull cord-type shall be provided ~~and shall be conveniently located~~ for resident use at each exam room (if provided), resident toilet, bath or shower room. The cord shall hang to within 2 to 6 inches (5.08 – 15.24 cm) of the floor for use by a resident lying on the floor. A portable wireless device shall satisfy this requirement.

(1) One emergency call station shall be installed in each separated room or area. Additional emergency call stations shall be located as determined by the facility in its Functional Program.

(2) If the emergency calling station is located ~~but not~~ inside of the shower ~~unless the nurse call device is~~ it shall be listed for wet locations.

(3) The call signal shall be the highest priority and shall be cancelled only at the emergency call~~ing~~ station.

(4) The emergency call~~ing~~ station shall activate distinctive audible and visual signals immediately at the resident room door or wireless pager, and activate a visual and audible signal in the clean utility, soiled utility, nourishment station, medication prep or mobile nurse station receiver and the master station of the resident unit. If a mobile nurse station receiver is utilized to receive the resident call, it will be worn by all staff who are assigned to the resident unit and shall identify the specific resident and or room from which the call was placed.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

28

### SP10356

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Corrects the word hospital to nursing home.

### Rationale

Corrects the word "hospital" to "nursing home" because this the nursing home section, not hospital.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**
Improves the effectiveness of the code by correcting the sentence.

450.3.13 Fire pump.
450.3.13.1 Where required by another section of this code, a new fire pump, except for a replacement fire pump, that is electric motor-driven shall be connected to the Emergency Power Supply System (EPSS) of the ~~hospital~~ nursing home. A fire pump(s) that is not electric motor driven shall meet the requirements of NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection alternative power.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

29

### SP10359

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revised to accurately designate the areas for testing of grounding systems.

### Rationale

Nursing homes, unlike hospitals, do not generally have category 1 and 2 patient care areas. The resident sleeping room is designated as a category 3 space and therefore would not require this type of testing. This revision clearly states where this testing, sometimes referred to a "equipotential testing" is to be completed.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.14.7 There shall be documentation for ~~equipotential~~ grounding system testing of voltage and impedance measurements only in areas defined as risk categories 1 or 2 in ~~patient~~ resident care areas.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

30

### SP10360

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Corrects the reference to RP-28 lighting for Older Adults.

### Rationale

This document is referenced in the Guidelines. This revision points the user to the specific table to lighting levels that are required by this code to be designed and constructed in a nursing home.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction
**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.15.3 All indoor lighting in the resident use areas including corridors, shared spaces, treatment areas, sleeping areas, social/recreational areas and living areas shall be designed and constructed to meet Table A-1 ~~the recommendations~~ of ANSI/IES RP-28-~~07~~ Recommended Practice: Lighting and the Visual Environment for ~~Senior Living~~ Older Adults and the Visually Impaired as referenced in ~~Chapter 35 of this code~~ the Guidelines.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

31

### SP10361

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Points to the correct section in the code for the installation of CO detectors.

### Rationale

Nursing home designers are missing the fact that nursing homes, unlike other occupancies, have a special statutory language for the location of CO detectors in their facilities. This addition, like the one in hospitals, alerts the user to the proper section of the code.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.3.16.3 Carbon monoxide detector. See Section 915 of this code for requirements.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

32

### SP10365

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the size requirements for operating rooms in an ASC.

### Rationale

This revision reflects the direction of the Guidelines from classifying operating rooms as Class A, B, or C base only on use of various anesthesia. The new operating room sizes have been carefully developed by the Guidelines committee to provide the safest patient environment with facility flexibility to determine what kind of anesthesia to use and the number of clinical personnel to require for any particular procedure. An operating room can range from a 255 SF to 400 SF and larger depending on how the room is to be used and what equipment is to be used in that room. Because Florida requires a piped medical gas system, each ASC must have at least one 270 SF operating room which is the minimum size for using general anestheia. In addition, the state agency desires to count the number of operating rooms, procedure rooms, inside any particular ASC. This revision matches what the agency's rule currently requires.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

451.3.2 Outpatient operating room.
All ambulatory surgical centers shall have at least one operating room that has a minimum clear floor area of 270 square feet (25.08 m2) as described in *The Guidelines*. ~~Only this size or larger operating room(s)~~ Every operating room that meets the requirements of an outpatient operating room, as described in the Guidelines, shall be ~~listed~~ counted as an operating room(s) for purposes of licensure.

451.3.2.1 If provided, ~~smaller operating rooms, and~~ all procedure, examination or treatment rooms shall meet the requirements for these rooms as described in The Guidelines. All procedure rooms shall be counted for purposes of licensure.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

33

### SP10366

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the use of audible alarms in the OR.

### Rationale

This revision makes it a requirement to use only visible alarm devices in critical care patient areas. This done to protect the patients from sudden noise that could negatively impact the clinician preforming a surgical or medical task on the patient.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

451.3.2.2 In lieu of audible alarm signals, visible alarm-indicating appliances shall be ~~permitted to be~~ used in critical care areas, such as the operating room ~~suite~~ area and the phase I recovery ~~suite~~ area .

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

34

### SP10368

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the use of sliding pocket doors and an ASC.

### Rationale

Sliding Pocket and folding doors often jamb and will not provide egress from an occupied room in time of emergencies. This could be an issue for emergency egress not only in the patient use toilets or baths but in any room that is capable of being occupied.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Improves 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**

Makes the code more clear for the user and the authority having jurisdiction.

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

Allows the use of many different door designs and configurations.

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

Improves the effectiveness of the code for public safety

451.3.4.3 The use of ~~sliding~~ pocket sliding or folding doors to ~~patient use toilets~~ any occupiable room shall not be permitted. A sliding door equipped with sliding door hardware located outside of the room and not equipped with a bottom door track shall be permitted.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

35

### SP10395

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the requirement for a piped gas system

### Rationale

Not all operating rooms in the ASC will require a piped oxygen and vacuum system. Some smaller operating rooms may use portable systems. This revision recognizes that and accommodates it in accordance with the FGI Guidelines.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

451.3.15 Medical gas. ~~There shall be a~~ A piped ~~medical gas~~ oxygen and vacuum system ~~installation~~ shall be provided in the ~~licensed~~ operating rooms, of the , if required by the Guidelines, that ~~shall~~ comply with the requirements of NFPA 99 Health Care Facilities Code for a Category 1 ~~p~~Piped ~~g~~Gas and ~~v~~Vacuum ~~s~~System.

-

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

36

### SP10411

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 469 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the sizes and design of operating rooms.

### Rationale

Class A, B, and C operating room designations are no longer used by the Guidelines because they are out of date and do not sufficiently allow for the various kinds of procedures and anesthetics used in the outpatient operating room suite. These sizes were developed over a period of time using full scale mock ups in close consultation with clinicians and physicians who work in this environment. (See attached white paper)

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

Reduces impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

469.4.3 Operating room(s).

469.4.3.1 There shall be at a minimum one operating room in each office surgery suite. The size and location of the operating room(s) shall be dependent on the level of care provided and equipment utilized based on the functional program.

469.4.3.2 The size of the operating room(s) shall be ~~as defined by the American College of Surgeons Classes as adapted from the American College of Surgeons publication 04GR-0001: Guidelines for Optimal Ambulatory Surgical Care and Office-Based Surgery, which was developed by the Board of Governors Committee on Ambulatory Surgical Care and published in May 2000.~~ as follows:

469.4.3.2.1 An operating room shall have a minimum clear floor area of 255 square feet (23.69 square meters).

469.4.3.2.2 An operating room where anesthetics will be administered using an anesthesia machine and supply cart shall have a minimum clear floor area of 270 square feet (25.08 square meters).

469.4.3.2.3 An operating room where surgery that may require additional staff and equipment will be performed shall have a minimum clear floor area of 400 square feet (37.16 square meters).

~~469.4.3.2.1 Class A: To be used for Level I Office Surgery as defined Rule 64B8-9.009, Florida Administrative Code.~~

-

~~469.4.3.2.1.1 Class A operating rooms shall have a minimum clear floor area of 150 square feet (45.72 m2) with a minimum clear dimension of 12 feet (3.65 m).~~

-

~~469.4.3.2.1.2 There shall be a minimum clear distance of 3 feet 6 inches (1.07 m) at each side, the head, and the foot of the operating table.~~

-

~~469.4.3.2.2 Class B: To be used for Levels I, II and IIA Office Surgery as defined in Rule 64B8-9.009, Florida Administrative Code.~~

-

~~469.4.3.2.2.1 Class B operating rooms shall have a minimum clear dimension of 15 feet (4.57 m).~~

-

~~469.4.3.2.2.2 Room arrangement shall permit a minimum clear dimension floor area of 250 square feet (23.23 m2) with a minimum of 3 feet 6 inches (1.07 m) at each side, the head, and the foot of the operating table.~~

-

~~469.4.3.2.3 Class C: To be used for Levels I, II, IIA and III Office Surgery as defined in Rule 64B8-9.009, Florida Administrative Code.~~

-

~~469.4.3.2.3.1 Class C operating rooms shall have a minimum clear floor area of 400 square feet (37.16 m2) and a minimum clear dimension of 18 feet (5.49 m).~~

-

~~469.4.3.2.3.2 Room arrangement shall permit a minimum clear dimension of 4 feet (1.22 m) at each side, the head, and the foot of the operating table. 469.4.3.3 The Class B and C operating room(s) shall be located within the semirestricted area within the office surgery suite.~~

-

469.4.3.3 ~~The Class B and C operating room(s) shall be located within the semirestricted area within the office surgery suite.~~ See the Guidelines, Chapter 2.1, Common Elements of Outpatient Facilities, for design details regarding clearances and space requirements for operating rooms.

FACILITY GUIDELINES INSTITUTE

2014 FGI *Guidelines*
Update Series

FGI *Guidelines* Update #3 September 15, 2014

# Operating Room Requirements for 2014 and Beyond

Byron Burlingame, MS, RN, CNOR

A comparison of the inpatient surgery section (2.2-3) and the ambulatory surgery center chapter (3.7) in the 2014 edition of the FGI *Guidelines for Design and Construction of Hospitals and Outpatient Facilities* to the same sections in the 2010 edition of the FGI *Guidelines for Design and Construction of Health Care Facilities* reveals a number of changes. Most of these modifications were made to bring the requirements for inpatient and outpatient surgery facilities into closer alignment, which means the language will largely be familiar. However, some intentional differences remain, the primary one being the size of operating rooms.

As surgical procedures previously performed primarily in an inpatient setting are increasingly taking place in outpatient facilities, the Health Guidelines Revision Committee (HGRC) members believe the physical environment for surgery should meet the same standards no matter where that surgery takes place. At the same time, they wanted to leave enough flexibility in the outpatient requirements to accommodate the space requirements of outpatient procedures that do not require a lot of equipment or staff but do require an aseptic field.

> *Guidelines* requirements are intended to be minimum standards, but these minimums must result in environments that support the safety of both patients and staff in all locations where surgery takes place.

In a review of the 2010 requirements, the HGRC Specialty Subgroup on Operating Rooms identified several important components of the ambulatory surgery text that needed improvement. To address this, the group started with a thorough comparison of inpatient and ambulatory surgery text in the 2010 edition. This effort revealed that some requirements in the ambulatory surgery chapter did not exist in the inpatient surgery section and vice versa. This article will highlight the key changes in the surgery sections that resulted from the group's work and the public review of their proposed changes.

## New Definitions

In the glossary of the 2014 *Guidelines for Design and Construction of Hospitals and Outpatient Facilities*, new definitions have been provided for procedure room, invasive procedure, and the two areas that make up the surgical suite—semi-restricted and restricted. These definitions are the foundation for the changes made in the body of the document, especially the distinction between an operating room and a procedure room and the types of procedures performed in each.

"Invasive procedure" is a broad term often used to describe procedures from a simple injection to a major surgical operation. For the purposes of the *Guidelines*, however, an ***invasive procedure*** is defined as a procedure that penetrates the protective surfaces of a patient's body (e.g., skin or mucous membranes), is performed in an aseptic surgical field, generally requires entry into a body cavity, and may involve insertion of an indwelling foreign body. Such procedures must be performed in an operating room suitable to the technical requirements of the procedure with consideration of infection prevention and anesthetic risks and goals. The intent is to provide a safe environment for procedures that carry a high risk of infection, either by exposure of a usually sterile body cavity to the external environment or by implantation of a foreign object(s) into a normally sterile site. Procedures performed through orifices normally colonized with bacteria and percutaneous procedures that do not involve an incision deeper than skin are not included in this definition.

A ***procedure room*** is defined as a room for the performance of procedures that do not require an aseptic field but may require use of sterile instruments or supplies. Procedure rooms are considered unrestricted areas. Local anesthesia and minimal and moderate sedation may be administered in a procedure room, but anesthetic agents used in procedure rooms must not require special ventilation or scavenging equipment.

An ***operating room*** (OR) is defined as a room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing surgical operations or other invasive procedures that require an aseptic field. Any form of anesthesia may be administered in an OR as long as appropriate anesthesia gas administration devices and exhaust systems are provided. A ***hybrid operating room*** is an operating room that has permanently installed equipment to enable diagnostic imaging before, during, and after surgical procedures. (Use of portable imaging technology does not make an OR a hybrid operating room.)

A ***restricted area*** in a surgical suite is a designated space that can only be accessed through a semi-restricted area in order to achieve a high level of asepsis control. Traffic in the restricted area is limited to authorized personnel and patients, and personnel are required to wear surgical attire and cover head and facial hair. Masks are required where open sterile supplies or scrubbed persons may be located.

A ***semi-restricted area*** comprises the peripheral support areas surrounding the restricted area of a surgical suite. These support areas include facilities such as storage areas for clean and sterile supplies, sterile processing rooms, work areas for storage and processing of instruments, scrub sink areas, corridors leading to the restricted area, and pump rooms.

Related definitions clarified in the 2014 glossary include those for spaces in pre- and postoperative patient care areas. A ***patient care station*** is a designated space where a specific patient care function takes place; the term does not imply any structural requirement. The structural requirements, instead, are included in the definitions of bays and cubicles, which are types of patient care stations: A ***bay*** has one hard wall at the headwall and three soft walls (cubicle curtains or portable privacy screens), and a ***cubicle*** has at least one opening and no door

and is enclosed on three sides with full- or partial-height partitions. A patient care station can also be a room.

**Surgical Suite**


### Outpatient Surgery Facilities

In previous editions of the *Guidelines*, operating rooms in ambulatory surgery centers were classified according to the A – C levels based on anesthesia use from an American College of Surgeons document on office-based surgery, which has not been published for more than 10 years. Determining requirements such as size and location of an operating room according to the type and level of anesthesia administered is no longer practical. The minimum space in today's operating rooms must be sufficient to accommodate all equipment and personnel needed in the OR, not just the equipment and personnel associated with administration of anesthesia. For example, a hernia repair can be performed under local, regional, or general anesthesia and the size of the OR for the procedure should not be based on the type of anesthesia used but on the equipment and number of staff required.

In Chapter 3.7 (Outpatient Surgical Facilities) in the 2014 *Guidelines*, the decision to move away from levels of anesthesia as a determinant of room size resulted in a minimum size requirement for an outpatient operating room (formerly Class B and Class C) of 250 square feet. Recommendations for sizing ORs that may need to be larger are included in the appendix. The room previously known as a Class A operating room is now referred to as a procedure room and has a minimum clear floor area of 150 square feet.

## Inpatient Surgery Facilities

The inpatient surgical facility text provides requirements for general operating rooms, hybrid ORs, and ORs for surgical procedures using portable imaging equipment or that require additional personnel and/or large equipment. The minimum inpatient OR size remains 400 square feet to provide flexibility and accommodate the amount of equipment used in traditional inpatient procedures, which is typically far more than that used in surgeries performed in outpatient settings. The size specified for procedures requiring more staff and/or equipment remains a minimum of 600 square feet.

A size for the hybrid OR is suggested in the appendix rather than required in the main text because the size needed for the room will depend on the specific imaging equipment to be installed. However, a minimum room dimension of 24 feet is required, although 22 feet is permitted in renovation projects where structural limitations make this dimension impossible to meet. As with all spaces under design, the equipment manufacturer must be consulted to determine the size of the equipment to be installed and the clearances needed for its safe use.

## Pre- and Postoperative Patient Care Areas

The sections on preoperative patient care areas and Phase I and Phase II recovery areas have been updated to clarify the requirements. One addition states that these are unrestricted areas, which means individuals in these areas may wear street clothes and do not need to cover their hair; as well, there are no strict ventilation requirements.

### Determining Minimum OR Space Requirements

The minimum square footage for an outpatient operating room included in the 2014 FGI *Guidelines for Design and Construction of Hospitals and Outpatient Facilities* was determined by combining the square footage of the minimum amount of equipment required, the square footage for the minimum number of people required, and a space of approximately 4 feet (1.22 meters) for a minimum safe traffic pathway on all four sides of the sterile field. The sterile field includes the OR table width of 1.75 feet plus 2 feet on each side to accommodate personnel and outstretched patient armrests. The safe traffic pathway of 4 feet includes space for two people to meet and pass each other without touching either personnel wearing sterile attire standing at the sterile field or non-sterile surfaces (e.g., walls, people, or equipment). This distance permits two people, both of whom are within the sterile field, to pass each other without contaminating their sterile attire by touching unsterile surfaces. An open traffic pathway is required on all four sides to provide space for personnel to set up a sterile field prior to the procedure, assist with safe patient evacuation using a stretcher in case of an emergency, pass between the back table and the wall during the procedure, and pass at the head of the patient without interfering with the work of the anesthesia care provider.

When calculating the square footage needed to accommodate the minimum amount of required equipment, the assumption was made that all equipment would fit tightly together; however, this frequently is not possible due to equipment shape.

The minimum equipment for a surgical procedure includes an anesthesia machine, anesthesia supply cart, anesthesia professional chair, intravenous pole or table, case cart/equipment delivery system cart, prep stand, portable documentation station with chair, back instrument table, ring stand, two trash containers, soiled linen container, hazardous waste receptacle, mayo stand, kick bucket, surgical field suction attached to a wall, image viewers, and a sharps disposal receptacle. The required personnel include the surgeon, scrub nurse/technician, circulating nurse, and anesthesia care provider. A 9-square-foot rectangle is required to allow for clear door swing when a stretcher is in the room.

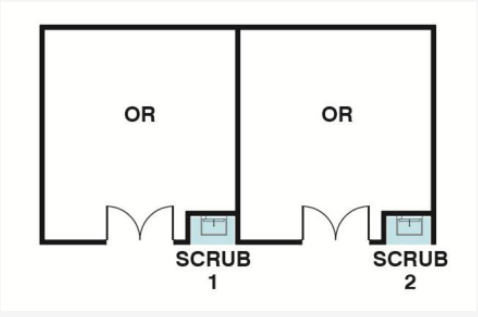
The number of Phase I (PACU or post-anesthetic care unit) patient care stations required in both inpatient and outpatient settings has been defined as 1.5 per OR. If that calculation yields a fraction, the number of patient care stations provided is to be rounded up to the next whole number. As explained in the definition of patient care areas, a patient care station can be a single-patient room or a bay or cubicle in a room with spaces for multiple patients.

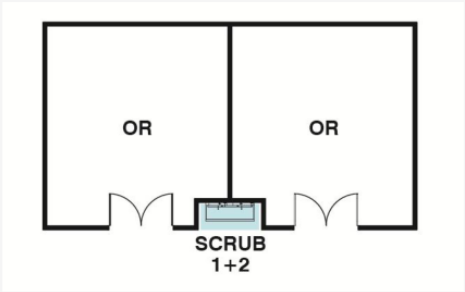
The location for hand-washing stations in preoperative and recovery areas with multiple patient care stations in the same room (i.e., not private patient care rooms) is now consistent in ambulatory and hospital surgery facilities. The formula is one hand-washing station for every four patient care stations. A requirement has been added that the hand-washing stations must be evenly distributed so the distance from the two patient care stations farthest from a hand-washing station is approximately equal.

**Support Areas for Surgical Facilities**

The location for scrub sinks and the number of sinks required has been clarified. At least one scrub position must be located next to the entrance of each operating room. A scrub station with two scrub positions may serve a pair of operating rooms as long as it is located next to the entrance to each OR. Scrub stations are not permitted to impede on the width of the corridor. Information about placing the scrub station in an alcove is provided in the appendix, including comments about avoiding splatter from the sinks.

**Scrub Station Location Options**




The following support area requirements have been removed from both the ambulatory and the hospital surgical facilities text:

- A "substerile" room between every two operating rooms. Details on this will be provided in a separate article on sterile processing rooms in this FGI Update series.
- The need for the door to the staff locker room to open directly into the semi-restricted area of the surgical suite has been removed. The current requirement only states that a locker room must be provided. This change allows for this facility to be shared with another department. The same is true for the lounge used by the perioperative team.

## Office-Based Surgery Facilities

In the 2010 edition of the *Guidelines*, Chapter 3.8 is titled "Specific Requirements for Office-Based Surgical Facilities," and many of the requirements are similar to those in Chapter 3.7. The committee considered removing this chapter based on the rationale that the office-based surgery setting is an ambulatory surgery setting, albeit a small one. The final decision, however, was to keep the chapter, retitling it "Specific Requirements for Office-Based Procedure and Operating Rooms" and cross-referencing as much as possible the requirements in Chapter 3.7 (Outpatient Surgical Facilities). The revised chapter now highlights those characteristics that are truly different for procedure and operating rooms in physicians' offices.

To summarize the end result of the changes from the 2010 to the 2014 edition, many of the requirements are the same for surgical facilities in hospitals and ambulatory settings with the exception of minimum room sizes. The Health Guidelines Revision Committee agreed that, based on the type of surgical procedures being performed in ambulatory settings today, it is important that most of the requirements for the physical environment be the same wherever patients are undergoing surgery.

**About the Author**
Byron L. Burlingame, MS, RN, CNOR, is a perioperative nursing specialist at the Association of periOperative Registered Nurses and a member of the 2014 Health Guidelines Revision Committee.

**Illustration Credits**
Surgical suite diagram: Ottolino Winters Huebner, St. Louis, Mo.
Scrub station diagrams: HKS, Inc., Washington, D.C.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

37

### SP10413

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 464 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises the section on generator uses and connections in new ALFs.

### Rationale

Revises this section to accurately implement the 59A36.025 rule for a "temporary" power source, adds lighting to the generator so there will be light inside the cooled ALF, and provides for air temperatures to be controlled in all resident areas of the building.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There may be some additional cost to industry relative to the cost of compliance with code but this is for new construction only and the cost would be minimal over all.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Improves 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**

Strengthens or improves the code for safety and egress.

**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**

Improves the effectiveness of the code by clarifying requirements.

464.4.2.2 A new facility shall be equipped with either a permanent on-site alternate power source to operate at least the equipment necessary to maintain safe indoor air temperatures in all normally occupied resident areas including sleeping, dining, recreational, and social areas, life safety systems, lighting, and equipment for resident care needs, or there shall be a permanently installed predesigned electrical service entry for the electrical system that will allow a quick connection to a ~~temporary~~ relocatable alternate power source to operate at least the equipment necessary to maintain safe indoor air temperatures in all normally occupied resident areas including sleeping, dining, recreational, and social areas, life safety systems, lighting, and equipment for resident care needs. This quick connection shall be installed inside of a permanent metal enclosure rated for this purpose and may be located on the exterior of the building. The relocatable alternate power source shall be stored onsite of the facility and maintained in accordance with the manufacturer's instructions.
See Chapter 59A-36.025, Florida Administrative Code, "Emergency Environmental Control for Assisted Living Facilities" for additional requirements.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

38

### SP10491

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Modifies Mobile/Transportable section in relation to the Guidelines.

### Rationale

This modification is necessary due to some revisions in the Guidelines that Florida did not want to accept regarding the length of stay of mobile units and how whether they are reviewed or not by the Agency.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**

Improves the effectiveness of the code by clarifying requirements.

449.3.3.3 This section shall apply to all mobile/transportable units regardless of the number of hours they are on site.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

39

### SP10494

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies if there is a conflict with the Guidelines which code takes precedence.

### Rationale

This is necessary because there are specific requirements in the Guidelines that Florida does not want to adopt. When this happens, Florida writes its own more specific requirement. This clarifies that the FBC takes precedence over the Guidelines when that happens.

### Fiscal Impact Statement

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

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

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

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

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

449.3 Additional physical plant requirements for general, rehabilitation, and psychiatric hospitals, including intensive residential treatment facilities (IRTFs) for children and adolescents, and unless exempted by Chapter 395.0163, Florida Statutes, all hospital outpatient facilities and hospital mobile and transportable units. In addition to the codes and standards referenced in Section 449.2 of this code, the following minimum standards of construction and specified minimum essential facilities, shall apply to all new hospitals and all additions, alterations or renovations to an existing licensed hospital, as described in Section 449.1 of this code and listed in Section 449.3 of this code. Where there are conflicting specific requirements between the Guidelines and this code, the requirements of this code shall take precedence.

