



Special Occupancy

Not a Glitch

Glitch Modifications

This document created by the Florida Department of Community Affairs -
850-487-1824

Sub Code: Building

Total Mods for Electrical: 4

Date Submitted	3/12/2011	Section	420.3.2	Proponent	skip gregory
Chapter	4	Affects HVHZ	No	Attachments	No
TAC Recommendation	Pending Review				
Commission Action	Pending Review				
Comments					
General Comments	No	Alternate Language	No		

Related Modifications**Summary of Modification**

Adds a sentence to clarify the requirements of this section.

Rationale

Although this is required by section 420.3.14, it may be overlooked by designers and should be added here for clarity so that designs can be made without expensive revisions. Further it "(a) Conflicts within the updated code" in that one section calls for ventilation in corridors while the other section does not require a corridor. There is a Florida specific need to fix this as this only pertains to Florida.

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

There is no impact. There is no impact on small business.

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

There is no impact. There is no impact on small business.

Impact to industry relative to the cost of compliance with code

There is no impact. There is no impact on small business.

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

Clarifies the Code for designers.

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

Clarifies the Code for designers.

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

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

Does not degrade the effectiveness of the code

Does not degrade the effectiveness of the code.

420.3.2 Resident unit. Each resident unit shall consist of the resident rooms and support areas, and shall be arranged to avoid unnecessary and unrelated travel through the unit. All resident corridors shall be enclosed and conditioned in accordance with section 420.3.14 Heating, Ventilation and Air Conditioning (HVAC) Systems. ~~It~~ The unit shall be designed to meet the organizational patterns of staffing, functional operations, and care programs as described in the functional program of the facility. Based on these aspects of the functional program, the resident unit may be designed to meet one of the following models:

Date Submitted	3/11/2011	Section	423.25.4.1	Proponent	Shawn Collins
Chapter	4	Affects HVHZ	Yes	Attachments	No
TAC Recommendation	Pending Review				
Commission Action	Pending Review				

Comments

General Comments	No	Alternate Language	No
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Related Modifications

Building-Section 1626-Modification # 4793
 Building-Section 423.25.4-Modification # 4810

Summary of Modification

Removes SBC/SSTD 12 as a recognized equivalent standard to ASTM E1996 for wind borne debris impacting EHPAs. SBC/SSTD requires missile speeds of 50 fps vs. 80 fps required by ASTM E 1996 for enhanced protection.

Rationale

With the incorporation of ASCE 7-10, section 26.10.3.2 requires the debris impact requirements of ASTM E1996 for "Enhanced Protection." These requirements are more demanding than SBC/SSTD 12 (80 fps missile speed v. 50 fps missile speed), thus are not equivalent with regards to Risk Category IV structures. Buildings of the type referenced in Section 423.25 (EHPA) would be regarded as "Essential Facilities" by the Code, ASCE 7-10 and ASTM E1996.

This issue is most easily resolved by removing reference to SBC/SSTD 12 as a recognized alternative and stating the "enhanced protection" requirement to provide clarity to the code.

The proposed code change has a Florida Specific need to comply with national standards. The lack of equivalency between the standards could result in structures that are designed and constructed to standards less than the national standards.

Manufacturers of wind-borne debris resistant product are generally not regarded as small business. Local small business could potentially see an increase in revenue to comply with the increased performance presented in the proposed code change.

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

Product that meets these requirements may experience a minimal price increase to accommodate additional material, additional testing, additional engineering and approvals to demonstrate compliance.

Impact to industry relative to the cost of compliance with code

Applicable industry would experience marginal fiscal impact that would be associated with re-tooling, additional testing, additional engineering and approvals to demonstrate compliance.

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

With the implementation of the "enhanced protection" requirements of ASTM E1996 into the EHPA debris impact standards the health, safety and welfare of the general public is significantly enhanced by further fortifying these essential facilities.

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

The code is strengthened and provides better protection for those facilities that need to remain fully operational during catastrophic events.

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

As with current code enforcement with regards to wind borne debris, any product, method or system of construction that demonstrates compliance shall be acceptable.

Does not degrade the effectiveness of the code

The code is intended to promote the health, safety and welfare of the general public and the proposed code modification reinforces these principles.