-

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

40

### SP10497

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Clarifies the use of the description.

### Rationale

The term "equipotential grounding" does not exist in the NFPA 99 or NFPA 70. The correct terminology is provided in this revision.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

449.3.11.6 There shall be documentation for ~~equipotential~~ grounding system testing of voltage and impedance measurements in all patient care areas, building service ground electrode systems, lightning protection ground terminals and special systems such as fire alarm, nurse call, paging, generator, emergency power, fault analysis and breaker coordination.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

41

### SP10501

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449.3.6.5 | **Proponent** | scott waltz |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

Strikes language preventing the use of VAV systems for certain areas in a hospital.

### Rationale

Revisions to ASRAE Standard 170 provide minimum standards that will allow the safe use or variable air volume systems for the conditions covered by deleted text.

### 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.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Yes.

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

improves the code

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

It does not.

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

It does not.

~~449.3.6.5~~

~~Variable air volume systems shall not be permitted for use in surgical departments, obstetrical departments, laboratories, isolation rooms and critical care units and rooms~~

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

42

### SP10507

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449.4.2.10 | **Proponent** | scott waltz |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

Deletes reference to a rule which no longer exists.

### Rationale

Deletes reference to a rule which no longer exists.

### 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.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Yes.

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

Improves the code.

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

It does not.

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

It does not.

~~**449.4.2.10 External emergency communications standards.**~~

~~Reference Chapter 59A-3.081 *Florida Administrative Code* for requirements.~~

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

43

### SP10349

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 1612.5 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 16 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Residential Section R322, #10351, to add definition and make similar change to where elevation data are prepared and sealed.

### Summary of Modification

Clarify that licensed professional surveyors and mappers survey and seal elevation data and add a definition for Professional Surveyor and Mapper.

### Rationale

The FBC defines “registered design professional,” citing Florida Statutes for Chapter 471 (Engineering) and Chapter 481 (Architecture). The term does not include professional surveyors and mappers licensed pursuant to Chapter 472, Florida Statutes. In 2021, the Florida Board of Professional Surveyors and Mappers determined and verified that only Surveyors and Mappers with Florida licenses in good standing “may certify elevation data in Florida pursuant to 472.0366.” Therefore, it is appropriate to define ‘professional surveyor and mapper” in the FBC, Building and FBC, Residential, and clarify in the sections that specify which professionals may certify elevations. The FEMA NFIP Elevation Certificate relies on the laws of each state that specify which licensed professionals may certify elevations.

### Fiscal Impact Statement

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

Local entities should verify that a certifier of elevation data is a Professional Surveyor and Mapper licensed by the FBPSM.

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

None, certification of elevations is already required.

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

None, certification of elevations is already required.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, because the appropriately licensed professional is required to prepare certifications.

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

Yes, because the appropriately licensed professional is required to prepare certifications.

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

The change does not affect materials and methods of construction.

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

Improves effectiveness because the appropriately licensed professional is required to prepare certifications.

**202 Definitions.**

PROFESSIONAL SURVEYOR AND MAPPER. An individual who is licensed or registered to engage in the practice of surveying and mapping under Chapter 472, Florida Statutes.

**1612.5 Flood hazard documentation.** The following documentation shall be prepared and sealed by a licensed professional surveyor and mapper or a registered design professional, as applicable, and submitted to the building official:

1. For construction in flood hazard areas other than coastal high hazard areas or coastal A zones:

   1.1. The elevation of the lowest floor, including the basement, as required by the lowest floor elevation inspection in Section 110.3, Building, 1.1 and for the final inspection in Section 110.3, Building, 5.1.

   1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.7.2.1 of ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.7.2.2 of ASCE 24.

   1.3 For dry floodproofed nonresidential buildings, construction documents shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.

2. For construction in coastal high hazard areas and coastal A zones:

   2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 110.3, Building, 1.1 and for the final inspection in Section 110.3, Building, 5.1.

   2.2. Construction documents shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.

   2.3. For breakaway walls designed to have a resistance of more than 20 psf (0.96 $kN/m^2$) determined using allowable stress design, construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

STATE OF FLORIDA

# DIVISION OF EMERGENCY MANAGEMENT

**Ron DeSantis**
Governor

**Kevin Guthrie**
Director

**MEMORANDUM**

TO: Florida Floodplain Managers and Building Officials

FROM: Conn Cole, Florida NFIP State Coordinator

DATE: November 11, 2021

RE: Certification of Elevation Data

Digitally signed by Conn Cole
DN: dc=org, dc=fleoc, ou=DEM_Users, ou=Mitigation, ou=HazardMitigationAssistance, cn=Conn Cole, email=Conn.Cole@em.myflorida.com
Date: 2021.11.11 10:06:30 -05'00'

From time to time, the State Floodplain Management Office is asked which professionals licensed in Florida are authorized to certify elevation data. In addition, most communities require submission of the FEMA/NFIP Elevation Certificate to satisfy the Florida Building Code requirements related to foundation inspections and final inspections (see FBC, Building, Sec. 110.3).

By email dated November 2, 2021 (attached), the Executive Director of the Board of Professional Surveyors and Mappers advises that "[o]nly Surveyors and Mappers licensed by the Board of Professional Surveyors and Mappers with licenses in good standing may certify elevation data in Florida according to 472.0366 [Florida Statutes] and verified by the board at the August 2, 2021 meeting."

The FEMA/NFIP Elevation Certificate clarifies that only professionals "authorized by law to certify elevation information" may sign and seal Section D of the Elevation Certificate. Therefore, the fact that the Elevation Certificate lists "land surveyor, engineer, or architect" does not, by itself, authorize all such licensed professionals to certify surveyed elevation data.

This memorandum and other guidance prepared by the State Floodplain Management Office is available online:

www.floridadisaster.org/dem/mitigation/floodplain/community-resources
(Guidance, Ordinance Amendments, FBC Amendments, and Sample Forms)

CHC/

Attachment: November 2, 2021 Email from Executive Director of the Board of Professional Surveyors and Mappers

DIVISION HEADQUARTERS
2555 Shumard Oak Blvd
Tallahassee, FL 32399-2100

Tel:850-815-4000
www.FloridaDisaster.org

STATE LOGISTICS RESPONSE CENTER
2702 Directors Row
Orlando, FL 32809-5631

**Rebecca C. Quinn**

**From:** Compton, Liz <Patricia.Compton@fdacs.gov>
**Sent:** Tuesday, November 02, 2021 10:55 AM
**To:** Conn Cole; Mckibben, Amanda
**Cc:** Kristabel Moore; Rebecca C. Quinn (rcquinn@earthlink.net)
**Subject:** RE: Elevation Data Certification

Dear Mr. Cole,

That is correct. Only Surveyors and Mappers licensed by the Florida Board of Professional Surveyors and Mappers with licenses in good standing may certify elevation data in Florida pursuant to 472.0366 and verified by the board at the August 2, 2021 meeting.

Sincerely,

**Liz Compton, CPM**
Executive Director
Board of Professional Surveyors and Mappers
Florida Department of Agriculture and Consumer Services

Liz.compton@FDACS.gov
850.410.3674

The Rhodes Building
2005 Apalachee Parkway
Tallahassee, FL 32399

www.FDACS.gov



**From:** Conn Cole <Conn.Cole@em.myflorida.com>
**Sent:** Tuesday, November 2, 2021 8:45 AM
**To:** Compton, Liz <Patricia.Compton@fdacs.gov>; Mckibben, Amanda <Amanda.McKibben@fdacs.gov>
**Cc:** Kristabel Moore <Kristabel.Moore@em.myflorida.com>; Rebecca C. Quinn (rcquinn@earthlink.net) <rcquinn@earthlink.net>
**Subject:** [External] Elevation Data Certification



Liz and Ms. McKibben,

Thank you for your quick response and assistance in clearing up the confusion on this topic. Would you please reply to confirm that only Professional Surveyors and Mappers licensed by the Florida Board of Professional Surveyors and Mappers may certify elevation data in Florida?

Best regards,
Conn

Conn H. Cole, MBA/PA, CFM
Florida NFIP State Coordinator | State Floodplain Manager
State Floodplain Management Office
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# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

44

### SP10152

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 3006.3 | **Proponent** | Amanda Hickman |
| **Chapter** | 30 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

none

### Summary of Modification

hoistways

### Rationale

Smoke protective curtain assemblies for hoistways are recognized and regulated in NFPA 105 Chapter 9 (2019). They have also been recognized and listed by ICC-ES for many years. There are multiple manufacturers of these assemblies in the market that hold Engineering Service Reports (ESR) for their use. These products have been in the market for 30 years with tens of thousands of successful installations. Smoke protective curtain assemblies provide a proven means for smoke and draft control at the hoistway door that enables design freedom and innovation. Smoke protective curtain assemblies for hoistways should be allowed to provide smoke and draft protection for elevator hoistways door openings. Smoke protective curtain assemblies are already being installed to protect elevator hoistway openings in Florida. Such installations being permitted either by using Section 3006.3, Item 3 or by using the alternative compliance provisions. The language in proposed Item 5 better addresses such assemblies by also including requirements that the control unit meet UL 864. UL 864 endures that the system meets rigorous release device criteria. In addition, the language in proposed Item 5 requires that such assemblies be installed and maintained in accordance with NFPA 105, which includes an annual test of such assemblies. The ASME A17.1 rule ensures these devices do not interfere with elevator operations.

### Fiscal Impact Statement

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

Will improve enforcement of the code because these products have been in the market for 25 years with tens of thousands of successful installations

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

The cost of this option for hoistway opening protection is offset by the cost of other forms of protection. As such, the cost of construction for adding option five does not raise or lower the cost of construction.

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

The cost of this option for hoistway opening protection is offset by the cost of other forms of protection. As such, the cost of construction for adding option five does not raise or lower the cost of construction.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Improves health and safety of general public because these provide a proven means for smoke and draft control at the hoistway door.

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

Improves the code because these products enable design freedom and innovation.

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

Does not discriminate because these products enable design freedom and innovation.

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

Improves the effectiveness of the code because smoke protective curtain assemblies for hoistways are recognized and regulated in NFPA 105.

**Add new definition:**

**SMOKE PROTECTIVE CURTAIN ASSEMBLY FOR HOISTWAY.** An automatic closing smoke and draft control curtain assembly.

**Revise as follows:**

**3006.3 Hoistway opening protection.**
Where Section 3006.2 requires protection of the elevator hoistway door opening, the protection shall be provided by one of the following:

1.An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by fire partitions in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.5.3 as required for corridor walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

2.An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by smoke partitions in accordance with Section 710 where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2. In addition, doors protecting openings in the smoke partitions shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.5.9. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

3.Additional doors shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such doors shall comply with the smoke and draft control door assembly requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal.

4.The elevator hoistway shall be pressurized in accordance with Section 909.21.

5. A *smoke protective curtain assembly for hoistways* shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such curtain assemblies shall comply with the smoke and draft control requirements in Section 716.5.3.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such curtain assemblies shall be equipped with a control unit listed to UL 864. Such curtain assemblies shall comply with section 2.11.6.3 of ASME A17.1/CSA B44. Installation and maintenance shall be in accordance with NFPA 105.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Building

45

### SP10484

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 35 | **Proponent** | James gregory |
| **Chapter** | 35 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Updates the code references.

### Rationale

Updates the reference to the most current Guidelines.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code stronger with current references.
**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**
Improves the effectiveness of the code by referencing current standards.

SP10484Text Modification

FGI The Facility Guidelines Institute
9750 Fall Ridge Trail
St. Louis, MO 63127
Standard referenced number Title
GHCF—~~18~~ 22 Guidelines for Design and Construction of Hospitals
GHCF—~~18~~ 22 Guidelines for Design and Construction of Outpatient Facilities
GHCF—~~18~~ 22 Guidelines for Design and Construction of Residential Health, Care, and Support Facilities ~~(First Printing 2018)~~

Mod_10484_TextOfModification.pdf Page: 1

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Residential

46

### SP10256

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 322.2.1 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Specifics for accessory structures in flood hazard areas in accordance with FEMA policy issued 2020.

**Rationale**

Based on FEMA 2024 IRC proposal RB137-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. NFIP regulations do not explicitly address accessory structures & detached garages, thus they have to be elevated or dry floodproofed. NFIP Technical Bulletin 7 (1993) outlines wet floodproofing requirements, but states that communities must grant variances before authorizing wet floodproofing. Proposal is based on the 2020 FEMA Policy and 2021 Bulletin (FEMA P-214). It provides relief to elevation or dry floodproofing by allowing wet floodproofed accessory structures & detached garages with floors below required elevations based on size and flood zone. Also modifies for attached garages, with no size limits. When included in FBCR, hundreds of communities will not have to adopt local amended flood regulations. It does not conflict with those that have adopted similar requirements over the last year. Note that Section R403.1.4.1 does not require footings for “free-standing accessory structures with an area of 600 square feet or less, of light-frame construction” to extend meet the frost protection requirements. And in Zone V & CAZ, breakaway walls and flood openings are not required. FEMA Policy & Bulletin https://www.fema.gov/media-collection/floodplain-management-requirementsagricultural-and-accessory-structures

**Fiscal Impact Statement**

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

Local cost savings: One, straightforward to enforce clear requirements rather than meet FEMA expectations that to conform to the Policy even if the specifics are not adopted; and Two, having requirements in the code eliminates the administrative burden of amending floodplain management regulations.

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

Lower cost of construction for many detached accessory structures smaller than the size limits established by FEMA because they can be wet floodproofed instead of elevated or dry floodproofed.

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

Facilitates compliance to have clear requirements.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, it provides requirements for flood resistance and facilitates meeting FEMA expectations which preserves access to federal flood insurance and disaster assistance.

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

Yes, it improves by stating specific requirements and limitations.

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

No, the use of flood damage resistant materials is already required.

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

No, it improves enforcement by having clear requirements.

# 2nd Comment Period

SP10256-G2

| Proponent | Brian Walsh - RCCIW | Submitted | 8/5/2022 11:21:09 AM | Attachments | No |
|---|---|---|---|---|---|

Comment:

No cost impact, but I do not understand why R322.2.1 modification would limit a property owner on the size of detached garages when there is no limit on size of attached garages.

# 1st Comment Period History

SP10256-G1

| Proponent | Rebecca Quinn obo FL Div Emerg Mgnt | Submitted | 4/16/2022 11:29:12 AM | Attachments | No |
|---|---|---|---|---|---|

Comment:

Submitted on behalf of the FDEM State Floodplain Manager, we recommend approval by the TAC and Commission because it not only implements FEMA's policy on accessory structures in floodplains, but having it in the FBC, Residential, would mean hundreds of Florida communities would not have to adopt separate local regulations. FEMA submitted this language for the International Residential Code as proposal RB137-22, which was Disapproved at the Committee Action Hearing. It's likely FEMA will submit public comment requesting approval by the ICC government voting members. We note that some Florida communities have size limits less than 600 sq ft, and those communities would either enforce that the size limit in zoning governs or they could adopt a local technical amendments to modify the size in this section.

**R322.2.1 Elevation requirements.**

1. Buildings and structures in flood hazard areas not including flood hazard areas designated as Coastal A Zones, shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or the design flood elevation, whichever is higher.

2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM plus 1 foot (305 mm), or not less than 3 feet (915 mm) if a depth number is not specified.

3. Basement floors that are below grade on all sides shall be elevated to or above base flood elevation plus 1 foot (305 mm), or the design flood elevation, whichever is higher.

4. Attached garages and carports ~~Garage and carport floors~~ shall comply with one of the following:

4.1. ~~They~~ The floors shall be elevated to or above the elevations required in Item 1 or Item 2, as applicable.

4.2. ~~They~~ The floors shall be at or above grade on not less than one side. Where ~~a~~ an attached garage or carport is enclosed by walls , the walls shall have flood openings that comply with Section R322.2.2 and the attached garage or carport shall be used solely for parking, building access or storage.

-

5. Detached accessory structures and detached garages shall comply with either of the following:

5.1. The floors shall be elevated to or above the elevations required in Item 1 or Item 2, as applicable.

5.2. The floors are permitted below the elevations required in Item 1 or Item 2, as applicable, provided such detached structures comply with

all of the following:

5.2.1. Are used solely for parking or storage.

5.2.2. Are one story and not larger than 600 square feet (55.75 m ).

5.2.3. Are anchored to resist flotation, collapse or lateral movement resulting from design flood loads.

5.2.4. Have flood openings that comply with Section R322.2.2.

5.2.5. Are constructed of flood damage-resistant materials that comply with Section R322.1.8.

5.2.6. Have mechanical, plumbing and electrical systems, if applicable, that comply with Section R322.1.6.

**Exception:** Enclosed areas below the elevation required in this section, including basements with floors that are not below grade on all sides, shall meet the requirements of Section 322.2.2.

**R322.3.2 Elevation requirements.**

1. Buildings and structures erected within coastal high-hazard areas and Coastal A Zones, shall be elevated so that the bottom of the lowest horizontal structure members supporting the lowest floor, with the exception of pilings, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus 1 foot (305 mm) or the design flood elevation, whichever is higher.

2. Basement floors that are below grade on all sides are prohibited.

3. Attached garages ~~Garages~~ used solely for parking, building access or storage, and carports shall comply with Item 1 or shall be at or above grade on not less than one side and, if enclosed with walls, such walls shall comply with Item ~~6~~ 7.

4. Detached accessory structures and detached garages shall comply with either of the following:

4.1. The bottom of the lowest horizontal structural member supporting the floors shall be elevated to or above the elevation required in

Item 1.

4.2. The floors are permitted below the elevations required in Item 1, provided such detached structures comply with all of the following:

4.2.1. Are used solely for parking or storage.

4.2.2. Are one story and not larger than 100 square feet (9.29 m).

4.2.3. Are anchored to resist flotation, collapse or lateral movement resulting from design flood loads.

5 4. The use of fill for structural support is prohibited.

6 ~~5~~. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.

7 ~~6~~. Walls and partitions enclosing areas below the elevation required in this section shall meet the requirements of Sections R322.3.5 and R322.3.6.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Residential

47

### SP10258

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 322.2.2 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Clarify requirements that don't apply to elevator shafts and utility chases in flood hazard areas.

**Rationale**

Based on FEMA 2024 IRC proposal RB138-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. FEMA regularly responds to questions about whether utility chases and elevator shafts that extend below elevated buildings are enclosures. Strictly read, Sections R322.2.2 and R322.3.5 apply to elevator shafts and utility chases that extend below elevated buildings, which means the walls must have flood openings and breakaways wall (Zone V and Coastal A Zones). This code change relaxes those requirements, with some limits, in line with IRC Commentary, ASCE 24, and published FEMA guidance. Those sources explain that elevator shafts do not require openings and breakaway walls, but the shafts must meet other requirements (materials, resistance to flood loads). Those sources also explain that utility chases do not require openings and breakaway walls as long as the chases are the minimum size necessary and are not sized or constructed to allow a person to enter the space. If chases allow entry by a person, they must fully comply with the requirements for enclosures, including the use limitations. Chases must meet other requirements (materials, resistance to flood loads). Bibliography: FEMA TB 9, Design and Construction Guidance for Breakaway Walls (2021), https://www.fema.gov/emergency-managers/riskmanagement/building-science/national-flood-insurance-technical-bulletins

**Fiscal Impact Statement**

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

No cost change to local entities.

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

Decreased costs when floodplain buildings have elevators and/or utility chases. Change allows conventional shaft and chase construction without flood openings or breakaway walls which are otherwise required for enclosures below elevated buildings in flood hazard areas.

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

Minor cost savings for not having to specify flood openings and breakaway walls.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, it satisfies FEMA-approved requirements for elevators and utility chases.

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

Yes, it improves by clarifying requirements.

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

No, the use of flood damage resistant materials is already required.

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

No, it improves by clarifying requirements.

## 1st Comment Period History

SP10258-G1

Proponent: Rebecca Quinn obo FL Div Emerg Mgnt | Submitted: 4/15/2022 4:19:51 PM | Attachments: No

Comment:

I submit this comment on behalf of Conn Cole, FDEM State Floodplain Manager, to advise that this proposal was submitted by FEMA for the 2024 International Codes as RB138-22 and was Approved as Submitted at the Committee Action Hearing.

**R322.2.2 Enclosed area below required elevation.** Enclosed areas, including crawl spaces, that are below the elevation required in Section R322.2.1 shall:

1. Be used solely for parking of vehicles, building access or storage.

2. Be provided with flood openings that meet the following criteria and are installed in accordance with Section R322.2.2.1:

2.1. The total net area of non-engineered openings shall be not less than 1 square inch (645 $mm^2$) for each square foot (0.093 $m^2$) of enclosed area where the enclosed area is measured on the exterior of the enclosure walls, or the openings shall be designed as engineered openings and the construction documents shall include a statement by a registered design professional that the design of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters as specified in Section 2.7.2.2 of ASCE 24.

2.2. Openings shall be not less than 3 inches (76 mm) in any direction in the plane of the wall.

2.3 The presence of louvers, blades, screens and faceplates or other covers and devices shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area.

**Exception:** The following are not required to comply with this section:

1. Elevator shafts.

2. Utility chases that protect utility lines from freezing, provided the utility chases are the minimum size necessary to protect the utility lines and do not provide access for a person to enter the space.

**R322.3.5 Walls below required elevation.** Walls and partitions are permitted below the elevation required in Section R322.3.2, provided that such walls and partitions are not part of the structural support of the building or structure and:

1. Electrical, mechanical and plumbing system components are not to be mounted on or penetrate through walls that are designed to break away under flood loads; and

2. Are constructed with insect screening or open lattice; or

3. Are designed to break away or collapse without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Such walls, framing and connections shall have a resistance of not less than 10 (479 Pa) and not more than 20 pounds per square foot (958 Pa) as determined using allowable stress design; or

4. Where wind loading values of this code exceed 20 pounds per square foot (958 Pa), as determined using allowable stress design, the construction documents shall include documentation prepared and sealed by a registered design professional that:

4.1. The walls and partitions below the required elevation have been designed to collapse from a water load less than that which would occur during the base flood.

4.2. The elevated portion of the building and supporting foundation system have been designed to withstand the effects of wind and flood loads acting simultaneously on structural and nonstructural building components. Water-loading values used shall be those associated with the design flood. Wind-loading values shall be those required by this code.

5. Walls intended to break away under flood loads as specified in Item 3 or 4 have flood openings that meet the criteria in Section R322.2.2, Item 2.

**Exception:** The following are not required to comply with this section:

1. Elevator shafts.

2. Utility chases that protect utility lines from freezing, provided the utility chases are the minimum size necessary to protect the utility lines and do not provide access for a person to enter the space.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Residential

48

### SP10259

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 322.3.2 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Specify where the bottom of the lowest horizontal structural member is when stem wall foundations are permitted in Coastal A Zones (seaward of LiMWA when delineated on FIRM).

### Rationale

Based on FEMA 2024 IRC proposal RB139-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. Section R322.3.3 Foundations, by exception, allows backfilled stem wall foundations in flood hazard areas designated as Coastal A Zones. Coastal A Zones are areas subject to waves that are between 3 feet and 1.5 feet high. Section R322.3.2 specifies elevation of the “bottom of the lowest horizontal structural members supporting the lowest floor.” This proposal does not change the requirement. It clarifies where the “bottom of the lowest horizontal structural member” is located when applicants elect to use backfilled stem wall foundations so that designers, builders, and building officials can readily determine compliance. Relating the required elevation to the wall also removes any confusion should a slab have varying thicknesses at points interior to the perimeter walls. There are different ways to configure the foundation wall and slab connection. Three common options are shown in the figures, with arrows pointing to the top of the foundation wall, or top of the portion of the wall, supporting the slab.

### Fiscal Impact Statement

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

Facilitates enforcement by taking the guesswork out of a key aspect of flood compliance.

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

No change because the proposal clarifies where the “bottom of the lowest horizontal structural member” is when backfilled stem wall foundations are used in Coastal A Zones. There is no change to the actual requirements for the elevation of the bottom of the lowest horizontal structural member.

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

No cost impact (doesn’t change a design requirement).

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, by taking the guesswork out of a key aspect of flood compliance.

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

Yes, by taking the guesswork out of a key aspect of flood compliance.

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

No change in materials and methods.

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

No, it improves effectiveness by taking the guesswork out of a key aspect of flood compliance.

## 1st Comment Period History

SP10259-G1

Proponent: Rebecca Quinn obo FL Div Emerg Mgnt | Submitted: 4/15/2022 4:21:01 PM | Attachments: No

Comment:

I submit this comment on behalf of Conn Cole, FDEM State Floodplain Manager, to advise that this proposal was submitted by FEMA for the 2024 International Codes as RB136-22 and was Approved as Submitted at the Committee Action Hearing.

**R322.3.2 Elevation requirements.**

1. Buildings and structures erected within coastal high-hazard areas and Coastal A Zones, shall be elevated so that the bottom of the lowest horizontal structural members supporting the lowest floor, with the exception of pilings, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus 1 foot (305 mm) or the design flood elevation, whichever is higher. Where stem wall foundations are permitted in Coastal A Zones in accordance with R322.3.3, the bottom of the lowest horizontal structural member supporting the lowest floor is the top of the foundation wall, or top of the portion of the foundation wall, supporting the slab.

2. Basement floors that are below grade on all sides are prohibited.

3. Garages used solely for parking, building access or storage, and carports shall comply with Item 1 or shall be at or above grade on not less than one side and, if enclosed with walls, such walls shall comply with Item 6.

4. The use of fill for structural support is prohibited.

5. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.

6. Walls and partitions enclosing areas below the elevation required in this section shall meet the requirements of Sections R322.3.5 and R322.3.6.

Attachment for INSERT PROPOSAL NUMBER

Figures from FEMA's proposal for the 2024 IRC.

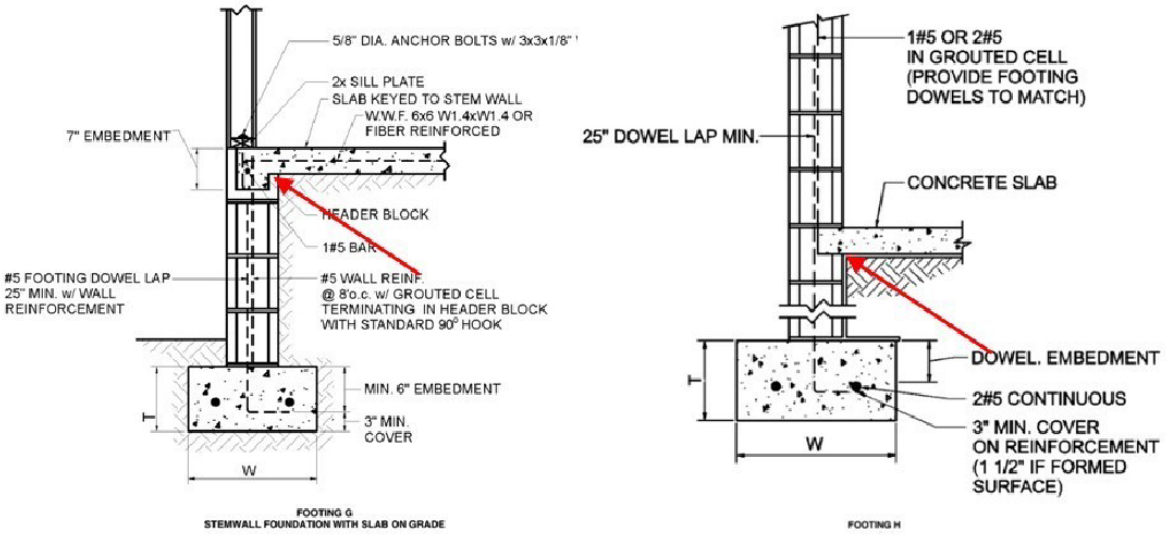
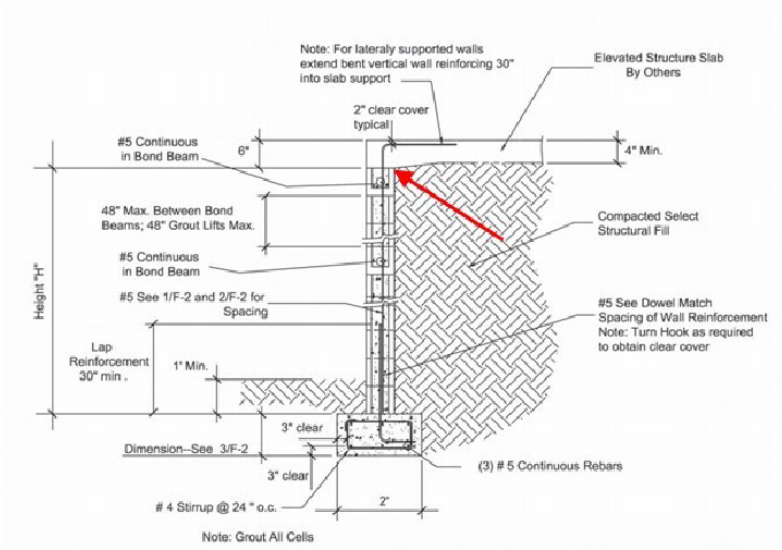



Figure 403.1(1) Concrete and Masonry Foundation Details
(2020 Florida Residential Code)




2/F-1 Case F - Closed Foundation Reinforced Masonry Foundation - Stem Wall Typical Section

FEMA P-550 Recommended Residential Construction for Coastal Areas

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The code change proposal clarifies where the "bottom of the lowest horizontal structural member" is when backfilled stem wall foundations are used in Coastal A Zones. There is no change to the actual requirements for elevation of the bottom of the lowest horizontal structural member. By clarifying existing requirements, there will be no cost impact when approving this proposal.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Approved as Submitted : 36**

Total Mods for report: 70

## Sub Code: Residential

49

### SP10262

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 322.3.3 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 3 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Approved as Submitted | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Refer to ASCE 24, the standard of practice, for the design of pilings and columns.

**Rationale**

Based on FEMA 2024 IRC proposal RB140-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. Section R322.3.3 applies to buildings in coastal high hazard areas and Coastal A Zones. Those are flood zones with wave action. In coastal high hazard areas, also called V Zones, waves are 3 feet and higher during base flood conditions. Wave heights in Coastal A Zones range from 3 ft to 1.5 feet. FEMA has delineated the inland extent of 1.5 foot waves on many Flood Insurance Rate Maps for coastal communities, labeling the line as the Limit of Moderate Wave Action. Section R322.3.9 requires construction documents to be prepared and sealed by registered design professionals. Section R322.3.3 describes the performance expectations for pilings and columns. This proposal requires pilings and columns to be designed in accordance with ASCE 24 Flood Resistant Design and Construction, which is the standard of practice for design and construction in flood hazard areas. Relying on the recognized standard of practice facilitates the design professional's task to satisfy the performance expectations.

**Fiscal Impact Statement**

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

Eases enforcement because ASCE 7 is the referenced standard for loads ASCE 24 is considered the "standard of practice" the code requires certification of design.

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

No change; code already requires foundations in Zone V and Coastal A Zones to be designed by registered design professionals to satisfy the performance expectations. Change requires designs in accordance with the recognized standard of practice, which facilitates the design professional's task.

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

There is no impact by having designers use the recognized "standard of practice" for flood hazard area design.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, because ASCE 24 has been the “standard of practice” since 1998.

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

Yes, because ASCE 24 has been the “standard of practice” since 1998.

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

No, because ASCE 24 has been the “standard of practice” since 1998.

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

No, because ASCE 24 has been the “standard of practice” since 1998.

## 1st Comment Period History

SP10262-G1

Proponent: Rebecca Quinn obo FL Div Emerg Mgnt | Submitted: 4/15/2022 4:21:55 PM | Attachments: No

Comment:

I submit this comment on behalf of Conn Cole, FDEM State Floodplain Manager, to advise that this proposal was submitted by FEMA for the 2024 International Codes as RB140-22 and was Approved as Submitted at the Committee Action Hearing.

**R322.3.3 Foundations.** Buildings and structures erected in coastal high-hazard areas and Coastal A Zones shall be supported on pilings or columns and shall be adequately anchored to such pilings or columns and shall comply with the following:

1. The space below the elevated building shall be either free of obstruction or, if enclosed with walls, the walls shall meet the requirements of Section R322.3.5.

2. Pilings shall be designed in accordance with ASCE 24 to have adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift) and pile embedment shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the piling.

3. Columns and their supporting foundations shall be designed in accordance with ASCE 24 to resist combined wave and wind loads, lateral and uplift, and shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the columns. Spread footing, mat, raft or other foundations that support columns shall not be permitted where soil investigations that are required in accordance with Section R401.4 indicate that soil material under the spread footing, mat, raft or other foundation is subject to scour or erosion from wave velocity flow conditions. If permitted, spread footing, mat, raft or other foundations that support columns shall be designed in accordance with ASCE 24.

4. Flood and wave loads shall be determined in accordance with ASCE 7 and shall include loads ~~those~~ associated with the design flood. Wind loads shall be those required by this code.

5. Foundation designs and construction documents shall be prepared and sealed in accordance with Section R322.3.9.

**Exception:** In Coastal A Zones, stem wall foundations supporting a floor system above and backfilled with soil or gravel to the underside of the floor system shall be permitted provided that the foundations are designed to account for wave action, debris impact, erosion and local scour. Where soils are susceptible to erosion and local scour, stem wall foundations shall have deep footings to account for the loss of soil.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

50

### SP10339

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 453.8.3.3 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Mass timber Type IV package of changes

### Summary of Modification

Type IV heavy timber, which is not permitted concealed spaces, is differentiated from Type IV-A, Type IV-B, and Type IV-C which are permitted concealed (but protected) spaces.

### Rationale

The package of mass timber modifications designate current Type IV buildings as Type IV-HT. This modification updates the designation within the section to maintain current requirements. Additionally, each of the new Type IV construction type are added and provided with a reference to the applicable section for the treatment of concealed spaces and structural protection. A code format edit is made substituting 'where' for 'when'

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
None; typical plan review and inspection.
**Impact to building and property owners relative to cost of compliance with code**
None; an optional construction method is enabled.
**Impact to industry relative to the cost of compliance with code**
None; an optional construction method is enabled.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Provides fire-resistive construction requirements.
**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**

Improves the code by supporting new methods of construction.

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

No materials are required or prohibited by this modification.

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

Improves the code by supporting new methods of construction.

## 1st Comment Period History

FP10339-G1

Proponent Don Whitehead Submitted 4/14/2022 5:01:54 PM Attachments Yes

Comment:

See attached file

**453.8.3.3 Type IV.**

~~When~~ Where Type IV-HT construction is used, wood shall be exposed and not covered by ceilings or other construction. Type IV-A construction shall comply with Section 602.4.1, Type IV-B construction shall comply with Section 602.4.2, and Type IV-C construction shall comply with Section 602.4.3.

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10339. This code modification seeks to allow concealed fire protected heavy timber construction in School Board and Florida College facilities. Currently, the State Board of Education has not authorized concealed heavy timber construction in educational facilities. Also, the Florida Building Commission has not authorized concealed heavy timber construction, as specified in the International Building Code (IBC). This change proposes to eliminate a Florida-specific requirement that was adopted to promote the long term public health and safety of public schools and colleges in Florida. The IBC does not take into account the unique situations in Florida as shown by the following explanations:

The wind loads in Florida are substantially higher because of the hurricane wind forces that all buildings in Florida must resist in order to protect the occupants during a storm. These higher hurricane wind forces include design wind speeds in excess of 200 mph and missile impact speeds in excess of 100 mph. Using concealed heavy timber construction as the structure of a public educational facility would be very inefficient, because it would not only require thicker walls that would reduce the amount of valuable classroom space, but it would require more taxpayer dollars.

Buildings constructed in Florida are vulnerable to termite damage and other wood destroying organisms, such as powderpost beetles and carpenter bees. Because the destruction is hidden below the surface, pest control inspections can only minimize the danger, but not completely eliminate it. Because concrete block is extremely durable, fire and termite resistant, and has a life expectancy of around 100 years, it is a popular building material in Florida. Because wood deteriorates more quickly with the high humidity in Florida, its life expectancy is about 25 years.

As an example of the potential hazard, allow me to share one school district's experience. Marion County School District was conducting an asbestos abatement of Anthony Elementary Cafetorium. During the asbestos abatement of the 9x9 floor tiles, one of the workers fell through the floor exposing the serious structural damage of the original wood floor framing system, which had been destroyed by powderpost beetles. Wood destroying organisms can cause structural failure without warning, and endanger the life safety of the occupants.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

51

### SP10340

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 453.8.3.4 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Fully sprinklered educational facility buildings are permitted to be of Type V-A construction

### Rationale

See uploaded rationale

### 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**
Lowers cost by providing an affordable construction alternative.
**Impact to industry relative to the cost of compliance with code**
Lowers cost by providing an affordable construction alternative.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
This about equivalent fire-resistive construction.
**Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction**
Improves the code by providing an equivalent and affordable construction alternative.
**Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities**
Helps eliminate existing discrimination against wood systems of construction that have proven equivalencies through extensive fire-testing. Reduces anti-competitive provisions of the building code.
**Does not degrade the effectiveness of the code**

Improves the code by providing an equivalent and affordable construction alternative.

## 1st Comment Period History

| | | | | | | |
|---|---|---|---|---|---|---|
| Proponent | Don Whitehead | Submitted | 4/14/2022 5:06:16 PM | Attachments | Yes | |

Comment:

See attached file

**453.8.3.4 Exceptions to types of construction:**
1.Covered walkways open on all sides may be Type V construction.

2.Single story dugouts, press boxes, concession stands, related public toilet rooms, detached covered play areas, and nonflammable storage buildings that are detached from the main educational facility by at least 60 feet (1829 mm), may be Type V construction.

3. Buildings fully sprinklered in accordance with Section 903.3.1.1 may be of Type V-A construction.

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10340. This code modification seeks to allow fire protected light weight wood construction, in School Board and Florida College facilities. Currently, the State Board of Education has not authorized light weight wood construction in educational facilities, even if it is fire protected and fully sprinklered. This change proposes to eliminate a Florida-specific requirement that was adopted to promote the public health and safety of the public schools and colleges in Florida. Currently, all educational facilities that are larger than 1,000 square feet are required to be fully sprinklered, in accordance with the Florida Fire Prevention Code. Using the argument that fire protected light weight wood construction, provides a higher degree of safety than an unprotected structure using noncombustible materials, does not mean that it is safer.

The wind loads in Florida are substantially higher because of the hurricane wind forces that all buildings in Florida must resist in order to protect the occupants during a storm. These higher hurricane wind forces include design wind speeds in excess of 200 mph and missile impact speeds in excess of 100 mph. Using light weight wood construction as the structure of a public educational facility would be very inefficient, because it would not only require thicker walls that would reduce the amount of valuable classroom space, but it would require more taxpayer dollars.

Buildings constructed in Florida are vulnerable to termite damage and other wood destroying organisms, such as powderpost beetles and carpenter bees. Because the destruction is hidden below the surface, pest control inspections can only minimize the danger, but not completely eliminate it. Because concrete block is extremely durable, fire and termite resistant, and has a life expectancy of around 100 years, it is a popular building material in Florida. Because wood, including fire retardant treated wood deteriorates more quickly with the high humidity in Florida, its life expectancy is about 25 years.

As an example of the potential hazard, allow me to share one school district's experience. Marion County School District was conducting an asbestos abatement of Anthony Elementary Cafetorium. During the asbestos abatement of the 9x9 floor tiles, one of the workers fell through the floor exposing the serious structural damage of the original wood floor framing system, which had been destroyed by powderpost beetles. Wood destroying organisms can cause structural failure without warning, and endanger the life safety of the occupants.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

**New Exception3 Sec 453.8.3.4 sprinklered Type V-A**

Per IBC Table 602, (FL Building Code Table 705.5) Type V-A buildings have the same required fire-resistance rating as Type IIA buildings which are permitted for educational buildings regardless of whether they are sprinklered.

Similarly, except for exterior 2-hour bearing walls, Type V-A buildings have the same required fire-resistance rating regardless of whether they are sprinklered as Type III-A buildings.

The proposed exception, by permitting Type V-A construction only where a NFPA 13 compliant suppression system is also required, provides a higher degree of fire-safety for occupancies within the scope of Section 453.

Note there is no history of fire deaths or injuries in fully sprinklered educational occupancies and an excellent history of structural protection.

Note too that Type V construction is broadly permitted for all manner of occupancies across the Gulf Coast region, demonstrating exceptional, durable performance in climates equally hot and humid as that in Florida.

Finally, cement and steel manufacturing **each** account for more than 8 percent of annual greenhouse gas emissions, while wood building products store the carbon (wood is about 50 percent carbon by weight) that was taken up by the trees from which the products were manufactured.

When FL locks carbon up in wood building products, instead of contributing carbon to the atmosphere by requiring other, carbon intensive building materials that have no appreciable performance benefit, it is a small step toward protecting its coastlines, property, and people from the hazards of climate change.

It is time to build smarter.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

52

### SP10418

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 453.8.3.2 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Changes the trigger for Type I construction to 5 stories rather than 3.

### Rationale

See uploaded rationale

### 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**

This will lower the cost of construction by permitting materials with equivalent performance, ensuring competition.

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

This will lower the cost of construction by permitting materials with equivalent performance, ensuring competition.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This is about fire safe construction.

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

It improves the code by providing equivalent or better materials.

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

No material is required or prohibited by this modification.

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

It improves the code by providing equivalent or better materials.

## 1st Comment Period History

| | | | | | | |
|---|---|---|---|---|---|---|
| Proponent | Don Whitehead | Submitted | 4/14/2022 5:08:06 PM | Attachments | Yes | |

Comment:

See attached file

P10418-G1

**453.8.3.2 Type I.**

Facilities ~~three~~ five stories or more shall be Type I construction.

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10418. This code modification seeks to allow three and four story Type II or IV heavy timber construction in School Board and Florida College facilities. Currently, the State Board of Education has not authorized three and four story Type II or IV heavy timber construction in educational facilities. This change proposes to eliminate a Florida-specific requirement that was adopted to promote the public health and safety of the public schools and colleges in Florida. Allowing three and four story Type II or IV heavy timber construction would actually reduce the amount of fire protection required for the exterior walls, floor construction and roof construction. And in Type IIB construction, the required fire protection for the exterior walls, floor construction and roof construction would be reduced to zero.

Reduction of fire protection in three and four story educational facilities would reduce the public health and safety of public schools and colleges in Florida. Section 553.79(9)(a) only allows the Florida Building Commission to approve modifications to the Florida Building Code that will strengthen or improve the code and not degrade the effectiveness of the code. Reduction of fire protection reduces the safety of educational facilities and therefore does not strengthen or improve the code, but rather degrades the effectiveness of the code.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

**453.8.3.2 Type I.**

Facilities ~~three~~ five stories or more shall be Type I construction.

Per the limits in Table 504.4, accepting this modification would permit a 4 story sprinklered educational building of either Type IIA or Type IV heavy timber or a 3 story non-sprinklered educational building of either Type IIA or Type IV.

Type IIA structural frame, exterior and interior walls, and roof and floor construction are required to be of not less than 1-hour fire-resistive construction. Type IV exterior walls are required to be 2-hour fire-resistive construction with a heavy timber or 1-hour structural frame and heavy timber floors and roof.

These are very modest allowable story increases from the prescriptive value in Section 453.8.3.2 based upon the proven fire-resistance of these types of construction and the presence of a fire-sprinkler system.

Educational occupancies in Type IIB buildings would be limited to 2 stories (non-sprinklered), (which is already permitted), and 3 stories (sprinklered).

Note that the amount of time that it takes for occupants to exit a building really does not have much relationship to the type of construction. Type of construction is about how long a given type is expected to maintain structural integrity in a fire event – a measure that begins mean something well after the building is evacuated.

Building occupants are generally expected to fully exit a building within 20 minutes of alarm.

Type of construction is far more relevant to fire-fighter operations which means these tabular provisions have had extensive debate and analysis through both the NFPA and ICC processes and are essentially settled values, having not changed for several cycles.

There is no fire or life safety reason or history of incidents to not permit these specific increases which remain within the limits set by the national model codes.

Note too that there is no history of occupant life loss or injury in fully sprinklered educational occupancies.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

53

### SP10462

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 453.8.3.1 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

This adds Type III-A to permitted construction types for educational facilities. See uploaded rationale.

### Rationale

Type III-A is more slightly fire-resistive, or better, than Type II-A and more fire-resistive than Type II-BB, which are both permitted construction types. See uploaded rationale.

### 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 reduce the cost of construction by providing more options.

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

Will reduce the cost of construction by providing more options.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This is a fire-resistive construction issue.

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

Improves the code by providing equivalent or better construction methods/systems.

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

No material is prohibited by this modification. It removes a requirement that discriminates against a system of construction with demonstrated capabilities as evidenced by the national model building codes.

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

Improves the code by providing equivalent or better construction methods/systems.

## 1st Comment Period History

| | | | | | | |
|---|---|---|---|---|---|---|
| Proponent | Don Whitehead | Submitted | 4/14/2022 5:09:08 PM | Attachments | Yes | |

Comment:

See attached file

P10462-G1

**453.8.3.1 Noncombustible Type I, II, III-A, or IV.**

The minimum construction type for one- and two-story public educational facilities shall be noncombustible Type I, II, III-A, or IV construction or better.

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10462. This code modification seeks to allow fire protected light weight wood construction, using fire retardant treated wood, in School Board and Florida College facilities. Currently, the State Board of Education has not authorized light weight wood construction in educational facilities, even if it is fire protected and uses retardant treated wood. This change proposes to eliminate a Florida-specific requirement that was adopted to promote the public health and safety of the public schools and colleges in Florida. Using the argument that the code allows a slightly taller wood building with a small percent more square feet per floor, if it is constructed with fire protected light weight wood construction using fire retardant treated wood, than an unprotected structure using noncombustible materials, does not mean that it is better. Also, fire-retardant treated wood is expressly prohibited from being used in the construction of educational facilities by Rule 6A2.0010, of the Florida Administrative Code.

The wind loads in Florida are substantially higher because of the hurricane wind forces that all buildings in Florida must resist in order to protect the occupants during a storm. These higher hurricane wind forces include design wind speeds in excess of 200 mph and missile impact speeds in excess of 100 mph. Using light weight wood construction as the structure of a public educational facility would be very inefficient, because it would not only require thicker walls that would reduce the amount of valuable classroom space, but it would require more taxpayer dollars.

Buildings constructed in Florida are vulnerable to termite damage and other wood destroying organisms, such as powderpost beetles and carpenter bees. Because the destruction is hidden below the surface, pest control inspections can only minimize the danger, but not completely eliminate it. Because concrete block is extremely durable, fire and termite resistant, and has a life expectancy of around 100 years, it is a popular building material in Florida. Because wood, including fire retardant treated wood deteriorates more quickly with the high humidity in Florida, its life expectancy is about 25 years.

As an example of the potential hazard, allow me to share one school district's experience. Marion County School District was conducting an asbestos abatement of Anthony Elementary Cafetorium. During the asbestos abatement of the 9x9 floor tiles, one of the workers fell through the floor exposing the serious structural damage of the original wood floor framing system, which had been destroyed by powderpost beetles. Wood destroying organisms can cause structural failure without warning, and endanger the life safety of the occupants.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

**Sec 453.8.3.1 Type III-A added to permitted construction types for educational facilities**.

Section 453.8.3.1 currently requires Type I, II or IV **or better construction**. Per IBC Table 601 (FL building code 705.5) *Fire-Resistance Rating Requirements for Building Elements (Hours)*, Type III-A is equivalent to Type II-A construction for all elements and better than Type II-A for exterior bearing walls.

Type III-A is also more fire resistant than the allowable Type II-B. Type III-A is therefore "***better construction***" and should be specifically accepted.

Note that the building code specifically recognizes these equivalencies in the height above grade and stories above grade tables where Type II-A and Type III-A are permitted the same heights and numbers of stories. Type II-B is permitted less height and fewer stories, establishing it as not '**better**' than Type III-A.

**TABLE 601** (FL building code 705.5)
**FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)**

| BUILDING ELEMENT | TYPE I | | TYPE II | | TYPE III | | TYPE IV | TYPE V | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | HT | A | B |
| Primary structural frame[f] (see Section 202) | 3[a] | 2[a] | 1 | 0 | 1 | 0 | HT | 1 | 0 |
| Bearing walls<br>Exterior[e, f]<br>Interior | 3<br>3[a] | 2<br>2[a] | 1<br>1 | 0<br>0 | 2<br>1 | 2<br>0 | 2<br>1/HT | 1<br>1 | 0<br>0 |
| Nonbearing walls and partitions Exterior | See Table 602 | | | | | | | | |
| Nonbearing walls and partitions Interior[d] | 0 | 0 | 0 | 0 | 0 | 0 | See Section 2304.11.2 | 0 | 0 |
| Floor construction and associated secondary members (see Section 202) | 2 | 2 | 1 | 0 | 1 | 0 | HT | 1 | 0 |
| Roof construction and associated secondary members (see Section 202) | $1^1/_2$[b] | 1[b,c] | 1[b,c] | 0[c] | 1[b,c] | 0 | HT | 1[b,c] | 0 |

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.

b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.

c. In all occupancies, heavy timber complying with Section 2304.11 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. Not less than the fire-resistance rating required by other sections of this code.

e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

f. Not less than the fire-resistance rating as referenced in Section 704.10.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

54

### SP10481

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 453.8.3 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

FL public colleges permitted same type of construction rules as private colleges.