423.25.4.1 Missile impact criteria. The building enclosure, including walls, roofs, glazed openings, louvers and doors, shall not be perforated or penetrated by a flying object. For walls and roofs, the missile criteria is as provided in ASTM E-1886, ASTM E-1996 ~~SBC/SSTD-12~~ or ~~SBC/SSTD-12~~ and shall comply to the enhanced protection requirements of Table 3.[4238 A3]

Date Submitted	3/11/2011	Section	423.25.4	Proponent	Shawn Collins
Chapter	4	Affects HVHZ	Yes	Attachments	No
TAC Recommendation	Pending Review				
Commission Action	Pending Review				
Comments					
General Comments	No	Alternate Language	No		

Related Modifications

Building-Section 1626-Modification # 4793

Summary of Modification

Removes SBC/SSTD 12 as a recognized equivalent standard to ASTM E1996 for wind borne debris impacting EHPAs. SBC/SSTD requires missile speeds of 50 fps vs. 80 fps required by ASTM E 1996 for enhanced protection.

Rationale

With the incorporation of ASCE 7-10, section 26.10.3.2 requires the debris impact requirements of ASTM E1996 for "Enhanced Protection." These requirements are more demanding than SBC/SSTD 12 (80 fps missile speed v. 50 fps missile speed), thus are not equivalent with regards to Risk Category IV structures. Buildings of the type referenced in Section 423.25 (EHPA) and would be regarded as "Essential Facilities" by the Code, ASCE 7-10 and ASTM E1996.

This issue is most easily resolved by removing reference to SBC/SSTD 12 as a recognized alternative and stating the "enhanced protection" requirement to provide clarity to the code.

The proposed code change has a Florida Specific need to comply with national standards. The lack of equivalency between the standards could result in structures that are designed and constructed to standards less than the national standards.

Manufacturers of wind-borne debris resistant product are generally not regarded as small business. Local small business could potentially see an increase in revenue to comply with the increased performance presented in the proposed code change.

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

Product that meets these requirements may experience a minimal price increase to accommodate additional material, additional testing, additional engineering and approvals to demonstrate compliance.

Impact to industry relative to the cost of compliance with code

Applicable industry would experience marginal fiscal impact that would be associated with re-tooling, additional testing, additional engineering and approvals to demonstrate compliance.

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

With the implementation of the "enhanced protection" requirements of ASTM E1996 into the EHPA debris impact standards the health, safety and welfare of the general public is significantly enhanced by further fortifying these essential facilities.

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

The code is strengthened and provides better protection for those facilities that need to remain fully operational during catastrophic events.

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

As with current code enforcement with regards to wind borne debris, any product, method or system of construction that demonstrates compliance shall be acceptable.

Does not degrade the effectiveness of the code

The code is intended to promote the health, safety and welfare of the general public and the proposed code modification reinforces these principles.

423.25.4 Structural standard for wind loads. At a minimum, EHPAs shall be designed for wind loads in accordance with ASCE 7, Minimum Design Loads for Buildings and Other Structures, Category III (Essential Buildings) . Openings shall withstand the impact of wind-borne debris missiles in accordance with the impact and cyclic loading criteria ~~per for enhanced protection per~~ ASTM E-1886, ASTM E-1996 ~~SBC/SSTD-12 or SBC/SSTD-12~~. Based on a research document, Emergency Shelter Design Criteria for Educational Facilities, by the University of Florida for the DOE, it is highly recommended by the department that the shelter be designed using the map wind speed plus 40 mph, with an importance factor of 1.0.

Date Submitted	3/11/2011	Section	1003.5	Proponent	Eberhard Roeder
Chapter	10	Affects HVHZ	No	Attachments	Yes
TAC Recommendation	Pending Review				
Commission Action	Pending Review				
Comments					
General Comments	No	Alternate Language	No		

Related Modifications

Summary of Modification

The proposal, by simply referring to the Florida onsite sewage treatment and disposal systems standards, which are the statutory standards for grease interceptors, remedies duplications and inconsistencies between the base text and the existing Florida regulations.

Rationale

- 1) glitch criterion: inconsistency with state law, and equivalency of standards
- 2 a) The base text includes some inconsistencies with the provisions of 64E-6, Florida Administrative Code regarding grease interceptors in onsite sewage treatment and disposal systems. The proposal, by simply referring to the Florida onsite sewage treatment and disposal systems standards, which are the statutory standards, remedies duplications and inconsistencies. Alternatively, I could provide language that copies the current language of 64E-6, Florida Administrative Code, into the Florida Building Code. While this alternative would ensure that the same standards are in both places, it makes it less clear how the approval process for grease interceptors works according to Chapter 64E-6, F.A.C. (see statutory and rule language attached).
- b) The proposed code change has a Florida specific need in that Florida's existing statutory language establishes Department of Health jurisdiction over grease interceptors that are a component in an onsite sewage treatment and disposal system. The Department has developed corresponding administrative code language that sets standards for grease interceptors.
- c) There is no impact on small businesses because this is clarification of existing State statutory and rule language, and the proposed language is very similar to the base text.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

None. The proposed language clarifies the existence of applicable Florida regulations. The proposed language will reduce confusion by eliminating duplication and inconsistencies.