### Rationale

To provide for equal treatment of public and private colleges under the law. See uploaded rationale.

### 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**

Should greatly reduce the cost of construction of public colleges by providing proven alternative building methods.

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

Should greatly reduce the cost of construction of public colleges by providing proven alternative building methods.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

It regards permitted construction types.

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

It improves the code by permitting public colleges to use the same construction regulations as private colleges.

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

It removes discrimination against certain materials that is based solely upon who owns the building.

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

It improves the code by permitting public colleges to use the same construction regulations as private colleges.

## 2nd Comment Period

SP10481-G2

Proponent Don Whitehead Submitted 8/22/2022 2:22:21 PM Attachments Yes

Comment:

See attached file

## 2nd Comment Period

SP10481-G3

Proponent Greg Johnson Submitted 8/24/2022 6:24:42 PM Attachments Yes

Comment:

Approving Modification #10481 has the potential to save FL taxpayers millions of dollars if the code will quit discriminating "against against materials, products, methods, or systems of construction of demonstrated capabilities." See the uploaded comment.

## 2nd Comment Period

SP10481-G4

Proponent Greg Johnson Submitted 8/26/2022 4:05:36 PM Attachments Yes

Comment:

See the uploaded comment file in support of SP10481 in response to Comment G-2 opposing Modification SP10481

## 1st Comment Period History

SP10481-G1

Proponent Don Whitehead Submitted 4/14/2022 5:10:24 PM Attachments Yes

Comment:

See attached file

**453.8.3 Construction type.**
School board ~~and Florida college~~ buildings including auxiliary, ancillary and vocational facilities shall comply with the following:

In Comment G-2 opposing Modification SP10481, staff to the Office of Educational Facilities (OEF) within the Florida Department of Education (FDOE) again seeks to block a change to the FL Building Code that would permit public colleges to be constructed with the same Types of Construction as those permitted for private colleges.

Previously OEF opposition was based upon (paraphrased) quasi-technical objections:

1. '*Wood is short lived (25 years) in FL.*' This was rebutted previously in testimony that provided multiple examples of wood frame buildings in FL that are hundreds of years old, including the ≈300-year-old wood frame school in the United States in St. Augustine.
2. '*Wood is susceptible to insect damage and potential collapse.*' This was rebutted previously by testimony that buildings of all types of construction materials are susceptible to failure where existing building inspection and maintenance is inadequate, with the collapse of the Sunnyside Condominiums – a concrete building – serving as evidence.
3. '*It is too expensive to build wood buildings that will comply with FL's wind-load requirements.*' This was rebutted previously in testimony with the observation that the FL Building Code does not need to have rules against construction methods that an owner will not select because of cost.

In comment G-2 however, OEF staff apparently concedes the technical debate and instead makes procedural arguments challenging the authority of the FL Building Commission to change, amend, interpret, or modify the FL Building Code as it relates to the State Requirements for Educational Facilities Rule 6A-2.0010, Florida Administrative Code (SREF). SREF Section 1.1(1) is cited to support this argument.

OEF staff also argues, per SREF Section 1.1(1) that only OEF itself has the authority to revise SREF and make recommendations for any modification and claims that Section 1013.03(6) of Florida Statutes (FS) "*also gives this authority to OEF to revise a portion of the Florida Building Code (FBC) for educational facilities construction.*" (Why OEF believes it has the authority to supersede the 1st amendment to the US Constitution and retain the sole right to *"make recommendations for any modification"* of the SREF is outside the scope of this comment.)

There are problems with OEF interpretations of the relevant rules and statutes as applied to the OEF staff argument against permitting the same construction types for public colleges as those permitted for private colleges.

First, SREF Section 1.2(40) defines the Florida Building Code (FBC) as, *"The building code used for new construction, remodeling and renovation of all public educational facilities."*

OEF staff – partially - correctly argues that FS Section 1013.03(6) gives the Department of Education (not OEF specifically) and the Board of Governors the authority to *"Develop, review, update, revise, and recommend a mandatory portion of the Florida Building Code for educational facilities construction and capital improvement by Florida College System institution boards and district school boards."* But, this statutory language <u>does not</u> give OEF the authority to <u>adopt</u> the FBC.

FS Section 1013.37(1) charges the Florida Building Commission with: *"A uniform statewide building code for the planning and construction of public educational and ancillary plants by district school boards and Florida College System institution district boards of trustees* ***shall be adopted by the Florida Building Commission within the Florida Building Code****, pursuant to s. 553.73."* <emphasis added>

FS Section 1013.37(4) Reinforces the advisory role of FDOE with respect to the content of the FBC when it states: "*The department may secure the service of other state agencies or such other assistance as it finds desirable* ***in recommending*** *to the Florida Building Commission* ***revisions to the code***." <emphasis added>

Further, SREF Section 1.3(1) permits educational boards the same authority to accept alternative materials, design, and methods of construction as any other building official or authority having jurisdiction as that granted by FBC Section 104.11.

Per SREF Section 1.3(4), the acceptance of an alternative materials, design, and method of construction – for example, Type III or Type V construction in an educational facility project – can be approved for general use "*when adopted into the Florida Building Code or these state rules*." In other words, SREF itself credits the FL Building Commission – the adopting authority for the FBC – with the ability to modify the FBC as it relates to public educational facilities.

Note that Modification SP10481 is about the equivalency of materials. FS 553.73(8)(a)(4) clearly states that the FL Building Commission may approve amendments that are needed to address the equivalency of standards.

A last point regarding SREF and the FBC: Section 4.3(1) of SREF says that "*Boards shall use the Uniform Building Code, which is a part of the Florida Building Code, and the Florida Fire Prevention Code as the state building codes and lifesafety codes for public educational facilities.*"

The intent of Modification SP10481 is that public colleges be permitted to use the same types of construction as private colleges. This is premised on the idea that the performance of two similar buildings will be similar regardless of who owns those buildings; in other words, publicly owned buildings should be afforded all cost-saving options or design flexibility that comparable privately owned buildings enjoy.

The philosophy underpinning SP10481 is echoed in several places in FL statutes and rules:

- Section 553.73(9)(a)(3) gives the FL Building commission the responsibility to adopt technical amendments to the FBC *"in the case of innovation or new technology, will provide equivalent or better products or methods or systems of construction."*
- Moreover, Section 553.73(9)(a)(4) of Florida statutes explicitly says that amendments to the code should "*not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities*." The intent of the statute is clearly that the code is not intended protect one material interest at the expense of another.
- The enabling statute of the FBC further recognizes this by twice giving guidance in Section 553.73(9)(d) to the acceptability of alternatives that *"provide an equivalent degree of lifesafety and an equivalent method of construction."* It repeats that direction in Sections 553.73(11)(a), 553.73(11)(b), and 553.73(11)(c).
- The sentiment is further repeated within the FBC itself, in Section 104.11, Alternative materials, design and methods of construction and equipment, which states: *"An alternative material, design or method of construction* ***shall be approved where*** *the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that* ***the material, method or work offered is****, for the purpose intended,* ***not less than the equivalent of that***

***prescribed in this code*** *in quality, strength, effectiveness, fire resistance, durability and safety."* <emphasis added>

- FS 1013.37(4) "*It is not a purpose of the Florida Building Code to inhibit the use of new materials or innovative techniques; nor may it specify or prohibit materials by brand names. The code must be flexible enough to cover all phases of construction so as to afford reasonable protection for the public safety, health, and general welfare.*"

While the interrelationship of the statutes and rules regulating the application of the FBC are complex, the question posed by SP10481 is very simple:

- Are there materials, products, or construction techniques of demonstrated capabilities not currently prescriptively recognized by the Florida Building Code for public colleges and universities?

There are 53 private colleges and universities in Florida that are permitted the use of the same types of construction as all the ≈4,000 other US colleges and universities where the International Building Code is adopted. Those 4,000 colleges and universities generally, and the 53 FL facilities specifically, provide an extensive record of buildings constructed using materials, products, and construction techniques of demonstrated capabilities.

Modification SP10481 must be approved to be consistent with the intent of FL statutes, rules, and the Florida Building Code.

**Comment on Mod # SP10481 Public colleges permitted same materials as private colleges**

Building codes almost invariably do not impose different technical requirements on buildings because of whom the owners are.

There is no good reason - none, nada, zero, zip - for the FL building code to treat public college buildings differently than privately owned college buildings.

FL Department of Education (FDOE)staff has commented in the past that concrete and masonry products are better than wood for durability, unaware perhaps that the oldest school building in America was constructed in St. Augustine, FL about 300 years ago, belying the claim that wood only lasts in FL for about 25 years.

FDOE staff also commented to the effect that it would be too expensive to construct with wood to meet the wind load requirements of the FL Building Code. If that is the case, why is a law needed against a material that is not cost-effective?

Regardless, as the owner, FL public schools can require whatever legal method or material for the construction of their buildings that they desire, provided it meets all of the design requirements of the FL Building Code. If they prefer concrete or masonry, they can specify concrete or masonry - they do not need a regulation to tell them how to specify their buildings, they can do it as a matter of procurement policy.

FDOE staff has also repeatedly discussed an incident where a worker fell through an insect damaged floor years ago. This incident (apparently not repeated in a commercial building in the Gulf Coast and Southern Atlantic adjacent states, per extensive online research), highlights what can happen when existing buildings do not receive adequate inspection and maintenance. The collapse of the Surfside Condominiums, which were of concrete construction and which killed 98 people, also represents a failure of adequate inspection and maintenance.

Any building of any material is susceptible to failure when not appropriately maintained.

Given the empirical evidence and demonstrated capabilities of wood buildings in FL private college buildings, there is no reason that publicly owned college buildings in FL should not be legally permitted to use the same cost-saving construction methods and materials as private colleges; anything else violates the principle of material neutrality.

Section 553.73(9)(a)(4) of Florida statutes explicitly says that amendments to the code should "*not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities.*"

The intent of the statute is clearly that the code is not intended protect one material interest at the expense of another. Modification SP10481 should be approved to end the current discrimination against wood materials, products, methods, and systems of construction of demonstrated capabilities for public college buildings.

As staff to the State Board of Education, I cannot recommend acceptance of Modification SP10481 that seeks to modify a portion of the State Requirements for Educational Facilities, Rule 6A-2.0010, Florida Administrative Code (SREF). This code modification seeks to allow light weight wood construction in public Florida College facilities. Currently, the State Board of Education has not authorized light weight wood construction in public Florida College facilities.

In accordance with section 1.1(1), SREF, SREF shall not be changed, amended, interpreted or modified by any other individual, agency or entity. Also, in accordance with section 1.1(1), SREF, only the Office of Educational Facilities (OEF) within the Florida Department of Education has the authority to revise SREF and make recommendations for any modification. Section 1013.03(6), Florida Statutes (F.S.), also gives this authority to OEF to revise a portion of the Florida Building Code (FBC) for educational facilities construction.

As staff to the State Board of Education, I urge the committee to not approve this code modification.

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10481. This code modification seeks to allow light weight wood construction in public Florida College facilities. Currently, the State Board of Education has not authorized light weight wood construction in public educational facilities. This change proposes to eliminate a Florida-specific requirement that was adopted to promote the public health and safety of the public colleges in Florida. The International Building Code does not take into account the unique situations in Florida as shown by the following explanations:

The wind loads in Florida are substantially higher because of the hurricane wind forces that all buildings in Florida must resist in order to protect the occupants during a storm. These higher hurricane wind forces include design wind speeds in excess of 200 mph and missile impact speeds in excess of 100 mph. Using light weight wood construction as the structure of a public college building would be very inefficient, because it would not only require thicker walls that would reduce the amount of valuable classroom space, but it would require more taxpayer dollars.

Buildings constructed in Florida are vulnerable to termite damage and other wood destroying organisms, such as powderpost beetles and carpenter bees. Because the destruction is hidden below the surface, pest control inspections can only minimize the danger, but not completely eliminate it. Because concrete block is extremely durable, fire and termite resistant, and has a life expectancy of around 100 years, it is a popular building material in Florida. Because wood deteriorates more quickly with the high humidity in Florida, its life expectancy is about 25 years.

As an example of the potential hazard, allow me to share one school district's experience. Marion County School District was conducting an asbestos abatement of Anthony Elementary Cafetorium. During the asbestos abatement of the 9x9 floor tiles, one of the workers fell through the floor exposing the serious structural damage of the original wood floor framing system, which had been destroyed by powderpost beetles. Wood destroying organisms can cause structural failure without warning, and endanger the life safety of the occupants.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

**Sec 453.8.3 Fl college building exempt from construction type**

**Reason**:

There is no life-safety, durability, or other reason that public Florida college buildings – which will generally be B occupancies occupied by adults - should have to comply with more stringent requirements than private college buildings - which will also generally be B occupancies occupied by adults..

Since the International Building Code doesn't differentiate college buildings by ownership (public vs. private), and it is adopted nationwide without that differentiation, it does not make sense for FL to use the distinction for building regulation.

Making this change has the potential, in the long term, to save the State of Florida literally millions of dollars; a great return for following a national standard.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

55

### SP10485

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 453.8.3 | **Proponent** | Greg Johnson |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

10481

### Summary of Modification

Provides regulation of publicly owned ancillary buildings consistent with privately owned buildings.

### Rationale

To provide for equal treatment under the law for publicly owned and privately owned buildings used for the same functions and by the same type of occupants.

### 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**

Should save the State of FL a considerable amount of money by 'right-sizing' the regulation of its buildings to match the private sector.

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

Reduces the cost of state facilities.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This is a construction regulation provision.

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

Improves the code by permitting publicly owned buildings to meet the same proven requirements that are applied to privately owned buildings.

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

Removes discrimination against materials based upon ownership.

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

Improves the code by permitting publicly owned buildings to meet the same proven requirements that are applied to privately owned buildings.

## 1st Comment Period History

FP10485-G1

Proponent Don Whitehead Submitted 4/14/2022 5:11:40 PM Attachments Yes

Comment:

See attached file

**453.8.3 Construction type.**
School board and Florida college buildings including auxiliary~~, ancillary~~ and vocational facilities shall comply with the following:

As staff to the State Board of Education, I would not be able to recommend acceptance of Modification SP10485. This code modification seeks to allow light weight wood construction in ancillary School Board and Florida College facilities. Currently, the State Board of Education has not authorized light weight wood construction in ancillary educational facilities. This change proposes to eliminate a Florida-specific requirement that was adopted to promote the long term public health and safety of the ancillary facilities for the public schools and colleges in Florida. Privately owned buildings do not always take into account the long term costs of buildings in Florida as shown by the following explanations:

The wind loads in Florida are substantially higher because of the hurricane wind forces that all buildings in Florida must resist in order to protect the occupants during a storm. These higher hurricane wind forces include design wind speeds in excess of 200 mph and missile impact speeds in excess of 100 mph. Using light weight wood construction as the structure of an ancillary public educational facility would be very inefficient, because it would not only require thicker walls that would reduce the amount of usable space, but it would require more taxpayer dollars.

Buildings constructed in Florida are vulnerable to termite damage and other wood destroying organisms, such as powderpost beetles and carpenter bees. Because the destruction is hidden below the surface, pest control inspections can only minimize the danger, but not completely eliminate it. Because concrete block is extremely durable, fire and termite resistant, and has a life expectancy of around 100 years, it is a popular building material in Florida. Because wood deteriorates more quickly with the high humidity in Florida, its life expectancy is about 25 years.

As an example of the potential hazard, allow me to share one school district's experience. Marion County School District was conducting an asbestos abatement of Anthony Elementary Cafetorium. During the asbestos abatement of the 9x9 floor tiles, one of the workers fell through the floor exposing the serious structural damage of the original wood floor framing system, which had been destroyed by powderpost beetles. Wood destroying organisms can cause structural failure without warning, and endanger the life safety of the occupants.

As staff to the State Board of Education, I urge the committee to not approve this code modification as submitted

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

56

### SP10488

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Defines how the code references are to be applied.

### Rationale

Updates to ASHRAE 170 and deletes Part 3 of the 2018 FGI Guidelines. If the 2022 edition of the FGI Guidelines is able to be included, then this 449.2.4 will be removed and 449.2.2 will be revised. If the 2022 edition of the Guidelines is not able to be adopted, then 449.2.3 will be removed.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Updates and clarifies the code references.

**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**

Improves the effectiveness of the code by clarifying requirements.

449.2.2 The Guidelines for Design and Construction of Hospitals (The Guidelines), except Part 3, as referenced in Chapter 35 of this code.

449.2.3 Low-acuity patient treatment areas as described in 2.2-3.1.3.6 (7) Treatment rooms and areas of the Guidelines shall not be permitted.

449.2.4 ANSI/ASHRAE/ASHE 170 - 21 Ventilation of Heath Care Facilities, as referenced in Chapter 35 of this code.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

57

### SP10489

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Details how the references will be applied.

### Rationale

If the 2022 Guidelines are able to be adopted, then 450.2.3 will be removed and 450.2.2 will be revised. If the 2022 is not able to be included in the 8th edition, then this will remain as is submitted.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.2.2 The Guidelines for Design and Construction of Residential Health, Care, and Support Facilities (The Guidelines), ~~including Chapter 3.2 Specific Requirements for Nursing Homes and~~ except ventilation and space conditioning requirements, including Table 3.1-1, as referenced in Chapter 35 of this code.

450.2.3 ANSI/ASHRAE/ASHE 170 - 21 Ventilation of Heath Care Facilities, as referenced in Chapter 35 of this code

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

58

### SP10490

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 451 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Updates and clarifies how the code will be applied.

### Rationale

If the 2022 Guidelines are adopted for the 8th edition 451.2.3 will be removed and 451.2.2 will be revised. If the 2022 Guidelines are not adopted then this proposal will remain as written.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code.
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code.
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code.
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction
**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**

Improves the effectiveness of the code by clarifying requirements.

451.2.2 The Guidelines for Design and Construction of Outpatient Facilities (The Guidelines), ~~including Part 1 General, and Part 2 Outpatient Facility Types, Chapter 2.7 Specific Requirements for Outpatient Surgery Facilities~~ except Part 3, as referenced in Chapter 35 of this code.

451.2.3 ANSI/ASHRAE/ASHE 170 - 21 Ventilation of Heath Care Facilities, as referenced in Chapter 35 of this code

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

59

### SP9839

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/07/2022 | **Section** | 3012 | **Proponent** | Gary Hutto |
| **Chapter** | 30 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Replace the word "other" with "any" for clarification that all work requiring testing and witnessing requires a construction permit.

### Rationale

Some understood the original language to only include work performed outside of Part 8 of which there is little or none. The new language makes clear the intent that any work performed that requires testing and witnessing shall require a construction permit.

### Fiscal Impact Statement

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

Impact is negligible due to current enforcement. Change is language is to make current enforcement easier when original language is used as a defense for not permitting.

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

These actions are currently being performed and enforced. Therefore the impact is none or negligible since the permitting fees are being considered, proposed, and included currently as a part of work orders and contracts.

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

Impact is negligible since the permitting of work on the scale that requires a permit has been required and performed for decades.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Work that requires a permit for testing and witnessing is life safety based with regards to the elevator performance and operations. The permit represents the only method the Bureau of Elevator Safety has to track

and monitor such work and testing as a part of inspections.

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

Work that requires a permit for testing and witnessing is life safety based with regards to the elevator performance and operations. The permit represents the only method the Bureau of Elevator Safety has to track and monitor such work and testing as a part of inspections.

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

The new language only clarifies what is already known in industry and removes any potential for confusion. This applies to all parties and all applicable work performed regardless of the building, owner, or company performing.

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

The new language clarifies the requirement and removes and doubt of the intent of the Code requirement.

**3012.1 Alterations to electric and hydraulic elevators and escalators.**

Alterations set forth in Part 8, ASME A17.1 to include any change to equipment, including its parts, components, and/or subsystems, other than maintenance, repair, or replacement; require an elevator construction permit, along with documented performance of inspections and tests to determine conformance with ASME A17.1. A repair or replacement of equipment, parts, components or subsystems that requires inspection, tests and independent witnessing in ~~other~~ **any** sections of ASME A17.1, A17.3 and A18.1 shall require an elevator construction permit.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

60

### SP10154

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/10/2022 | **Section** | 3001.2 | **Proponent** | Priscilla Magee |
| **Chapter** | 30 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

None

### Summary of Modification

Elevator emergency communication systems

### Rationale

The National Elevator Industry, Inc. (NEII) proposes an amendment to 2021 International Building Code (IBC) Requirement 3001.2 to prevent a conflict that was created by a provision added in the 2018 IBC and remains in the 2021 edition. This provision, IBC Requirement 3001.2, mandates an emergency communication system for the deaf, hard of hearing, and speech impaired. NEII supports the intent of this code change, but the code language in the IBC is vague and unenforceable. NEII strongly recommends IBC Requirement 3001.2 be replaced with the following: An elevator emergency communication system shall be provided complying with the requirements in ASME A17.1/CSA B44. This proposed revision to the 2021 IBC retains the base requirement for the system while referencing the technical requirements in ASME A17.1/CSA B44 Safety Codes for Elevators and Escalators (A17.1). This modification will not impact the cost of construction as IBC Section 3001.1 also requires the system to comply with the requirements identified in A17.1 generally. Because the current language in the IBC is vague and provides no technical criteria for operation of the communication system, failure to make the amendment recommended could result in confusion and inconsistent enforcement in the field. Consistency is very important to all users, especially those users with a disability. Referring to the A17.1/B44 standard provides technical criteria and consistency which is not provided by the current IBC language.

### Fiscal Impact Statement

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

No impact. IBC Section 3001.1 already requires an enhanced communication system, but the requirements are not clear. The reference to A17.1/B44 provides clear guidance to users where to find the technical requirements.

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

No impact. IBC Section 3001.1 already requires an enhanced communication system, but the requirements are not clear. The reference to A17.1/B44 provides clear guidance to users where to find the technical requirements.

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

No impact. IBC Section 3001.1 already requires an enhanced communication system, but the requirements are not clear. The reference to A17.1/B44 provides clear guidance to users where to find the technical requirements.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes.

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

Yes.

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

Does not discriminate.

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

Improves effectiveness of the code.

**3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired.** An elevator emergency communication system shall be provided complying with the requirements in ASME A17.1/CSA B44.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

61

### SP10383

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 3002.4 | **Proponent** | Tommy Demopoulos |
| **Chapter** | 30 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Elevator car to accommodate ambulance stretcher

### Summary of Modification

Modify section to accommodate an ambulance stretcher 24 inches by 84 inches instead of 24 inches by 76 inches.

### Rationale

This modification is due to stretcher lengths increasing on many brands such as Stryker Stretchers. If the stretcher was lying flat and a patient was in cardiac arrest, you would not be able to fit in the elevator to go to the ground floor. You would have to incline the stretcher which then does not provide adequate compressions with the head portion inclined so you could fit into the elevator. With a minimum of 84 inches for new elevators, this provides sufficient space to keep the patient lying flat, continue chest compressions and be able to take the elevator down to the ground level.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
Nothing additional
**Impact to building and property owners relative to cost of compliance with code**
Potential increase in cost for a larger elevator and hoistway but can be offset by potential lives saved.
**Impact to industry relative to the cost of compliance with code**
None
**Impact to small business relative to the cost of compliance with code**

### Requirements

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

This proposal improves life safety. General public visiting or living in a building should be comfortable knowing they could be transported by means of a stretcher, that they can fit inside of an elevator. Their life could be saved by laying flat and receiving effective chest compressions.

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

This size increase does not diminish any code and there are products out there already that meet this need.

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

There is no discrimination of materials of products with this proposed code section.

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

This proposed modification does not degrade effectiveness of the code and shows alignment with the fire service and emergency medical services.

# 2nd Comment Period

SP10383-G1

Proponent Tommy Demopoulos Submitted 8/16/2022 1:45:16 PM Attachments No

Comment:

Stryker and Ferno are the most common and widely used stretcher within the State of Florida. These lengths are 84" and 80" respectively. Not constructing new buildings to allow EMS responders to properly transport a patient from the upper floors to the ground is a disservice to the residents of Florida. It is very unsafe and takes multiple personnel to carry a patient down the stairs on a backboard in cardiac arrest. This also delays proper chest compressions which places the patient at risk.

*Any building that is more than three stories high or in which the vertical distance between the bottom terminal landing and the top terminal landing exceeds 25 feet (7620 mm), must be constructed to contain at least one passenger elevator that is operational for building occupants and fire department emergency access to all floors. The elevator car shall be of such size and arrangement to accommodate an ambulance stretcher no less than 24 inches by ~~76~~ 84 inches (610 mm by ~~1950~~ 2134 mm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame.*

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Denied : 13**

Total Mods for report: 70

## Sub Code: Building

62

### SP10405

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/14/2022 | **Section** | 3002.4 | **Proponent** | Darrel Donatto |
| **Chapter** | 30 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Denied | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Proposed change to the minimum dimensions of “elevator cars designed to accommodate an ambulance stretcher” from 24 inch x 76 inch to the current national standards and the actual needed size of 24 inch x 84 inch.

### Rationale

This proposal is being submitted on behalf of the Florida Fire Chiefs' Association. The current IBC and current NFPA 5000 require 24 inch x 84 inch for "elevator cars to accommodate ambulance stretchers." The IBC changed to the 84 inch requirement in 2006 to reflect the needs for actual stretcher sizes in use by EMS. The FBC differs in that it requires a size of 24 inches by 76 inches, which is not large enough for ambulance stretchers. The standard stretcher size of stretchers made by the largest stretcher manufacturer, Stryker, is 23 inches by 83 inches. This proposal is to change the FBC from the 24 inch x 76 inch dimensions to the current national standards and the actual needed size of 24 inch x 84 inch.

### Fiscal Impact Statement

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

There will not be any additional impact to local entities relative to the enforcement of this proposed code modification.

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

There will not be any additional impact to building and property owners relative to the cost of compliance with this modification.

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

There will not be any additional impact on industry relative to the cost of compliance with this modification.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Stryker, the largest stretcher manufacturer, standard stretcher size is 23 inches by 83 inches. This stretcher is used by the majority of Florida EMS providers. The current IBC and NFPA 5000 require 24 inch x 84 inch elevator because this is the size needed to accommodate EMS stretchers.

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

This make the FBC the same as the IBC and NFPA 3000 and makes it in alignment with actual needs.

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

This proposed modification does not discriminate against materials, products, methods, or systems of construction.

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

This proposed modification does not degrade the effectiveness of the code.

## 1st Comment Period History

SP10405-G1

Proponent Tommy Demopoulos Submitted 3/15/2022 4:03:42 PM Attachments No

Comment:

This proposal has been vetted through our Broward County fire committees and has full support as we utilize stretchers larger than the 76" requirement. This proposal not only increases life safety to building guests and residents, but decreases the risk of injury to firefighters and emergency medical personnel. Without this increased size elevators, there is a potential for first responders to have to carry patients down stairs or other means which can potentially injure our members.

## 1st Comment Period History

SP10405-G2

Proponent Brett Dunckel Submitted 3/17/2022 9:00:30 AM Attachments No

Comment:

I am in full support of this proposal. As a firefighter paramedic, I've had to carry numerous patients in cardiac arrest down stairwells due to elevators which would not fit our equipment. This severely interfered with patient care.

3002.4 Elevator car to accommodate ambulance stretcher.

Any building that is more than three stories high or in which the vertical distance between the bottom terminal landing and the top terminal landing exceeds 25 feet (7620 mm), must be constructed to contain at least one passenger elevator that is operational for building occupants and fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by ~~76~~ 84 inches (610 mm by ~~1950~~ 2134 mm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

63

### SP10102

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 450 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Updates a code reference.

### Rationale

The first printing of the Guidelines has been depleted. The second printing of the Guidelines incorporates this Interim Amendment that modified the nursing home sleeping room requirements. The 7th edition of the code references the first printing that does not contain this amendment. This revision includes this amendment which is now available for all of the Guideline users. (See attachment for the Interim Amendment to the 2018 edition).

### Fiscal Impact Statement

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

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

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

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

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

There is no impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

450.2.2 The Guidelines for Design and Construction of Residential Health, Care, and Support Facilities with INTERIM AMENDMENT, 2018 (The Guidelines), ~~including Chapter 3.2 Specific Requirements for Nursing Homes~~ as referenced in Chapter 35 of this code.

August 28, 2020

## Interim Amendment for the 2018 Residential *Guidelines*

Since publication of the 2018 edition of the *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, the Facility Guidelines Institute (FGI) has received requests from several state authorities having jurisdiction (AHJs) asking for minimum square footages for resident rooms in nursing homes. In response to this request, the Residential Document Group (RDG) of the FGI Health Guidelines Revision Committee (HGRC) reconvened to address these concerns outside of the scheduled editorial cycles for the 2018 and 2022 editions of the *Guidelines*. The RDG proposed incorporating the text featured in this document for inclusion in the 2022 Residential *Guidelines* document, but—to address the enforcement issue in a more timely fashion—the group also requested it be published as an interim amendment, which is an official change, to the 2018 Residential *Guidelines*.

### Background

Prior to the release of this interim amendment, the Residential *Guidelines* had been silent on square footage requirements for sizing resident rooms. This was an intentional choice out of concern that, if a minimum size was provided, it would be taken as an absolute. That minimum would then become the base size of the space in which a resident would live, regardless of whether the size fully met resident needs. Given that residents may live in long term-care settings for 15 years or more, this was deemed unacceptable.

The unfortunate side effect of that choice has been that states have had difficulty implementing the Residential *Guidelines*. Thus, the RDG reconsidered its position and agreed that basing a minimum resident room size on clearances would serve the needs of both states and nursing home residents.

### Development of Minimum Square Footages

To establish the minimum size requirements included in the interim amendment, the RDG applied the following material from the 2018 Residential *Guidelines*:

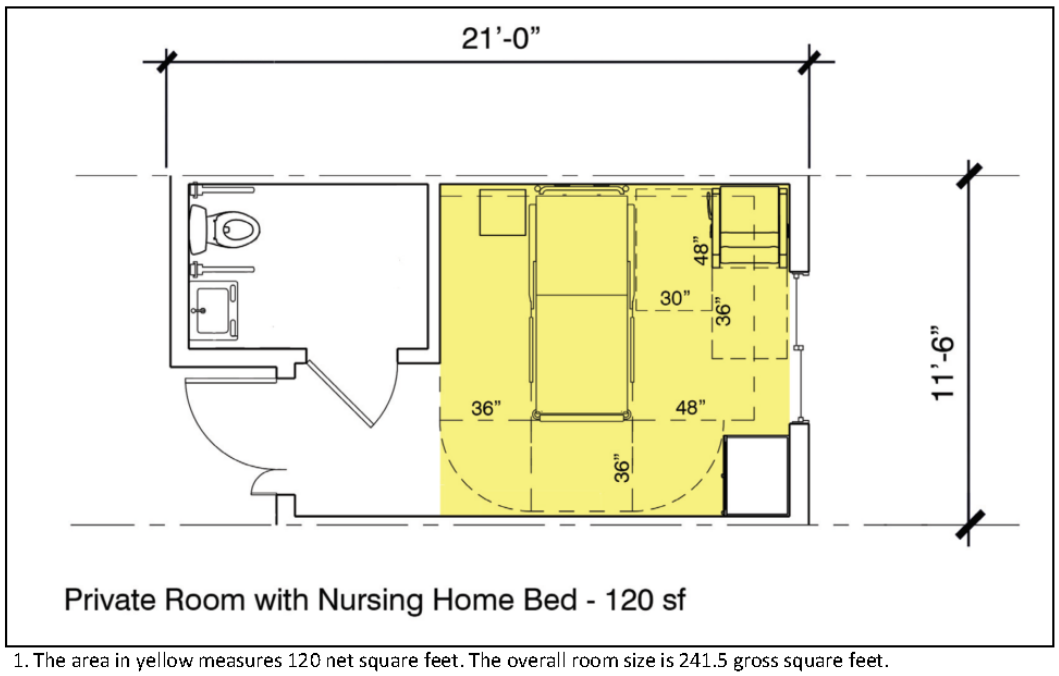
- Clearance suggestions in appendix section A3.1-2.2.2.2 (Determining space needs)
- Furniture and equipment requirements in Section 3.1-2.2.2.2 (Resident Room—Space requirements)
- Design requirements in Section 2.2-3 (Design Criteria for Accommodations for Care of Persons of Size*)

The group diagrammed private and shared room layouts driven by these clearances and furniture requirements to determine the minimum room size for each user group and variation—standard room with hospital or nursing home bed, room for an individual of size

*The term "person of size" has been replaced in the draft 2022 *Guidelines* with "individual of size." Its use here is intentional to be consistent with the 2018 *Guidelines* documents.

with fixed lift, and room for an individual of size with movable lift. (As an example, see the diagram for a standard room below.)

**New required clearances and minimum room size for a resident room**




1. The area in yellow measures 120 net square feet. The overall room size is 241.5 gross square feet.
2. This graphic is for illustration purposes only and does not depict a recommended or required resident room layout.

**Public comment on the interim amendment**

The proposed revisions to the requirements for resident rooms in nursing homes in this interim amendment were subjected to a public comment period during October and November 2019, followed by additional review and final approval by the RDG and the HGRC Steering Committee. Upon their approval, the interim amendment was accepted as integral to the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities.*

**Inclusion of the Interim Amendment in the Second Printing of the 2018 Residential *Guidelines***

FGI considers the second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilitites* to be the official 2018 Residential *Guidelines* document, and the interim amendment became effective with its release in August 2020.

Specific alert language to make users aware of the incorporation of an interim amendment has been added to the title page of the document, with simplified alert language immediately

preceding each affected section in the main text. The alerts are shown below exactly as they appear in the second printing.

**Alert on the title page of the 2018 Residential *Guidelines*, second printing:**

**ALERT: This second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities* has been modified by the issuance of an official interim amendment. FGI considers this amended document to be the official edition of the 2018 Residential *Guidelines*.** For states that have adopted the first printing of this document, a paper explaining the changes—with the affected sections shown as published in the first printing of the 2018 Residential *Guidelines*—can be accessed at www.fgiguidelines.org.

**The following sections have been amended in this second printing:**
Appendix section A2.2-3 (Design considerations for accommodations for care of persons of size: Design Elements)
Section 2.3-3.2.2.1 (Examination and Treatment Room Space Requirements: Design Elements)
Appendix section A2.3-3.2.2.2 (2) (Examination or treatment rooms for persons of size: Design Elements)
Section 3.1-2.2.2 (Resident Room: Specific Requirements for Nursing Homes)
Section 3.1-2.2.3 (Resident Room for Persons of Size: Specific Requirements for Nursing Homes)

**Amended text is indicated by a dotted line to the left of the column.**

**Example of alert immediately preceding affected sections in the main text:**

**In this second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.3-3.2.2.1 (Examination and Treatment Room Space Requirements: Design Elements) has been altered by the issuance of an official interim amendment (see page 1).** FGI considers this amended document to be the official edition of the 2018 Residential *Guidelines*. For states that have adopted the first printing of this document, a paper explaining the changes—with the affected sections shown as published in the first printing of the 2018 Residential *Guidelines*—can be accessed at www.fgiguidelines.org.

**Amended text is indicated by a dotted line to the left of the column.**

## Applying the Amended Text

FGI encourages all users of the 2018 Residential *Guidelines* to print this document and affix it to copies of the first printing. For users with digital licenses, the changes are shown in the page view content on MADCAD in the same way. The changes have been incorporated into the HTML version on MADCAD seamlessly, without identifying alerts.

Before beginning any residential project, FGI recommends verifying with the local AHJ which printing of the 2018 Residential *Guidelines* is being followed by the state.

The interim amendment text featured in the following table also appears in the draft of the 2022 Residential *Guidelines*. Although FGI considers it to be the official 2018 Residential *Guidelines* text, the RDG and HGRC believe it is appropriate to present these changes as new in the draft 2022 Residential *Guidelines* to give the public an additional opportunity to provide feedback.

Public comments may be submitted via FGI's comment platform at www.fgiguidelines.net from July 1, 2020, through September 30, 2020.

The following table provides a cross-walk to illustrate the changes made to the 2018 Residential *Guidelines* by the interim amendment as compared to the original language in the first printing of the document. The left column shows the text in the first printing, and the right column shows the text in the second printing. (Sections beginning with "A"—shown in italic in this table—are appendix text, which is advisory only.)

| **2018 Residential *Guidelines*, first printing** | **2018 Residential *Guidelines*, second printing** |
|---|---|
| ***A2.2-3-a Design considerations for accommodations for care of persons of size*** | ***A2.2-3-a Design considerations for accommodations for care of persons of size*** |
| *a. Accommodations for persons of size and the equipment needed to care for them require more operational space and more storage than a traditional resident health, care, or support environment. Therefore, additional square footage may be required to accommodate these needs.* | *a. Accommodations for persons of size and the equipment needed to care for them require more operational space and more storage than a traditional resident health, care, or support environment. Therefore, additional square footage may be required to accommodate these needs.* |
| *Size increases will be determined by the space needs of expanded-capacity portable equipment (e.g., beds, wheelchairs, lifts) and fixed equipment (e.g., exam tables) designed for persons of size. Equipment used for persons of size is considerably larger than standard equipment. For example, a bed with a 1,000-pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.* | *Size increases will be determined by the space needs of expanded-capacity portable equipment (e.g., beds, wheelchairs, lifts) and fixed equipment (e.g., exam tables) designed for persons of size. Equipment used for persons of size is considerably larger than standard equipment. For example, a bed with a 1,000-pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.* |
| ~~*Resident rooms and exam rooms for persons of size should have a minimum clear floor area of 200 square feet (18.58 square meters); a minimum clear dimension of 17 feet (5.18 meters); and a minimum clearance of 7 feet (2.13 meters) on one side and 5 feet (1.52 meters) on the other side and at the foot of the treatment table or bed. Where a portable lift is used, a minimum of 35 square feet (3.25 square meters) of storage space should be provided. Equipment used for persons of size is considerably larger than standard equipment. A bed with a 1,000 pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.*~~ | *See Section 2.3-3.2.2 (Examination and Treatment Room Space Requirements) and Section 3.1-2.2.3.2 (Resident Room for Persons of Size: Space requirements) for space requirements for resident rooms and exam rooms for persons of size.* |
| *Toilet fixtures should be floor-mounted and designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms)—or as indicated for the care population being served—and mounted a minimum of 24 inches (60.96* | *Toilet fixtures should be floor-mounted and designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms)—or as indicated for the care population being served—and mounted a minimum of 24 inches (60.96* |

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| *centimeters) on center from the finished wall. A clear floor space of 5 feet (1.52 meters) should be provided on one side of the toilet for access and assistance. Sinks also need to be floor mounted, as people lean on a sink and its surrounds while using the bathroom. A clear floor area of 5 feet (1.52 meters) should be provided on either side of the sink and toilet to accommodate a caregiver who is assisting the resident. It is also good practice to provide a handrail designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms), or as indicated for the care population being served, adjacent to the sink to give the resident a means of support other than the sink and its surrounds.* | *centimeters) on center from the finished wall. A clear floor space of 5 feet (1.52 meters) should be provided on one side of the toilet for access and assistance. Sinks also need to be floor-mounted, as people may lean on a sink and its surrounds while using the bathroom. A clear floor area of 5 feet (1.52 meters) should be provided on either side of the sink and toilet to accommodate a caregiver who is assisting the resident. It is also good practice to provide a handrail designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms), or as indicated for the care population being served, adjacent to the sink to give the resident a means of support other than the sink and its surrounds.* |
| *If a resident is able to walk, he or she will likely need to use a handrail for support or balance. Such handrails should be designed to support and sustain a minimum concentrated load of 800 pounds (362.88 kilograms).* | *If a resident is able to walk, he or she will likely need to use a handrail for support or balance. Such handrails should be designed to support and sustain a minimum concentrated load of 800 pounds (362.88 kilograms).* |
| **2.3-3.2.2 Examination and Treatment Room Space Requirements** | **2.3-3.2.2 Examination and Treatment Room Space Requirements** |
| **2.3-3.2.2.1 Area** | **2.3-3.2.2.1 Area** |
| (1) Each examination or treatment room shall have a minimum clear floor area of 120 square feet (11.15 square meters). | (1) Each examination or treatment room shall have a minimum clear floor area of 120 square feet (11.15 square meters). |
| (2) Where an examination or treatment room is used for a population that includes persons of size, a minimum clear floor area of ~~210 square feet (19.51 square meters)~~ shall be provided. | (2) Where an examination or treatment room is used for a population that includes persons of size, a minimum clear floor area of 219 square feet (20.35 square meters) shall be provided. |
| *A2.3-3.2.2.2 (2) Examination or treatment rooms for persons of size… [not in first printing]* | ***A2.3-3.2.2.2 (2) Examination or treatment rooms for persons of size** should have a minimum clear dimension of 17 feet (5.18 meters) and a minimum clearance of 7 feet (2.13 meters) on one side and 5 feet 6 inches (1.68 meters) on the other side and 5 feet (1.52 meters) at the foot of the treatment table or bed. Where a portable lift is used, a minimum of 35 square feet (3.25 square meters) of storage space should be provided.* |
| ***~~A3.1 2.2.2.2 Determining space needs.~~** ~~Resident rooms should be sized, arranged, and furnished to maximize safe patient mobility, mobilization, weight-bearing exercise, and ambulation potential while minimizing risk to caregivers. This should~~* | *A3.1-2.2.2.2 Detemining space needs [not in second printing]* |

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| ~~*apply to all populations being cared for and served.*~~<br><br>~~*Clearances should be provided and maintained to accommodate safe resident mobility and mobilization of residents. Designated clearances should not be obstructed by any object that does not qualify as movable according to Section 1.5-4.2 (Movable and Portable Equipment).*~~<br><br>~~*a. To facilitate planning for minimum clearances around beds, bed type and size should be established as part of the functional program. As acceptable to AHJs, bed placement should be chosen by individual residents and their families to satisfy the needs and desires of the resident.*~~<br><br>~~*b. Provision of bed clearances to support resident safety should include the following:*~~<br><br>~~*— Standard resident room:*~~<br><br>~~• *48 inches (121.92 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *36 inches (91.44 centimeters) at the foot of the bed*~~<br><br>~~*— Resident rooms for persons of size with an overhead lift:*~~<br><br>~~• *72 inches (182.88 centimeters) from the bed by 120 inches long (304.8 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *66 inches (167.64 centimeters) at the foot of the bed*~~<br><br>~~*— Resident rooms for persons of size without an overhead lift to accommodate use of a mobile lift:*~~<br><br>~~• *84 inches (213.36 centimeters) from the bed by 120 inches long (304.8 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *66 inches (167.64 centimeters) at the foot of the bed*~~<br><br>~~*Where lifts are used, additional clearance is needed to accommodate use of the lift and an expanded capacity wheelchair as well as space for staff to help a person of size transfer from bed to*~~ | |

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| ~~*wheelchair or gurney. Mobile lifts require more floor space than overhead lifts to accommodate the lift footprint.*~~<br><br>~~*c. Sizing of resident rooms should accommodate clearances for resident chairs, recliners, wheelchairs, or other devices; these clearances may overlap with the bed clearances. The size of each room should allow unimpeded clearance on at least one side and at the front of any resident chair, etc., as follows:*~~<br><br>~~*— 48 inches (121.92 centimeters) on the transfer side of the chair, etc. for both standard and person of size room types*~~<br><br>~~*— 36 inches (91.44 centimeters) for the approach to the chair for a standard room*~~<br><br>~~*— 66 inches (167.64 centimeters) for the approach to the chair for a room accommodating a person of size*~~ | |
| **3.1-2.2.2.2 Space requirements**<br><br>~~(1) Space shall be provided to accommodate resident care and for maneuverability when resident-operated mobility devices are used.~~<br><br>~~(2) Resident rooms shall be sized, arranged, and furnished to maximize safe resident mobility, mobilization, weight-bearing activity, and ambulation potential and to minimize risks to caregivers. This requirement shall apply to all resident rooms, regardless of resident weight or condition.~~ | **3.1-2.2.2.2 Space requirements**<br><br>*(1) Area. Single- and multiple-resident rooms shall be sized to accommodate the functional placement of required furnishings and equipment essential to resident comfort and safety.<br><br>(a) Where a single-resident room is provided, it shall have the following:<br><br>(i) Minimum clear floor area of 120 square feet (11.15 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br><br>(ii) Minimum clear dimension of 11 feet (3.35 meters)<br><br>(b) Where a multiple-resident room is provided, it shall have the following:<br><br>(i) Minimum clear floor area of 108 square feet (10.03 square meters) per resident bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br><br>(ii) Minimum clear dimension of 9 feet 6 inches (2.90 meters)<br><br>***A3.1-2.2.2.2 (1)*** *Space should be provided to accommodate the care population, resident care, and maneuverability when resident-operated mobility devices are used. Functional placement is based on considerations for safe resident mobility,* |

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| | *mobilization, weight-bearing activity, and ambulation and for minimization of risks to caregivers.*<br><br>*(2) Clearances. Clearances shall be a consideration during design of resident rooms.<br><br>***A3.1-2.2.2.2 (2) Clearances.*** *To facilitate planning for minimum clearances around beds, bed type and maximum bed size should be established by the residential care organizations as part of the functional program. Whenever possible, bed placement should be chosen by individual residents and their representatives or persons of significance (e.g., family, spouse/partner, resident-appointed advocate) to satisfy the needs and desires of the resident.*<br>*a. In resident rooms, the following minimum clearances should be used around the resident bed to support resident and staff safety:*<br>*—48 inches (121.92 centimeters) on the transfer side*<br>*—36 inches (91.44 centimeters) on the non-transfer side*<br>*—36 inches (91.44 centimeters) at the foot in single-resident rooms*<br>*—48 inches (121.92 centimeters) at the foot of each bed in multiple-resident rooms*<br>*b. In resident rooms, a clear circulation pathway of 36 inches (91.44 centimeters) should be provided between fixed elements or equipment. This circulation pathway should be permitted to overlap other required clearances.*<br>*c. Sizing of resident rooms should accommodate clearances for resident chairs, recliners, and other movable furnishings; these items and their clearances may overlap with the bed clearances. The size of each room should allow unimpeded clearance on at least one side and at the front of any resident chair, as follows:*<br>*—48 inches (121.92 centimeters) on the transfer side*<br>*—36 inches (91.44 centimeters) for the approach to the chair*<br>*d. Arrangement of furniture that reduces these clearances should be permitted as long as access for other occupants is not reduced and there is at* |

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| | *least one layout that meets the recommended clearances in appendix section A3.1-2.2.2.2 (2) (Clearances).* |
| ~~(3) Area and dimensions. The area and dimensions provided for each resident space shall be based on inclusion of the following:~~<br>~~(a) Space to accommodate a maximum of two beds that allows staff members access to both sides and the foot of each bed~~<br>(b) A window ~~accessible from a wheelchair or other resident-operated mobility device~~<br>(c) A wardrobe or closet ~~accessible from a wheelchair or other resident-operated mobility device~~<br>~~(d) The following furniture accessible from a wheelchair or other resident-operated mobility device:~~<br>(i) Bed<br>~~*(ii) Lounge chair~~<br>(iii) Dresser<br>(iv) Nightstand | (3) Resident room accommodations. Accommodations provided for each resident room shall be accessible from a wheelchair or other resident-operated mobility device and include the following:<br>(a) Window<br>(b) Bed<br>*(c) Resident chair or recliner<br>(i) Location of the resident chair or recliner adjacent to the head of the bed shall be permitted.<br>(ii) Use of a recliner in lieu of a bed shall be permitted based on resident preference.<br>(d) Wardrobe(s) or closet(s). Where a movable wardrobe(s) is provided, it shall be permitted to be located adjacent to the head of the bed.<br>(e) Dresser. The dresser shall be permitted to be located:<br>(i) In or as part of a wardrobe or closet.<br>(ii) On the wall adjacent to the head of the bed.<br>(f) Nightstand. The nightstand shall be permitted to be located adjacent to the head of the bed. |
| ***A3.1-2.2.2.2 (3)(d)(ii) Resident seating.*** *The lounge chair provided in a resident room to give residents an alternative to bed-stay should be evaluated for provision of the following:*<br>*—Comfort sufficient for long-term sitting*<br>*—Cervical support and support for the resident's head (backrest)*<br>*—Opportunity to recline the backrest to enable periodic redistribution of body weight during long periods of sitting (recliner)*<br>*—Ease of entry and exit*<br>*See appendix section A2.4-2.4.3.1 (Furniture selection recommendations) for additional information.* | ***A3.1-2.2.2.2 (3)(c) Resident chair or recliner.*** *The lounge chair or recliner provided in a resident room to give residents an alternative to bed-stay should be evaluated for provision of the following:*<br>*a. Comfort sufficient for long-term sitting*<br>*b. Cervical support and support for the resident's head (backrest)*<br>*c. Opportunity to recline the backrest to enable periodic redistribution of body weight during long periods of sitting (recliner)*<br>*d. Ease of entry and exit*<br>*See appendix section A2.4-2.4.3.1 (Furniture selection recommendations) for additional information.* |

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| *(e) Space for a side chair<br><br>***A3.1-2.2.2.2 (3)(e) Visitor seating.*** *Provision of a side chair for a visitor means residents do not have to remain in bed when they have a visitor.* | *(g) Space for a side chair<br><br>***A3.1-2.2.2.2 (3)(g) Visitor seating.*** *Provision of a side chair for a visitor means residents do not have to remain in bed when they have a visitor.* |
| (f ) The room shall be configured so that each resident can view the television from a resident chair. | (h) The room shall be configured to provide each resident with a view of the television from a resident chair or recliner. |
| (g) Direct access from the room entry to the toilet room, closet or wardrobe, and window, without traveling through the living space of another resident | (i) Direct access shall be provided from the room entry to the bed, toilet room, closet or wardrobe, and window without traveling through the living space of another resident. |
| ~~*(h) Clearance for staff members to use lifting equipment to access the bed, chairs, and toilet. See appendix section A3.1-2.2.2.2-b (Determining space needs) for recommendations.~~ | |
| ~~***A3.1-2.2.2.2 (3)(h)*** *Although use of portable lifting equipment requires more clearance for maneuvering than fixed lifting equipment, use of fixed equipment does not eliminate the need for portable equipment. Portable equipment will be required when a resident falls out of range of a fixed lift or requires a sit-to-stand lift.*~~<br><br>~~*Using a portable lift without powered wheels to move a resident laterally requires more exertion by staff than using a fixed lift; in addition, the exertion required is increased where the floor is carpeted. However, carpet types differ in their resistance to wheeled devices, and carpet has significant advantages over hard-surface flooring in noise reduction and residential appearance, both of which are important in creating a comfortable, attractive living environment. See Section 2.4-2.3.2 (Flooring and Wall Bases) for requirements.*~~<br><br>~~*Resident rooms and associated toilets may be equipped with a ceiling-mounted track to accommodate ceiling-mounted mobility and lifting devices. The track layout should be designed to aid in maintaining or improving resident mobility and ambulation, independent function, and strength and to help staff members transfer residents to or from bed/chair/toilet/bathing facilities/stretcher or reposition them in a bed or a chair.*~~<br><br>~~*One objective in using ceiling systems would be to assist residents who have poor balance or are*~~ | *A3.1-2.2.2.2 (3)(h) **Although use of portable lifting equipment…** [not in second printing]* |

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| ~~*unable to bear all of their weight to stand and ambulate throughout the room. A second objective would be to maximize resident choice and control of bed location and room arrangement, key factors in creating "home" for the resident.*~~<br><br>~~*One way to meet these objectives is to install permanent tracks the full length of two sides of the room with a perpendicular spur that extends into the toilet room over the toilet and into a shower, where provided. With this basic layout, when residents who require mobility or transfer assistance move into a room, a cross track and lift device can be installed for the duration of their stay. This approach would make all areas of the room accessible to the resident using the lifting device, thereby offering the resident a variety of room arrangements and substantially reducing the need for a portable lift.*~~<br><br>~~(4) Every bed location shall have sufficient space to permit placement of a stretcher along one side for lateral transfer of the resident from the bed to the stretcher by at least two staff members without substantial rearrangement of furniture.~~<br><br>~~(5) Clearances~~<br><br>~~(a) In multiple-bed rooms, clearance shall allow for the movement of beds and equipment without disturbing residents.~~<br><br>~~(b) Clear access to one side of the bed shall be provided along 75 percent of its length.~~<br><br>~~(c) Mechanical and fixed equipment shall not obstruct access to any required element.~~<br><br>~~(d) These guidelines shall allow arrangement of furniture that may reduce these access provisions, without impairing access provisions for other occupants.~~ | |
| ~~**3.1-2.2.3 Special-Care Resident Rooms**~~ [Resident Room for Persons of Size was not in the first printing; Section 3.1-2.2.3 has been renumbered as Section 3.1-2.2.4 in the second printing.] | **3.1-2.2.3 Resident Room for Persons of Size**<br><br>Where a resident room(s) designed to accommodate persons of size is provided, it shall meet the requirements in Section 3.1-2.2.2 (Resident Room) except as amended in this section.<br><br>**3.1-2.2.3.1 General**<br><br>*(1) The need for, number, and type of resident rooms accommodating persons of size shall be determined for the intended care population during the functional programming process. |

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| | ***A3.1-2.2.3.1 (1) Considerations for persons of size.*** *The projected need for accommodations for care of persons of size should be defined in the planning phase and include the following:*<br>*—Projected weight capacities for persons of size in the population to be served*<br>*—Projected number of resident rooms required to accommodate persons of size*<br>*—Projected number of expanded-capacity lifts required to accommodate persons of size*<br><br>(2) Where the facility provides resident rooms for persons of size, see sections 1.2-5.6 (Planning Considerations for Persons of Size) and 2.2-3 (Design Criteria for Accommodations for Care of Persons of Size) for further requirements.<br><br>***3.1-2.2.3.2 Space requirements**<br><br>***A3.1-2.2.3.2 Resident lifting equipment.*** *See Section 1.2-3.3 (Resident Mobility and Transfer Risk Assessment) for information on providing resident lifts to mitigate risks involved in resident handling and mobility tasks. Information and guidance for evaluating resident mobility and transfer risks can be found in "Patient Handling and Mobility Assessments," a white paper published by the Facility Guidelines Institute and available from www.fgiguidelines.org.*<br><br>(1) Area<br>(a) Where a single-resident room with a fixed overhead lift is provided, it shall have the following:<br>(i) Minimum clear floor area of 200 square feet (18.58 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br>(ii) Minimum clear dimension of 13 feet (3.96 meters)<br>(b) Where a multiple-resident room with a fixed overhead lift is provided, it shall have the following:<br>(i) Minimum clear floor area of 176 square feet (16.35 square meters) per resident |

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| | bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br>(ii) Minimum clear dimension of 10 feet 9 inches (3.28 meters) for the clear floor area for each resident<br>(c) Where a single-resident room for persons of size without an overhead lift is provided but mobile lifts will be used, the room shall have the following:<br>(i) Minimum clear floor area of 219 square feet (20.35 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br>(ii) Minimum clear dimension of 13 feet (3.96 meters) for the clear floor area for each resident<br>(d) Where a multiple-resident room without an overhead lift is provided but mobile lifts will be used, the room shall have the following:<br>(i) Minimum clear floor area of 192 square feet (17.84 square meters) of clear floor area per resident bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br>(ii) Minimum clear dimension of 10 feet 9 inches (3.28 meters) for the clear floor area for each resident<br>*(2) Clearances. Clearances shall be a consideration during design of resident rooms for persons of size.<br><br>***A3.1-2.2.3.2 (2) Clearances.*** *To facilitate planning for minimum clearances around beds, bed type and maximum bed size should be established by the residential care organization as part of the functional program. Whenever possible, bed placement should be chosen by individual residents and their representatives or persons of significance (e.g., family, spouse/partner, resident-appointed advocate) to satisfy the needs and desires of the resident.*<br>*a. In resident rooms for persons of size with an overhead lift, the following minimum clearances should be used around the bed to support resident and staff safety:* |

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| | —66 inches (167.64 centimeters) from the bed by 126 inches long (320 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) on the non-transfer side<br>—60 inches (152.4 centimeters) at the foot<br>b. In resident rooms for persons of size without an overhead lift where mobile lifts will be used, the following minimum clearances should be used around the bed to support resident and staff safety:<br>—84 inches (213.36 centimeters) from the bed by 126 inches long (320 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) on the non-transfer side<br>—60 inches (152.4 centimeters) at the foot<br>c. In resident rooms for persons of size, a clear circulation pathway of 60 inches (152.4 centimeters) should be provided between fixed elements or equipment. This circulation pathway should be permitted to overlap other required clearances.<br>d. Sizing of resident rooms for persons of size where a mobile lift will be used, whether or not an overhead lift is present, should accommodate clearances for resident chairs, recliners, and other movable furnishings; these items and their clearances may overlap with the bed clearances. The size of each room for a person of size should allow unimpeded clearance on at least one side and at the front of any resident chair as follows:<br>—48 inches (121.92 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) for the approach to the chair<br>e. Mobile vs. fixed lift clearance considerations<br>—Where lifts are used, additional clearance is needed to accommodate use of the lift, an expanded-capacity wheelchair, and space for staff to help a person of size transfer from bed to wheelchair or gurney. Mobile lifts require more floor space than overhead lifts to accommodate the lift footprint. Selection of lift equipment should be completed during the functional programming process to evaluate clearances required.<br>—Use of portable lifting equipment requires more clearance for maneuvering than fixed lifting |

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| | *equipment; however, the use of fixed equipment does not eliminate the need for portable equipment. Portable equipment could be needed when a resident is not in proximity to a fixed lift or requires a sit-to-stand lift.*<br>*—Using a portable lift without powered wheels to move a resident laterally requires more exertion by staff than using a fixed lift, and the exertion required is increased where the floor is carpeted. See Section 2.4-2.3.2 (Flooring and Wall Bases) for additional information.*<br>*—Resident rooms and associated toilets may be equipped with a ceiling-mounted track to accommodate ceiling-mounted mobility and lifting devices. The track layout should be designed to aid in maintaining or improving resident mobility and ambulation, independent function, and strength and to assist staff members with transfer of residents to or from bed/chair/toilet/bathing facilities/stretcher or repositioning residents in a bed or chair.*<br>*—One objective of using ceiling lift systems is to support residents who have poor balance or are unable to bear all of their weight to stand and ambulate throughout the room. A second objective is to maximize resident choice and control of bed location and room arrangement, key factors in creating "home" for the resident. These objectives can be met by installing permanent tracks the full length of two sides of the room with a perpendicular spur that extends into the toilet room over the toilet and into a shower (i.e., an "I" or "H" layout) to achieve maximum flexibility. This approach would make all areas of the room accessible to the resident using the lifting device, thereby offering the resident a variety of room arrangements and substantially reducing the need for a portable lift.* |

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

64

### SP10329

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Revises requirements for Class 1 mobile/transportable medical units.

### Rationale

The requirements in the Guidelines for Class 1 mobile medical units are sufficient to provide for patient safety because Class 1 units are not permitted to provide invasive procedures or procedures that require specific air flow or pressure amounts. A new Formal Interpretation of the Guidelines reference: 2.8-8.2.1 and 2.8-8.2.1.2 published 1/25/22 revises this section to clarify the deletion of any reference to ASHRAE 170 for Class 1 units. Removes reference to Part 1 that has relevance to mobile/transportable units.

### Fiscal Impact Statement

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

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

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

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

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

Reduces impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Makes the code more clear for the user and the authority having jurisdiction.

**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**

Improves the effectiveness of the code by clarifying requirements.

449.3.3.2 ~~The mobile facility~~ Mobile/transportable medical units shall comply with the applicable requirements of the Florida Building Code, Building~~.~~, except Class 1 units as described in the Guidelines. Mobile/transportable medical units shall comply with The Guidelines, ~~including Part 1 General and~~ Part 2, Chapter 2.8, Specific Requirements for Mobile/Transportable Medical Units~~.~~, except Class 1 units, as described in the Guidelines, shall not be required to comply with ASHRAE 170.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

65

### SP10330

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Provides alternative method for hand washing for a Class 1 mobile/transportable unit.

### Rationale

Class 1 mobile medical units do not provide surgical or medical services or any invasive procedures to patients involving physical contact with the clinicians that would require the mechanics of hand-washing for infection control. This revision has been accepted and added to the 2022 edition of the Guidelines section 2.8-3.1.2.2.

### Fiscal Impact Statement

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

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

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

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

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

Reduces impact to industry relative to the cost of compliance with code

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Provides for equivalent or better method to assure patient safety.

**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**

Improves effectiveness of the code by allowing for equivalent method of compliance.

449.3.3.3 In lieu of a hand-washing station, a Class 1 mobile/transportable medical unit as described in the Guidelines, may utilize a hand sanitation dispenser for hand washing.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

66

### SP10336

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 449 | **Proponent** | James gregory |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Deletes unnecessary and misunderstood requirement.

### Rationale

Emergency access routes are already required to the facility. This section is redundant and often not understood by the user.

### Fiscal Impact Statement

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code
**Impact to small business relative to the cost of compliance with code**

### Requirements

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**

Improves the effectiveness of the code by eliminating redundant requirements.

~~449.4.2.2.4 Where an off-site public access route is available to the new facility at or above the base flood elevation, a minimum of one on-site emergency access route shall be provided that is located at the same elevation as the public access route.~~

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

67

### SP10264

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/12/2022 | **Section** | 1805.1.2.1 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 18 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Residential, Section R408.7, proposal #10263, to make the same replacement of Technical Bulletin 11.

### Summary of Modification

Replace reference to NFIP Technical Bulletin 11 with enforceable requirements.

### Rationale

Based on FEMA 2024 IBC proposal S154-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. The basic requirements of the National Flood Insurance Program prohibit areas of buildings that are below grade on all sides (except nonresidential buildings that are designed to be dry floodproofed). That limitation applies to crawlspaces that have the interior grade below the exterior grade on all sides. The exception in this section refers to FEMA Technical Bulletin 11, which outlines limitations to allow below-grade crawlspaces, specifically limitations on wall height and how far below grade the interior can extend. Importantly, TB 11 requires jurisdictions to adopt the specified requirements in the exception to allow for construction of such below-grade spaces. The proposed replaces the reference to TB 11 with itemized lists that capture the limitations in TB 11. Not only does this eliminate the need for buildings and designers to find and interpret TB 11, it eliminates the need for communities to adopt the specific requirements. The Florida Division of Emergency Management State Floodplain Management Office notes that this below-grade crawlspace configuration is not common in Florida, but the office has responded to questions about it. If this code change proposal is successful, the codes will no longer refer to TB 11 and TB 11 should be removed from the list of referenced standards in both codes. Bibliography: FEMA Technical Bulletin 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas, Interim Guidance (2001), https://www.fema.gov/emergency-managers/risk-management/building-science/national-flood-insurance-technical-bulletins

### Fiscal Impact Statement

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

Increases enforcement efficiency because the provisions are specified rather than have to research a guidance document.

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

No change; proposal replaces the reference to NFIP Technical Bulletin 11 with a list of requirements from the Bulletin.

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

No change to the technical requirements.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, it provides clear requirements for flood resistance and facilitates meeting FEMA expectations.

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

Yes, it improves by stating specific requirements and limitations.

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

No, the use of flood damage resistant materials and methods is already required.

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

No, it improves enforcement by having clear requirements.

## 1st Comment Period History

FP10264-G1

| | | | | | |
|---|---|---|---|---|---|
| Proponent | Rebecca Quinn obo FL Div Emerg Mgnt | Submitted | 4/15/2022 4:24:52 PM | Attachments | No |

Comment:

I submit this comment on behalf of Conn Cole, FDEM State Floodplain Manager, to request withdrawal of this proposal.

**1805.1.2.1 Flood hazard areas.** For buildings and structures in flood hazard areas as established in Section 1612.3, the finished ground level of an under-floor space such as a crawl space shall be equal to or higher than the outside finished ground level on at least one side.

**Exception:** Under-floor spaces of Group R-3 buildings that meet the following requirements: ~~of FEMA TB 11.~~

1. The velocity of floodwater at the site does not exceed 5 feet per second.

2. The interior grade of the under-floor space is not more than 2 feet below the lowest adjacent exterior grade.

3. The height of the under-floor space, measured from the interior grade of the under-floor space to the top of the foundation wall is not more than 4 feet at any point.

4. There is an adequate drainage system that removes floodwater from the interior area of the under-floor space.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

68

### SP9957

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/15/2022 | **Section** | 35 | **Proponent** | James gregory |
| **Chapter** | 35 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

### Summary of Modification

Updates ASHARE 170 edition

### Rationale

Updates to the correct and latest edition of this reference and includes addenda c and d and errata that has been incorporated into the current printing of this reference.

### Fiscal Impact Statement

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

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

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

There is no impact to building and property owners relative to cost of compliance with code.

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

There is no impact to industry relative to the cost of compliance with code.

**Impact to small business relative to the cost of compliance with code**

### Requirements

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

Does not adversely affect 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**

Updates older references.

**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**

Improves the effectiveness of the code by updating older references.

## Alternate Language

# 1st Comment Period History

SP9957-A1

**Proponent** James gregory **Submitted** 4/7/2022 2:58:24 PM **Attachments** Yes

Rationale:

This is the correct attachment to go with SP 9957 and modifies ASHRAE 170-2021.

## Fiscal Impact Statement

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

Does not impact local entity for code enforcement.

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

Does not increase cost to property owners.

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

Does not increase cost to industry for code compliance.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Corrects the submission with the right documents.

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

Strengthens the codes by including the addenda to ASHRAE 170.

**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**

Improves the effectiveness of the code.

N/A

SP9957Text Modification

ASHRAE, Inc.
1791 Tullie Circle NE
Atlanta, GA 30329-2305
Standard referenced number Title
ANSI/ASHRAE/~~ASJHE~~ ASHE 170—~~08~~ 21 (with addenda c and d and errata dated 11/15/21) Ventilation of Heath Care Facilities

Mod_9957_TextOfModification.pdf Page: 1

# ADDENDA

**ANSI/ASHRAE/ASHE Addendum c to**
**ANSI/ASHRAE/ASHE Standard 170-2021**

# Ventilation of Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on July 30, 2021, and by the American Society for Health Care Engineering on July 14, 2021.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (https://www.ashrae.org/continuous-maintenance).

The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway NW, Peachtree Corners, GA 30092. E-mail: orders@ashrae.org. Fax 678-539-2129. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to www.ashrae.org/permissions.

 ISSN 1041-2336

ASHRAE

ASHE
Optimizing health care facilities

Approved American National Standard
ANSI
www.ansi.org

**SPECIAL NOTE**

This American National Standard (ANS) is a national voluntary consensus Standard developed under the auspices of ASHRAE. *Consensus* is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this Standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this Standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

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## FOREWORD

*Addendum c filter changes align Standard 170 requirements with FGI requirements for residential health care facilities.*

***Note:*** In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

## Addendum c to Standard 170-2021

***Revise Table 9-1 as shown. The remainder of Table 9-1 is unchanged.***

**Table 9-1 Design Parameters for Residential Health, Care, and Support-Specific Spaces**

| Function of Space (l) | Pressure Relationship to Adjacent Areas (d) | Minimum Outdoor ach | Minimum Total ach | All Room Air Exhausted Directly to Outdoors (f) | Air Recirculated by Means of Room Units (a) | Unoccupied Turndown | Minimum Filter Efficiencies (i) | Design Relative Humidity (g), % | Design Temperature (h), °F/°C |
|---|---|---|---|---|---|---|---|---|---|
| RESIDENTIAL HEALTH | | | | | | | | | |
| NURSING HOMES | | | | | | | | | |
| All room *(FGI 3.1–2.2.4.1)* (b) | Negative | 2 | 12 | Yes | No | Yes | MERV ~~14~~13 | Max 60 | 70–78/21–29 |
| All anteroom *(FGI 3.1–2.2.4.1)* (b) | Negative | NR | 10 | Yes | No | Yes | MERV ~~14~~13 | Max 60 | 70–78/21–29 |
| Occupational therapy *(FGI 3.1–3.3.3)* | NR | 2 | 6 | NR | NR | Yes | MERV ~~14~~13 | NR | 70–78/21–29 |
| Physical therapy *(FGI 3.1–3.3.2)* | Negative | 2 | 6 | NR | NR | Yes | MERV ~~14~~13 | NR | 70–78/21–29 |
| Resident living/activity/dining *(FGI 3.1–2.3.3)* | NR | 4 | 4 | NR | NR | Yes | MERV ~~14~~13 | Max 60 | 70–78/21–29 |
| Resident room *(FGI 3.1–2.2.2)* | NR | 2 | 2 | NR | NR | Yes | MERV ~~14~~13 | Max 60 | 70–78/21–29 |
| Resident corridor *(FGI 2.4–2.2.2)* | NR | NR | 4 | NR | NR | Yes | MERV ~~14~~13 | NR | 70–78/21–29 |
| Toilet/bathing room *(FGI 3.1–2.2.2.6)* | Negative | NR | 10 | Yes | No | No | MERV ~~14~~13 | NR | 70–78/21–29 |
| HOSPICE FACILITIES | | | | | | | | | |
| All room *(FGI 3.2–2.2.3.1)* (c) | Negative | 2 | 12 | Yes | No | Yes | MERV ~~14~~13 | Max 60 | 70–75/21–24 |
| All anteroom *(FGI 3.2–2.2.3.1)* (c) | (e) | NR | 10 | Yes | No | Yes | MERV ~~8~~13 | Max 60 | NR |
| Resident room *(FGI 3.2–2.2.2)* | NR | 2 | 2 | NR | NR | Yes | MERV ~~8~~13 | Max 60 | 70–75/21–24 |
| Resident corridor *(FGI 2.4–2.2.2)* | NR | NR | 4 | NR | NR | Yes | MERV ~~8~~13 | NR | NR |
| Toilet/bathing room *(FGI 3.2–2.2.2.6)* | Negative | NR | 10 | Yes | No | Yes | MERV ~~8~~13 | NR | 70–75/21–24 |
| RESIDENTIAL CARE AND SUPPORT | | | | | | | | | |
| ASSISTED LIVING FACILITIES | | | | | | | | | |
| Resident living/activity/dining *(FGI 4.1–2.3.3)* | NR | NR | NR | NR | NR | Yes | MERV-8 | NR | NR |
| Resident room *(FGI 4.1–2.2.2)* | NR | NR | NR | NR | NR | Yes | MERV-8 | NR | 70–78/21–29 |
| Resident corridor *(FGI 2.4–2.2.2)* | NR | NR | NR | NR | NR | Yes | MERV-8 | NR | NR |
| Toilet/bathing room *(FGI 4.1–2.2.2.7)* | NR | NR | NR | NR | NR | Yes | MERV-8 | NR | NR |
| SERVICE | | | | | | | | | |
| Clean linen storage *(FGI 2.3–4.6)* | Positive | NR | 2 | NR | NR | No | MERV-8 | NR | 72–78/22–26 |
| Dietary storage *(FGI 2.3–4.5)* | NR | NR | 2 | NR | No | No | MERV-8 | NR | 72–78/22–26 |
| Food preparation center *(FGI 2.3–4.5.3.3)* (e) | NR | 2 | 10 | NR | No | Yes | MERV-8 | NR | 72–78/22–26 |
| Hair salon *(FGI 2.3–2.3.5 & 4.1–2.3.5)* | Negative | NR | 10 | Yes | NR | Yes | MERV-8 | NR | 70–78/21–29 |
| Laundry, central and personal *(FGI 2.3–4.2.7)* | Negative | 2 | 10 | Yes | No | No | MERV-8 | NR | NR |
| Linen and trash chute room *(FGI 2.3–4.6 & 2.3–4.9)* | Negative | NR | 10 | Yes | No | No | MERV-8 | NR | NR |
| Medication room *(FGI 2.3–4.2.2.2)* | NR | 2 | 4 | NR | NR | Yes | MERV-8 | Max 60 | 70–75/21–24 |
| Soiled linen sorting and storage *(FGI 2.3–4.6)* | Negative | NR | 10 | Yes | No | No | MERV-8 | NR | NR |
| Warewashing *(FGI 2.3–4.5.3.6)* | Negative | NR | 10 | Yes | No | Yes | MERV-8 | NR | NR |
| SUPPORT SPACE | | | | | | | | | |
| Clean utility *(FGI 2.3–4.2.5)* | Positive | 2 | 4 | NR | NR | No | MERV-8 (k) | NR | NR |
| Environmental services room *(FGI 2.3–4.9)* (j) | Negative | NR | 10 | Yes | NR | No | MERV-8 | NR | NR |
| Hazardous waste storage *(FGI 2.3–4.8)* | Negative | 2 | 10 | Yes | No | No | MERV-8 | NR | NR |
| Nonrefrigerated body holding room | Negative | NR | 10 | Yes | No | No | MERV-8 | NR | 68–75/20–24 |
| Soiled utility or soiled holding *(FGI 2.3–4.2.6)* | Negative | 2 | 10 | Yes | No | No | MERV-8 | NR | NR |

***Informative Note:*** NR = No requirement

***Add a new Section 9.4.3 as shown.***

**9.4.3 Nonrefrigerated Body Holding Rooms.** A nonrefrigerated body holding room is applicable only to facilities that do not perform autopsies on-site and use the space for short periods while waiting for the body to be transferred. All exhaust air from nonrefrigerated body holding shall be discharged directly to the outdoors without mixing with air from any other room or exhaust system.

***Revise Informative Appendix D as below.***

## INFORMATIVE APPENDIX D
## RECOMMENDED FILTER EFFICIENCIES BY SPACE TYPE

Spaces in Table 7-1, 8-1, 8-2, and 9-1 of this standard have filter efficiencies assigned based on Table D-1. This table is provided here for information, to allow users to understand the intent of the filter assignments and make engineering judgments on spaces not specifically named in the standard.

**Table D-1 Recommended Filter Efficiencies by Space Type**

| Level | Space Category | Filter Efficiency Recommendations [a,b] |
|---|---|---|
| I | • Primarily exhausted space (e.g., restrooms, janitor's rooms)<br>• Any human-occupied space<br>• Any room, inpatient or outpatient, where a patient stays less than 6 hours including waiting rooms<br>• Laboratories<br>• Resident rooms in assisted living ~~or hospice~~<br>• Storage of packaged sterile material, clean linen, or pharmaceuticals [c]<br>• Treatment rooms, endoscopy procedure room<br>• Dirty side of decontamination process | MERV 8 (equivalent to ASHRAE 62.1 or Standard 62.2) |
| II | • Skilled nursing and hospice residential health facilities | MERV 13 [f,g] |
| III | • Inpatient spaces, including medical-surgical, airborne isolation [d]<br>• Special exam room for suspect airborne cases, emergency department exam rooms [e]<br>• ~~Resident room in a skilled nursing area~~<br>• Workroom for packing of sterile materials<br>• CT or MRI procedure, interventional radiology (including biopsy), or bronchoscopy<br>• ER procedure or trauma room | MERV14 [f,g] |
| ~~III~~IV | • Operating room [h] | MERV16 [f] |
| ~~IV~~V | • Operating room designated for orthopedic, transplants, neurosurgery, or dedicated burn unit procedures<br>• Protective environments, including burn units | HEPA |

***Notes:***

a. Where listed, MERV rating is assumed to be nondegrading.
b. Transfer air due to differences in pressure between spaces may be unfiltered.
c. Pharmacy compounding spaces are not covered in this table. Follow USP 795, USP 797, or USP 800, as applicable (see Section 11 references).
d. Does not include recirculated air. Air recirculated in an AII room requires HEPA filters.
e. Air from spaces where suspected airborne cases may be treated or examined should be filtered at level III prior to recirculation to other spaces. If exhausted, supply air filtration may be level I.
f. Minimum MERV rating of the highest efficiency filter in the airstream.
g. Filter efficiency if supply air is used; not intended to exclude natural ventilation if otherwise allowed.
h. An optional risk assessment, conducted with the user group, may indicate a need to increase from Level ~~III~~IV to Level ~~IV~~V.

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7/21

# ADDENDA

**ANSI/ASHRAE/ASHE Addendum d to**
**ANSI/ASHRAE/ASHE Standard 170-2021**

# Ventilation of Health Care Facilities

Approved by ASHRAE and the American National Standards Institute on October 29, 2021, and by the American Society for Health Care Engineering on October 27, 2021.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (https://www.ashrae.org/continuous-maintenance).

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## FOREWORD

*Addendum d changes to Section 3, "Definitions," align Standard 170 requirements with FGI's evolving clinical approaches to care and treatment of patients in imaging settings.*

***Note:*** In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

## Addendum d to Standard 170-2021

***Revise Section 3 as shown. The remainder of Section 3 is unchanged.***

***Class 1 imaging room:*** an imaging room designated for the performance of patient care activities, including diagnostic radiography, fluoroscopy, mammography, computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), nuclear medicine, and other imaging modalities, including services that use natural orifice entry and do not pierce or penetrate natural protective membranes.

***Class 2 imaging room:*** an imaging room designated for the performance of patient care activities, including diagnostic and therapeutic procedures such as coronary, neurological, or peripheral angiography, including electrophysiology, cardiac catheterization, and interventional angiography and similar procedures.

***Class 3 imaging room:*** an imaging room designated for the performance of patient care activities, including invasive procedures ~~including cardiac stenting, implantation of devices in an invasive fluoroscopy,~~ and any other Class 2 procedure during which the patient will require physiological monitoring and is anticipated to require active life support.

***procedural*** ~~***invasive***~~ ***fluoroscopy:*** therapeutic or diagnostic ~~invasive~~ procedures that require fluoroscopic imaging (e.g., cardiac catheterization, interventional angiography, cardiac stenting, or implantation of devices). (***Informative Note:*** These procedures are typically performed in a restricted or semirestricted area based on the classification of the imaging procedure being performed. ~~Refer also to *Class 2 imaging room* for cardiac catheterization or interventional angiography and *Class 3 imaging room* for cardiac stenting or implantation of devices.~~)

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10/21

**ERRATA SHEET FOR ANSI/ASHRAE/ASHE STANDARD 170-2021**
**Ventilation of Health Care Facilities**

**November 15, 2021**

The corrections listed in this errata sheet apply to ANSI/ASHRAE/ASHE Standard 170-2021. The first printing is identified on the outside back cover as "Product code: 86536 3/21". Shaded items have been added since the previously published errata sheet dated August 12, 2021 was distributed.

| Page | Erratum |
|---|---|
| 14 | **Table 7-1 Design Parameters—Inpatient Spaces.** In Table 7-1 change the heading "NURSING UNITS AND OTH & ER PATIENT CARE AREAS" to "NURSING UNITS AND OTHER PATIENT CARE AREAS". |
| 23 | **7.4.1 Operating Rooms (ORs), Operating/Surgical Cystoscopic Rooms, Caesarean Delivery Rooms, and Class 3 Imaging Rooms.** In Section 7.4.1 delete item "c" and re-letter item "d" as "c" as shown below.<br>*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*<br><br>[…]<br>~~c. In operating rooms designated for orthopedic procedures, transplants, neurosurgery, or dedicated burn unit procedures, HEPA filters shall be provided.~~<br>c.~~d.~~ In ORs or Class 3 imaging rooms designated for orthopedic procedures, transplants, neurosurgery, or dedicated burn unit procedures, HEPA filters shall be provided and located in the air terminal device. |
| 26 | **Table 8.1 Design Parameters – Specialized Outpatient Spaces.** For Sterilizer equipment room change the Air Recirculated by Means of Room Units listed in Table 8.1 from "No" to "NR" as shown in the attached. Changes highlighted in yellow.<br>*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)* |
| 26 | **Table 8-1 Design Parameters—Specialized Outpatient Spaces.** Remove the FGI reference for Specialty IC exam room in Table 8-1 as shown in the attached. Changes highlighted in yellow.<br>*(Note: Deletions are shown in ~~strikethrough~~.)* |
| 29 | **Table 8-2 Design Parameters—General Outpatient Spaces (q).** Remove the FGI reference for Specialty IC exam room in Table 8-2 as shown in the attached. Changes highlighted in yellow.<br>*(Note: Deletions are shown in ~~strikethrough~~.)* |

**Table 8-1 Design Parameters—Specialized Outpatient Spaces**

| Function of Space (f) | Pressure Relationship to Adjacent Areas (n) | Minimum Outdoor ach | Minimum Total ach | All Room Air Exhausted Directly to Outdoors (j) | Air Recirculated by Means of Room Units (a) | Minimum Filter Efficiencies (c) | Design Relative Humidity (k), % | Design Temperature (l), °F/°C |
|---|---|---|---|---|---|---|---|---|
| DIAGNOSTIC AND TREATMENT *(Continued)* | | | | | | | | |
| Specialty IC exam room ~~*(FGI 2.1–3.2.1.3)*~~ (y) | Negative | 2 | 6 | Yes | NR | MERV-8 | Max 60 | 70–75/21–24 |

**Table 8-1 Design Parameters—Specialized Outpatient Spaces**

| Function of Space (f) | Pressure Relationship to Adjacent Areas (n) | Minimum Outdoor ach | Minimum Total ach | All Room Air Exhausted Directly to Outdoors (j) | Air Recirculated by Means of Room Units (a) | Minimum Filter Efficiencies (c) | Design Relative Humidity (k), % | Design Temperature (l), °F/°C |
|---|---|---|---|---|---|---|---|---|
| STERILE PROCESSING (aa) | | | | | | | | |
| Sterilizer equipment room *(FGI 2.1–4.3.2.2)* | Negative | NR | 10 | Yes | NR ~~No~~ | MERV-8 | NR | NR |

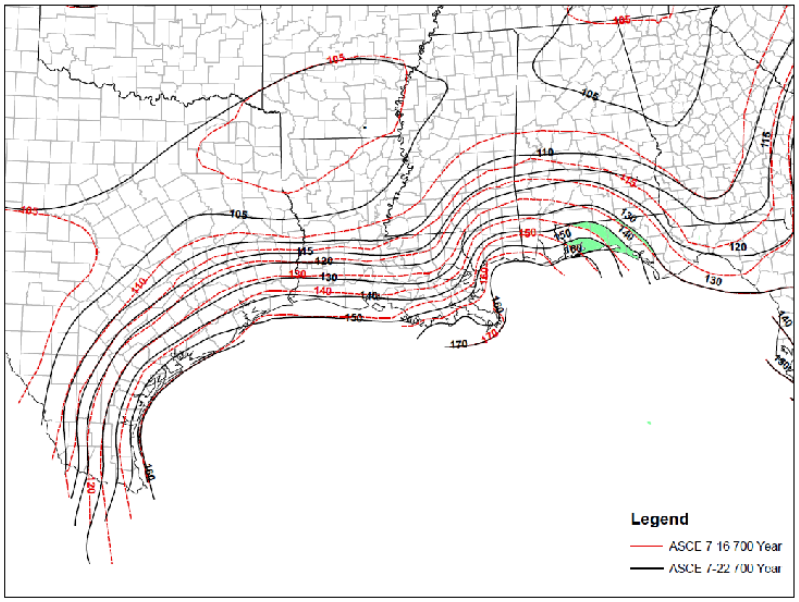
**Table 8-2 Design Parameters—General Outpatient Spaces (q)**

| | | ach Design Option | | | | | | | $R_p$-$R_a$ Air-Class Design Option | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Function of Space (f) | Pressure Relationship to Adjacent Areas (d) | Min. Outdoor ach (q) | Min. Total ach (q) | All Room Air Exhausted Directly to Outdoors (j) | Air Recirculated by Means of Room Units (a) | Min. Filter Efficiencies (c) | Design RH% (i) | Design Temperature °F/°C (k) | Air Class (q) | $R_p$ cfm/(L·s)/ person and Min. Space Population (q) | $R_a$ cfm/ft²/(L·s/m) (q) |
| GENERAL DIAGNOSTIC AND TREATMENT | | | | | | | | | | | |
| Specialty IC exam room ~~*(FGI 2.3–3.2.2)*~~ (b) | Negative | 2 | 3 | Yes | NR | MERV-8 | Max 60 | 70–75/21–24 | 3 | 10 (5) / 3 | 0.18 / (0.9) |

This is one of several proposals that updates the ASCE 7 standard from the 2016 edition to the 2022 edition (ASCE 7-22). The wind load provisions of ASCE 7-22 have been revised and refined in several key areas. The following is a summary of some of the key changes to the wind load provisions applicable to the State of Florida:

- Slight increases in design wind speeds for the western Panhandle.
- Revised the determination of applicability of the Wind-borne Debris Region in areas where the design wind speed is greater than or equal to 130 mph and less than 140 mph.
- Changes to roof pressure coefficients for mean roof heights less than or equal to 60 ft.
- New provisions for roof pavers
- New provisions for ground-mounted fixed-tilt solar panel systems.
- New provisions for wind loads on elevated buildings (MWFRS and C&C).
- New provisions for tornado loads.

For most of Florida, wind speeds have not changed. However, for the western part of the Panhandle, wind speeds have slightly increased. The following figure shows the impact of these increases for Risk Category II. The 130 mph contour has shifted very slightly northward and eastward. The 140 mph contour and the 150 mph contour have shifted moderately northward and eastward.




Where wind speeds are equal to or greater than 130 mph but less than 140 mph, the Wind-borne Debris region now applies within one mile of the mean high water line where an Exposure D condition exists upwind of the water line. The term “coastal” has been deleted. This change provides a more consistent method for determining the Wind-borne Debris Region in these areas.

One of the more significant changes in ASCE 7-22 is related to the roof design pressures for buildings with mean roof heights less than or equal to 60 ft. In particular, the pressure coefficient graphs and equations have become simpler. For gable and hipped roofs with slopes between 7 and 45 degree, the

number of zones has been reduced to 3 consistent with editions of ASCE 7 prior to the 2016 edition. Additionally, all zones have been truncated at effective wind areas 10 square feet and less, also consistent with editions of ASCE 7 prior to the 2016 edition. This truncation has resulted in reduced pressure coefficients for some zones and effective wind areas, and subsequent reduced design pressures on the roof in some areas.

Another significant change in ASCE 7-22 is the introduction of tornado wind speed maps and design requirements. New Chapter 32 has been added that specifically addresses the design of buildings for tornadoes. The tornado provisions only apply to certain Risk Category III and IV buildings. Risk Categories I and II are exempt from the tornado provisions. Where the tornado wind speed, $V_T$, is less than 60 mph, design for tornadoes is not required. Additionally, the design for tornadoes is not required for the following wind speeds:

For Exposure B: $V_T \geq 0.5V$

For Exposure C: $V_T \geq 0.6V$

For Exposure D: $V_T \geq 0.67V$

The applicable tornado wind speed for a building is based on the Risk Category and the effective plan area of the building. For Risk Category III buildings, tornado wind speeds are based on a 700-year MRI. For Risk Category IV buildings, tornado wind speeds are based on a 3000-year MRI. Based on the wind speed limitations, Risk Category III buildings in Florida with an effective plan area of 100,000 square feet and less are not required to be designed for tornado loads. For all effective plan areas, the tornado wind speeds in Florida are less than the corresponding hurricane wind speeds. While the tornado provisions are not anticipated to significantly affect the design of Risk Category III and IV buildings for wind loads in Florida, there are situations, particularly for large buildings in Northwest Florida where the tornado provisions may govern over the hurricane provisions.

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Building

69

### SP10341

| | | | | | |
|---|---|---|---|---|---|
| **Date Submitted** | 02/13/2022 | **Section** | 35 | **Proponent** | James gregory |
| **Chapter** | 35 | **Affects HVHZ** | No | **Attachments** | **Yes** |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

**Related Modifications**

**Summary of Modification**

Amends existing code reference

**Rationale**

Amends the 2018 edition to include the Interim Amendment that has become part of the Guidelines.

**Fiscal Impact Statement**

**Impact to local entity relative to enforcement of code**
There is no impact to local entity relative to enforcement of code
**Impact to building and property owners relative to cost of compliance with code**
There is no impact to building and property owners relative to cost of compliance with code
**Impact to industry relative to the cost of compliance with code**
There is no impact to industry relative to the cost of compliance with code
**Impact to small business relative to the cost of compliance with code**

**Requirements**

**Has a reasonable and substantial connection with the health, safety, and welfare of the general public**
Does not adversely affect 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**
Makes the code more clear for the user and the authority having jurisdiction.
**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**
Improves the effectiveness of the code by clarifying requirements.

GHCF—18 Guidelines for Design and Construction of Residential Health, Care, and Support Facilities (~~First Printing~~ 2018 with Interim Amendment )

FGI

August 28, 2020

## Interim Amendment for the 2018 Residential *Guidelines*

Since publication of the 2018 edition of the *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, the Facility Guidelines Institute (FGI) has received requests from several state authorities having jurisdiction (AHJs) asking for minimum square footages for resident rooms in nursing homes. In response to this request, the Residential Document Group (RDG) of the FGI Health Guidelines Revision Committee (HGRC) reconvened to address these concerns outside of the scheduled editorial cycles for the 2018 and 2022 editions of the *Guidelines*. The RDG proposed incorporating the text featured in this document for inclusion in the 2022 Residential *Guidelines* document, but—to address the enforcement issue in a more timely fashion—the group also requested it be published as an interim amendment, which is an official change, to the 2018 Residential *Guidelines*.

### Background

Prior to the release of this interim amendment, the Residential *Guidelines* had been silent on square footage requirements for sizing resident rooms. This was an intentional choice out of concern that, if a minimum size was provided, it would be taken as an absolute. That minimum would then become the base size of the space in which a resident would live, regardless of whether the size fully met resident needs. Given that residents may live in long term-care settings for 15 years or more, this was deemed unacceptable.

The unfortunate side effect of that choice has been that states have had difficulty implementing the Residential *Guidelines*. Thus, the RDG reconsidered its position and agreed that basing a minimum resident room size on clearances would serve the needs of both states and nursing home residents.

### Development of Minimum Square Footages

To establish the minimum size requirements included in the interim amendment, the RDG applied the following material from the 2018 Residential *Guidelines*:

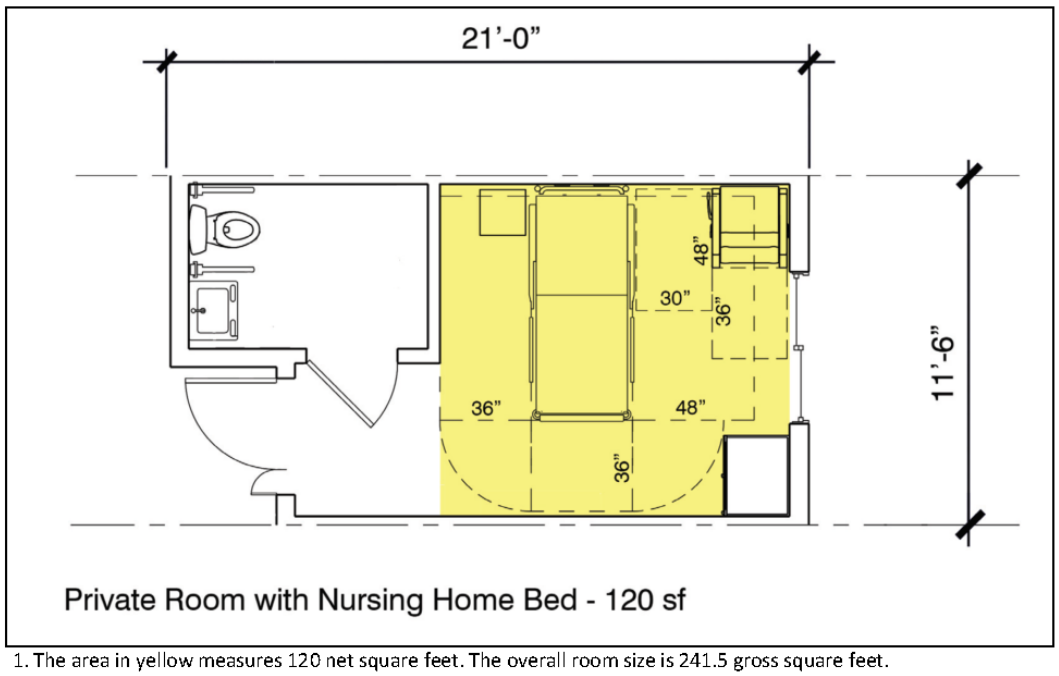
- Clearance suggestions in appendix section A3.1-2.2.2.2 (Determining space needs)
- Furniture and equipment requirements in Section 3.1-2.2.2.2 (Resident Room—Space requirements)
- Design requirements in Section 2.2-3 (Design Criteria for Accommodations for Care of Persons of Size*)

The group diagrammed private and shared room layouts driven by these clearances and furniture requirements to determine the minimum room size for each user group and variation—standard room with hospital or nursing home bed, room for an individual of size

*The term "person of size" has been replaced in the draft 2022 *Guidelines* with "individual of size." Its use here is intentional to be consistent with the 2018 *Guidelines* documents.

with fixed lift, and room for an individual of size with movable lift. (As an example, see the diagram for a standard room below.)

**New required clearances and minimum room size for a resident room**




1. The area in yellow measures 120 net square feet. The overall room size is 241.5 gross square feet.
2. This graphic is for illustration purposes only and does not depict a recommended or required resident room layout.

**Public comment on the interim amendment**

The proposed revisions to the requirements for resident rooms in nursing homes in this interim amendment were subjected to a public comment period during October and November 2019, followed by additional review and final approval by the RDG and the HGRC Steering Committee. Upon their approval, the interim amendment was accepted as integral to the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities.*

**Inclusion of the Interim Amendment in the Second Printing of the 2018 Residential *Guidelines***

FGI considers the second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilitites* to be the official 2018 Residential *Guidelines* document, and the interim amendment became effective with its release in August 2020.

Specific alert language to make users aware of the incorporation of an interim amendment has been added to the title page of the document, with simplified alert language immediately

preceding each affected section in the main text. The alerts are shown below exactly as they appear in the second printing.

**Alert on the title page of the 2018 Residential *Guidelines*, second printing:**

**ALERT: This second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities* has been modified by the issuance of an official interim amendment. FGI considers this amended document to be the official edition of the 2018 Residential *Guidelines*.** For states that have adopted the first printing of this document, a paper explaining the changes—with the affected sections shown as published in the first printing of the 2018 Residential *Guidelines*—can be accessed at www.fgiguidelines.org.

**The following sections have been amended in this second printing:**
Appendix section A2.2-3 (Design considerations for accommodations for care of persons of size: Design Elements)
Section 2.3-3.2.2.1 (Examination and Treatment Room Space Requirements: Design Elements)
Appendix section A2.3-3.2.2.2 (2) (Examination or treatment rooms for persons of size: Design Elements)
Section 3.1-2.2.2 (Resident Room: Specific Requirements for Nursing Homes)
Section 3.1-2.2.3 (Resident Room for Persons of Size: Specific Requirements for Nursing Homes)

**Amended text is indicated by a dotted line to the left of the column.**

**Example of alert immediately preceding affected sections in the main text:**

**In this second printing of the 2018 *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.3-3.2.2.1 (Examination and Treatment Room Space Requirements: Design Elements) has been altered by the issuance of an official interim amendment (see page 1).** FGI considers this amended document to be the official edition of the 2018 Residential *Guidelines*. For states that have adopted the first printing of this document, a paper explaining the changes—with the affected sections shown as published in the first printing of the 2018 Residential *Guidelines*—can be accessed at www.fgiguidelines.org.

**Amended text is indicated by a dotted line to the left of the column.**

## Applying the Amended Text

FGI encourages all users of the 2018 Residential *Guidelines* to print this document and affix it to copies of the first printing. For users with digital licenses, the changes are shown in the page view content on MADCAD in the same way. The changes have been incorporated into the HTML version on MADCAD seamlessly, without identifying alerts.

Before beginning any residential project, FGI recommends verifying with the local AHJ which printing of the 2018 Residential *Guidelines* is being followed by the state.

The interim amendment text featured in the following table also appears in the draft of the 2022 Residential *Guidelines*. Although FGI considers it to be the official 2018 Residential *Guidelines* text, the RDG and HGRC believe it is appropriate to present these changes as new in the draft 2022 Residential *Guidelines* to give the public an additional opportunity to provide feedback.

Public comments may be submitted via FGI's comment platform at www.fgiguidelines.net from July 1, 2020, through September 30, 2020.

The following table provides a cross-walk to illustrate the changes made to the 2018 Residential *Guidelines* by the interim amendment as compared to the original language in the first printing of the document. The left column shows the text in the first printing, and the right column shows the text in the second printing. (Sections beginning with "A"—shown in italic in this table—are appendix text, which is advisory only.)

| 2018 Residential *Guidelines*, first printing | 2018 Residential *Guidelines*, second printing |
|---|---|
| ***A2.2-3-a Design considerations for accommodations for care of persons of size*** | ***A2.2-3-a Design considerations for accommodations for care of persons of size*** |
| *a. Accommodations for persons of size and the equipment needed to care for them require more operational space and more storage than a traditional resident health, care, or support environment. Therefore, additional square footage may be required to accommodate these needs.* | *a. Accommodations for persons of size and the equipment needed to care for them require more operational space and more storage than a traditional resident health, care, or support environment. Therefore, additional square footage may be required to accommodate these needs.* |
| *Size increases will be determined by the space needs of expanded-capacity portable equipment (e.g., beds, wheelchairs, lifts) and fixed equipment (e.g., exam tables) designed for persons of size. Equipment used for persons of size is considerably larger than standard equipment. For example, a bed with a 1,000-pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.* | *Size increases will be determined by the space needs of expanded-capacity portable equipment (e.g., beds, wheelchairs, lifts) and fixed equipment (e.g., exam tables) designed for persons of size. Equipment used for persons of size is considerably larger than standard equipment. For example, a bed with a 1,000-pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.* |
| ~~*Resident rooms and exam rooms for persons of size should have a minimum clear floor area of 200 square feet (18.58 square meters); a minimum clear dimension of 17 feet (5.18 meters); and a minimum clearance of 7 feet (2.13 meters) on one side and 5 feet (1.52 meters) on the other side and at the foot of the treatment table or bed. Where a portable lift is used, a minimum of 35 square feet (3.25 square meters) of storage space should be provided. Equipment used for persons of size is considerably larger than standard equipment. A bed with a 1,000 pound capacity is 44 inches (101.6 centimeters) to 57 inches (144.78 centimeters) wide by 96 inches (243.84 centimeters) to 102 inches (259.08 centimeters) long.*~~ | *See Section 2.3-3.2.2 (Examination and Treatment Room Space Requirements) and Section 3.1-2.2.3.2 (Resident Room for Persons of Size: Space requirements) for space requirements for resident rooms and exam rooms for persons of size.* |
| *Toilet fixtures should be floor-mounted and designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms)—or as indicated for the care population being served—and mounted a minimum of 24 inches (60.96* | *Toilet fixtures should be floor-mounted and designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms)—or as indicated for the care population being served—and mounted a minimum of 24 inches (60.96* |

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| *centimeters) on center from the finished wall. A clear floor space of 5 feet (1.52 meters) should be provided on one side of the toilet for access and assistance. Sinks also need to be floor mounted, as people lean on a sink and its surrounds while using the bathroom. A clear floor area of 5 feet (1.52 meters) should be provided on either side of the sink and toilet to accommodate a caregiver who is assisting the resident. It is also good practice to provide a handrail designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms), or as indicated for the care population being served, adjacent to the sink to give the resident a means of support other than the sink and its surrounds.* | *centimeters) on center from the finished wall. A clear floor space of 5 feet (1.52 meters) should be provided on one side of the toilet for access and assistance. Sinks also need to be floor-mounted, as people may lean on a sink and its surrounds while using the bathroom. A clear floor area of 5 feet (1.52 meters) should be provided on either side of the sink and toilet to accommodate a caregiver who is assisting the resident. It is also good practice to provide a handrail designed to sustain a minimum concentrated load of 800 pounds (362.88 kilograms), or as indicated for the care population being served, adjacent to the sink to give the resident a means of support other than the sink and its surrounds.* |
| *If a resident is able to walk, he or she will likely need to use a handrail for support or balance. Such handrails should be designed to support and sustain a minimum concentrated load of 800 pounds (362.88 kilograms).* | *If a resident is able to walk, he or she will likely need to use a handrail for support or balance. Such handrails should be designed to support and sustain a minimum concentrated load of 800 pounds (362.88 kilograms).* |
| **2.3-3.2.2 Examination and Treatment Room Space Requirements** | **2.3-3.2.2 Examination and Treatment Room Space Requirements** |
| **2.3-3.2.2.1 Area** | **2.3-3.2.2.1 Area** |
| (1) Each examination or treatment room shall have a minimum clear floor area of 120 square feet (11.15 square meters). | (1) Each examination or treatment room shall have a minimum clear floor area of 120 square feet (11.15 square meters). |
| (2) Where an examination or treatment room is used for a population that includes persons of size, a minimum clear floor area of ~~210 square feet (19.51 square meters)~~ shall be provided. | (2) Where an examination or treatment room is used for a population that includes persons of size, a minimum clear floor area of 219 square feet (20.35 square meters) shall be provided. |
| *A2.3-3.2.2.2 (2) Examination or treatment rooms for persons of size… [not in first printing]* | ***A2.3-3.2.2.2 (2) Examination or treatment rooms for persons of size** should have a minimum clear dimension of 17 feet (5.18 meters) and a minimum clearance of 7 feet (2.13 meters) on one side and 5 feet 6 inches (1.68 meters) on the other side and 5 feet (1.52 meters) at the foot of the treatment table or bed. Where a portable lift is used, a minimum of 35 square feet (3.25 square meters) of storage space should be provided.* |
| ***~~A3.1 2.2.2.2 Determining space needs.~~** ~~Resident rooms should be sized, arranged, and furnished to maximize safe patient mobility, mobilization, weight-bearing exercise, and ambulation potential while minimizing risk to caregivers. This should~~* | *A3.1-2.2.2.2 Detemining space needs [not in second printing]* |

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| ~~*apply to all populations being cared for and served.*~~<br><br>~~*Clearances should be provided and maintained to accommodate safe resident mobility and mobilization of residents. Designated clearances should not be obstructed by any object that does not qualify as movable according to Section 1.5-4.2 (Movable and Portable Equipment).*~~<br><br>~~*a. To facilitate planning for minimum clearances around beds, bed type and size should be established as part of the functional program. As acceptable to AHJs, bed placement should be chosen by individual residents and their families to satisfy the needs and desires of the resident.*~~<br><br>~~*b. Provision of bed clearances to support resident safety should include the following:*~~<br><br>~~*— Standard resident room:*~~<br><br>~~• *48 inches (121.92 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *36 inches (91.44 centimeters) at the foot of the bed*~~<br><br>~~*— Resident rooms for persons of size with an overhead lift:*~~<br><br>~~• *72 inches (182.88 centimeters) from the bed by 120 inches long (304.8 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *66 inches (167.64 centimeters) at the foot of the bed*~~<br><br>~~*— Resident rooms for persons of size without an overhead lift to accommodate use of a mobile lift:*~~<br><br>~~• *84 inches (213.36 centimeters) from the bed by 120 inches long (304.8 centimeters) on the transfer side*~~<br><br>~~• *36 inches (91.44 centimeters) on the non-transfer side of the bed*~~<br><br>~~• *66 inches (167.64 centimeters) at the foot of the bed*~~<br><br>~~*Where lifts are used, additional clearance is needed to accommodate use of the lift and an expanded capacity wheelchair as well as space for staff to help a person of size transfer from bed to*~~ | |

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| ~~*wheelchair or gurney. Mobile lifts require more floor space than overhead lifts to accommodate the lift footprint.*~~<br><br>~~*c. Sizing of resident rooms should accommodate clearances for resident chairs, recliners, wheelchairs, or other devices; these clearances may overlap with the bed clearances. The size of each room should allow unimpeded clearance on at least one side and at the front of any resident chair, etc., as follows:*~~<br><br>~~*— 48 inches (121.92 centimeters) on the transfer side of the chair, etc. for both standard and person of size room types*~~<br><br>~~*— 36 inches (91.44 centimeters) for the approach to the chair for a standard room*~~<br><br>~~*— 66 inches (167.64 centimeters) for the approach to the chair for a room accommodating a person of size*~~ | |
| **3.1-2.2.2.2 Space requirements**<br><br>~~(1) Space shall be provided to accommodate resident care and for maneuverability when resident-operated mobility devices are used.~~<br><br>~~(2) Resident rooms shall be sized, arranged, and furnished to maximize safe resident mobility, mobilization, weight-bearing activity, and ambulation potential and to minimize risks to caregivers. This requirement shall apply to all resident rooms, regardless of resident weight or condition.~~ | **3.1-2.2.2.2 Space requirements**<br><br>*(1) Area. Single- and multiple-resident rooms shall be sized to accommodate the functional placement of required furnishings and equipment essential to resident comfort and safety.<br><br>(a) Where a single-resident room is provided, it shall have the following:<br><br>(i) Minimum clear floor area of 120 square feet (11.15 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br><br>(ii) Minimum clear dimension of 11 feet (3.35 meters)<br><br>(b) Where a multiple-resident room is provided, it shall have the following:<br><br>(i) Minimum clear floor area of 108 square feet (10.03 square meters) per resident bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br><br>(ii) Minimum clear dimension of 9 feet 6 inches (2.90 meters)<br><br>***A3.1-2.2.2.2 (1)*** *Space should be provided to accommodate the care population, resident care, and maneuverability when resident-operated mobility devices are used. Functional placement is based on considerations for safe resident mobility,* |

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| | *mobilization, weight-bearing activity, and ambulation and for minimization of risks to caregivers.*<br><br>*(2) Clearances. Clearances shall be a consideration during design of resident rooms.<br><br>***A3.1-2.2.2.2 (2) Clearances.*** *To facilitate planning for minimum clearances around beds, bed type and maximum bed size should be established by the residential care organizations as part of the functional program. Whenever possible, bed placement should be chosen by individual residents and their representatives or persons of significance (e.g., family, spouse/partner, resident-appointed advocate) to satisfy the needs and desires of the resident.*<br><br>*a. In resident rooms, the following minimum clearances should be used around the resident bed to support resident and staff safety:*<br><br>*—48 inches (121.92 centimeters) on the transfer side*<br><br>*—36 inches (91.44 centimeters) on the non-transfer side*<br><br>*—36 inches (91.44 centimeters) at the foot in single-resident rooms*<br><br>*—48 inches (121.92 centimeters) at the foot of each bed in multiple-resident rooms*<br><br>*b. In resident rooms, a clear circulation pathway of 36 inches (91.44 centimeters) should be provided between fixed elements or equipment. This circulation pathway should be permitted to overlap other required clearances.*<br><br>*c. Sizing of resident rooms should accommodate clearances for resident chairs, recliners, and other movable furnishings; these items and their clearances may overlap with the bed clearances. The size of each room should allow unimpeded clearance on at least one side and at the front of any resident chair, as follows:*<br><br>*—48 inches (121.92 centimeters) on the transfer side*<br><br>*—36 inches (91.44 centimeters) for the approach to the chair*<br><br>*d. Arrangement of furniture that reduces these clearances should be permitted as long as access for other occupants is not reduced and there is at* |

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| | *least one layout that meets the recommended clearances in appendix section A3.1-2.2.2.2 (2) (Clearances).* |
| ~~(3) Area and dimensions. The area and dimensions provided for each resident space shall be based on inclusion of the following:~~<br>~~(a) Space to accommodate a maximum of two beds that allows staff members access to both sides and the foot of each bed~~<br>(b) A window ~~accessible from a wheelchair or other resident-operated mobility device~~<br>(c) A wardrobe or closet ~~accessible from a wheelchair or other resident-operated mobility device~~<br>~~(d) The following furniture accessible from a wheelchair or other resident-operated mobility device:~~<br>(i) Bed<br>~~*(ii) Lounge chair~~<br>(iii) Dresser<br>(iv) Nightstand | (3) Resident room accommodations. Accommodations provided for each resident room shall be accessible from a wheelchair or other resident-operated mobility device and include the following:<br>(a) Window<br>(b) Bed<br>*(c) Resident chair or recliner<br>(i) Location of the resident chair or recliner adjacent to the head of the bed shall be permitted.<br>(ii) Use of a recliner in lieu of a bed shall be permitted based on resident preference.<br>(d) Wardrobe(s) or closet(s). Where a movable wardrobe(s) is provided, it shall be permitted to be located adjacent to the head of the bed.<br>(e) Dresser. The dresser shall be permitted to be located:<br>(i) In or as part of a wardrobe or closet.<br>(ii) On the wall adjacent to the head of the bed.<br>(f) Nightstand. The nightstand shall be permitted to be located adjacent to the head of the bed. |
| ***A3.1-2.2.2.2 (3)(d)(ii) Resident seating.*** *The lounge chair provided in a resident room to give residents an alternative to bed-stay should be evaluated for provision of the following:*<br>*—Comfort sufficient for long-term sitting*<br>*—Cervical support and support for the resident's head (backrest)*<br>*—Opportunity to recline the backrest to enable periodic redistribution of body weight during long periods of sitting (recliner)*<br>*—Ease of entry and exit*<br>*See appendix section A2.4-2.4.3.1 (Furniture selection recommendations) for additional information.* | ***A3.1-2.2.2.2 (3)(c) Resident chair or recliner.*** *The lounge chair or recliner provided in a resident room to give residents an alternative to bed-stay should be evaluated for provision of the following:*<br>*a. Comfort sufficient for long-term sitting*<br>*b. Cervical support and support for the resident's head (backrest)*<br>*c. Opportunity to recline the backrest to enable periodic redistribution of body weight during long periods of sitting (recliner)*<br>*d. Ease of entry and exit*<br>*See appendix section A2.4-2.4.3.1 (Furniture selection recommendations) for additional information.* |

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| *(e) Space for a side chair<br><br>***A3.1-2.2.2.2 (3)(e) Visitor seating.*** *Provision of a side chair for a visitor means residents do not have to remain in bed when they have a visitor.* | *(g) Space for a side chair<br><br>***A3.1-2.2.2.2 (3)(g) Visitor seating.*** *Provision of a side chair for a visitor means residents do not have to remain in bed when they have a visitor.* |
| (f ) The room shall be configured so that each resident can view the television from a resident chair. | (h) The room shall be configured to provide each resident with a view of the television from a resident chair or recliner. |
| (g) Direct access from the room entry to the toilet room, closet or wardrobe, and window, without traveling through the living space of another resident | (i) Direct access shall be provided from the room entry to the bed, toilet room, closet or wardrobe, and window without traveling through the living space of another resident. |
| ~~*(h) Clearance for staff members to use lifting equipment to access the bed, chairs, and toilet. See appendix section A3.1-2.2.2.2-b (Determining space needs) for recommendations.~~ | |
| ~~***A3.1-2.2.2.2 (3)(h)*** *Although use of portable lifting equipment requires more clearance for maneuvering than fixed lifting equipment, use of fixed equipment does not eliminate the need for portable equipment. Portable equipment will be required when a resident falls out of range of a fixed lift or requires a sit-to-stand lift.*~~<br><br>~~*Using a portable lift without powered wheels to move a resident laterally requires more exertion by staff than using a fixed lift; in addition, the exertion required is increased where the floor is carpeted. However, carpet types differ in their resistance to wheeled devices, and carpet has significant advantages over hard-surface flooring in noise reduction and residential appearance, both of which are important in creating a comfortable, attractive living environment. See Section 2.4-2.3.2 (Flooring and Wall Bases) for requirements.*~~<br><br>~~*Resident rooms and associated toilets may be equipped with a ceiling-mounted track to accommodate ceiling-mounted mobility and lifting devices. The track layout should be designed to aid in maintaining or improving resident mobility and ambulation, independent function, and strength and to help staff members transfer residents to or from bed/chair/toilet/bathing facilities/stretcher or reposition them in a bed or a chair.*~~<br><br>~~*One objective in using ceiling systems would be to assist residents who have poor balance or are*~~ | *A3.1-2.2.2.2 (3)(h) **Although use of portable lifting equipment…** [not in second printing]* |

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| ~~*unable to bear all of their weight to stand and ambulate throughout the room. A second objective would be to maximize resident choice and control of bed location and room arrangement, key factors in creating "home" for the resident.*~~<br><br>~~*One way to meet these objectives is to install permanent tracks the full length of two sides of the room with a perpendicular spur that extends into the toilet room over the toilet and into a shower, where provided. With this basic layout, when residents who require mobility or transfer assistance move into a room, a cross track and lift device can be installed for the duration of their stay. This approach would make all areas of the room accessible to the resident using the lifting device, thereby offering the resident a variety of room arrangements and substantially reducing the need for a portable lift.*~~<br><br>~~(4) Every bed location shall have sufficient space to permit placement of a stretcher along one side for lateral transfer of the resident from the bed to the stretcher by at least two staff members without substantial rearrangement of furniture.~~<br><br>~~(5) Clearances~~<br><br>~~(a) In multiple-bed rooms, clearance shall allow for the movement of beds and equipment without disturbing residents.~~<br><br>~~(b) Clear access to one side of the bed shall be provided along 75 percent of its length.~~<br><br>~~(c) Mechanical and fixed equipment shall not obstruct access to any required element.~~<br><br>~~(d) These guidelines shall allow arrangement of furniture that may reduce these access provisions, without impairing access provisions for other occupants.~~ | |
| ~~**3.1-2.2.3 Special-Care-Resident Rooms**~~ [Resident Room for Persons of Size was not in the first printing; Section 3.1-2.2.3 has been renumbered as Section 3.1-2.2.4 in the second printing.] | **3.1-2.2.3 Resident Room for Persons of Size**<br><br>Where a resident room(s) designed to accommodate persons of size is provided, it shall meet the requirements in Section 3.1-2.2.2 (Resident Room) except as amended in this section.<br><br>**3.1-2.2.3.1 General**<br><br>*(1) The need for, number, and type of resident rooms accommodating persons of size shall be determined for the intended care population during the functional programming process. |

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| | ***A3.1-2.2.3.1 (1) Considerations for persons of size.*** *The projected need for accommodations for care of persons of size should be defined in the planning phase and include the following:*<br>*—Projected weight capacities for persons of size in the population to be served*<br>*—Projected number of resident rooms required to accommodate persons of size*<br>*—Projected number of expanded-capacity lifts required to accommodate persons of size*<br><br>(2) Where the facility provides resident rooms for persons of size, see sections 1.2-5.6 (Planning Considerations for Persons of Size) and 2.2-3 (Design Criteria for Accommodations for Care of Persons of Size) for further requirements.<br><br>***3.1-2.2.3.2 Space requirements**<br><br>***A3.1-2.2.3.2 Resident lifting equipment.*** *See Section 1.2-3.3 (Resident Mobility and Transfer Risk Assessment) for information on providing resident lifts to mitigate risks involved in resident handling and mobility tasks. Information and guidance for evaluating resident mobility and transfer risks can be found in "Patient Handling and Mobility Assessments," a white paper published by the Facility Guidelines Institute and available from www.fgiguidelines.org.*<br><br>(1) Area<br>(a) Where a single-resident room with a fixed overhead lift is provided, it shall have the following:<br>(i) Minimum clear floor area of 200 square feet (18.58 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br>(ii) Minimum clear dimension of 13 feet (3.96 meters)<br>(b) Where a multiple-resident room with a fixed overhead lift is provided, it shall have the following:<br>(i) Minimum clear floor area of 176 square feet (16.35 square meters) per resident |

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| | bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br>(ii) Minimum clear dimension of 10 feet 9 inches (3.28 meters) for the clear floor area for each resident<br>(c) Where a single-resident room for persons of size without an overhead lift is provided but mobile lifts will be used, the room shall have the following:<br>(i) Minimum clear floor area of 219 square feet (20.35 square meters), excluding closet or wardrobe, bathroom, and vestibule entry<br>(ii) Minimum clear dimension of 13 feet (3.96 meters) for the clear floor area for each resident<br>(d) Where a multiple-resident room without an overhead lift is provided but mobile lifts will be used, the room shall have the following:<br>(i) Minimum clear floor area of 192 square feet (17.84 square meters) of clear floor area per resident bed, excluding closet or wardrobe, bathroom(s), and vestibule entry<br>(ii) Minimum clear dimension of 10 feet 9 inches (3.28 meters) for the clear floor area for each resident<br>*(2) Clearances. Clearances shall be a consideration during design of resident rooms for persons of size.<br><br>***A3.1-2.2.3.2 (2) Clearances.*** *To facilitate planning for minimum clearances around beds, bed type and maximum bed size should be established by the residential care organization as part of the functional program. Whenever possible, bed placement should be chosen by individual residents and their representatives or persons of significance (e.g., family, spouse/partner, resident-appointed advocate) to satisfy the needs and desires of the resident.*<br>*a. In resident rooms for persons of size with an overhead lift, the following minimum clearances should be used around the bed to support resident and staff safety:* |

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| | —66 inches (167.64 centimeters) from the bed by 126 inches long (320 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) on the non-transfer side<br>—60 inches (152.4 centimeters) at the foot<br>b. In resident rooms for persons of size without an overhead lift where mobile lifts will be used, the following minimum clearances should be used around the bed to support resident and staff safety:<br>—84 inches (213.36 centimeters) from the bed by 126 inches long (320 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) on the non-transfer side<br>—60 inches (152.4 centimeters) at the foot<br>c. In resident rooms for persons of size, a clear circulation pathway of 60 inches (152.4 centimeters) should be provided between fixed elements or equipment. This circulation pathway should be permitted to overlap other required clearances.<br>d. Sizing of resident rooms for persons of size where a mobile lift will be used, whether or not an overhead lift is present, should accommodate clearances for resident chairs, recliners, and other movable furnishings; these items and their clearances may overlap with the bed clearances. The size of each room for a person of size should allow unimpeded clearance on at least one side and at the front of any resident chair as follows:<br>—48 inches (121.92 centimeters) on the transfer side<br>—66 inches (167.64 centimeters) for the approach to the chair<br>e. Mobile vs. fixed lift clearance considerations<br>—Where lifts are used, additional clearance is needed to accommodate use of the lift, an expanded-capacity wheelchair, and space for staff to help a person of size transfer from bed to wheelchair or gurney. Mobile lifts require more floor space than overhead lifts to accommodate the lift footprint. Selection of lift equipment should be completed during the functional programming process to evaluate clearances required.<br>—Use of portable lifting equipment requires more clearance for maneuvering than fixed lifting |

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| | *equipment; however, the use of fixed equipment does not eliminate the need for portable equipment. Portable equipment could be needed when a resident is not in proximity to a fixed lift or requires a sit-to-stand lift.*<br>*—Using a portable lift without powered wheels to move a resident laterally requires more exertion by staff than using a fixed lift, and the exertion required is increased where the floor is carpeted. See Section 2.4-2.3.2 (Flooring and Wall Bases) for additional information.*<br>*—Resident rooms and associated toilets may be equipped with a ceiling-mounted track to accommodate ceiling-mounted mobility and lifting devices. The track layout should be designed to aid in maintaining or improving resident mobility and ambulation, independent function, and strength and to assist staff members with transfer of residents to or from bed/chair/toilet/bathing facilities/stretcher or repositioning residents in a bed or chair.*<br>*—One objective of using ceiling lift systems is to support residents who have poor balance or are unable to bear all of their weight to stand and ambulate throughout the room. A second objective is to maximize resident choice and control of bed location and room arrangement, key factors in creating "home" for the resident. These objectives can be met by installing permanent tracks the full length of two sides of the room with a perpendicular spur that extends into the toilet room over the toilet and into a shower (i.e., an "I" or "H" layout) to achieve maximum flexibility. This approach would make all areas of the room accessible to the resident using the lifting device, thereby offering the resident a variety of room arrangements and substantially reducing the need for a portable lift.* |

# TAC: Special Occupancy

Total Mods for **Special Occupancy** in **Withdrawn : 8**

Total Mods for report: 70

## Sub Code: Residential

70

### SP10263

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| **Date Submitted** | 02/12/2022 | **Section** | 408.7 | **Proponent** | Conn Cole FDEM SFMO |
| **Chapter** | 4 | **Affects HVHZ** | No | **Attachments** | No |
| **TAC Recommendation** | Withdrawn | | | | |
| **Commission Action** | Pending Review | | | | |

**Comments**

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

### Related Modifications

Building, Section 1805.1.2.1, proposal #10264, to make the same replacement of Technical Bulletin 11.

### Summary of Modification

Replace reference to NFIP Technical Bulletin 11 with enforceable requirements.

### Rationale

Based on FEMA 2024 IBC proposal S154-22. Subject to 553.73(7)(a) as flood requirement for inclusion in 9th Edition. The basic requirements of the National Flood Insurance Program prohibit areas of buildings that are below grade on all sides (except nonresidential buildings that are designed to be dry floodproofed). That limitation applies to crawlspaces that have the interior grade below the exterior grade on all sides. The exception in this section refers to FEMA Technical Bulletin 11, which outlines limitations to allow below-grade crawlspaces, specifically limitations on wall height and how far below grade the interior can extend. Importantly, TB 11 requires jurisdictions to adopt the specified requirements in the exception to allow for construction of such below-grade spaces. The proposed replaces the reference to TB 11 with itemized lists that capture the limitations in TB 11. Not only does this eliminate the need for buildings and designers to find and interpret TB 11, it eliminates the need for communities to adopt the specific requirements. The Florida Division of Emergency Management State Floodplain Management Office notes that this below-grade crawlspace configuration is not common in Florida, but the office has responded to questions about it. If this code change proposal is successful, the codes will no longer refer to TB 11 and TB 11 should be removed from the list of referenced standards in both codes. Bibliography: FEMA Technical Bulletin 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas, Interim Guidance (2001), https://www.fema.gov/emergency-managers/risk-management/building-science/national-flood-insurance-technical-bulletins

### Fiscal Impact Statement

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

Increases enforcement efficiency because the provisions are specified rather than have to research a guidance document.

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

No change; proposal replaces the reference to NFIP Technical Bulletin 11 with a list of requirements from the Bulletin.

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

No change to the technical requirements.

**Impact to small business relative to the cost of compliance with code**

## Requirements

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

Yes, it provides clear requirements for flood resistance and facilitates meeting FEMA expectations.

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

Yes, it improves by stating specific requirements and limitations.

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

No, the use of flood damage resistant materials is already required.

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

No, it improves enforcement by having clear requirements.

# 1st Comment Period History

P10263-G1

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| Proponent | Rebecca Quinn obo FL Div Emerg Mgnt | Submitted | 4/15/2022 4:23:57 PM | Attachments | No |

Comment:

I submit this comment on behalf of Conn Cole, FDEM State Floodplain Manager, to request withdrawal of this proposal.

**R408.7 Flood resistance.** For buildings located in flood hazard areas as established in Table R301.2(1):

1. Walls enclosing the under-floor space shall be provided with flood openings in accordance with Section R322.2.2.

2. The finished ground level of the under-floor space shall be equal to or higher than the outside finished ground level on at least one side.

**Exception:** Under-floor spaces that meet the following requirements: ~~of FEMA TB-11-1.~~

1. The velocity of floodwater at the site does not exceed 5 feet per second.

2. The interior grade of the under-floor space is not more than 2 feet below the lowest adjacent exterior grade.

3. The height of the under-floor space, measured from the interior grade of the under-floor space to the top of the foundation wall is not more than 4 feet at any point.

4. There is an adequate drainage system that removes floodwater from the interior area of the under-floor space.