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

None. The proposed language clarifies the existence of applicable Florida regulations. The proposed language will reduce confusion by eliminating duplication and inconsistencies.

Impact to industry relative to the cost of compliance with code

None. The proposed language clarifies the existence of applicable Florida regulations. The proposed language will reduce confusion by eliminating duplication and inconsistencies.

Requirements

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

Properly operating grease interceptors protect sewer systems and onsite sewage and disposal systems and their functioning, which in turn protects health, safety and welfare of the general public.

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

Improves code by eliminating duplication and inconsistencies with Florida regulations. Provides equivalent products and systems of construction.

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

The proposal makes no changes to material, product, method and system standards in existing onsite sewage treatment and disposal system regulations.

Does not degrade the effectiveness of the code

The proposal improves effectiveness by providing a clear reference to applicable Florida regulations.

1003.5 Grease interceptors for onsite sewage treatment and disposal systems. Each interceptor shall be sized, constructed and approved in accordance with Chapter 64E-6, Florida Administrative Code. Grease interceptors shall be water and gas tight. Each interceptor shall be engineered to withstand the load, such as from vehicular traffic, to be placed on the interceptor. Sizing of grease interceptors shall be based on the equations of Table 1003.5.1. The minimum tank volume of grease interceptors shall be 750 gallons (2839 L), and the maximum volume of an individual grease interceptor chamber shall be 1,250 gallons (4731 L). Interceptors shall be permitted to be installed in series or as multi-chambered tanks.

1003.5.1 Grease interceptor capacity. Add to read as shown.

1003.5.1 Grease interceptor capacity. —The minimum grease retention capacity for interceptors shall be at least two times the flow-through rate.

1003.5.2 Construction of interceptor. Add to read as shown.

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

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

1003.5.3 Inlet and outlet piping. —The inlet and outlet piping shall have a two-way cleanout tee installed. Inlet piping shall enter at 2½ inches (64 mm) above the liquid level. Inlet piping shall connect to a tee, sweep or baffle, which shall extend to 24 inches (610 mm) below the water level. The outlet pipe shall start at 8 inches (203 mm) above the bottom of the interceptor and extend vertically to a tee. The tee and pipe shall be no less than 4 inches (102 mm) in diameter. The tee shall be installed with the run in the vertical direction.

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

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

SIZING FORMULA FOR RESTAURANTS:	OTHER ESTABLISHMENTS WITH COMMERCIAL KITCHENS:
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$(S) \times (GS) \times (HR/12) \times (LF) =$ Effective
 _____ Capacity of grease
 _____ Interceptor in gallons

Where:

S = Number of seats in dining area
 GS = Gallons of waste water per seat (Use 25 gallons for restaurants with china dishes and/or automatic dishwasher) (Use 10 gallons for restaurants with paper or baskets and no dishwashers)
 HR = Number of hours restaurant is open
 LF = Loading Factor (Use 2.00 interstate highway; 1.50 other freeways; 1.25 recreational area; 1.00 main highway; 0.75 other highway)

$(M) \times (GM) \times (LF) =$ Effective capacity of
 _____ Grease interceptor in
 _____ gallons

Where:

M = Meals prepared per day
 GM = Gallons of waste water per meal (Use 5 gallons)
 LF = Loading Factor
 (Use 1.00 with dishwashing machine and 0.75 without dishwashing machine)

Note: For other than private sewage disposal systems, reduce gallon values by 25%.

381.0065 Onsite sewage treatment and disposal systems; regulation.—

(2) DEFINITIONS.--As used in ss. 381.0065-381.0067, the term:

(j) "Onsite sewage treatment and disposal system" means a system that contains a standard subsurface, filled, or mound drainfield system; an aerobic treatment unit; a graywater system tank; a laundry wastewater system tank; a septic tank; a grease interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed beyond the building sewer on land of the owner or on other land to which the owner has the legal right to install a system. The term includes any item placed within, or intended to be used as a part of or in conjunction with, the system. This term does not include package sewage treatment facilities and other treatment works regulated under chapter 403.

Rule 64E-6.013 (7) Grease interceptors are not required for a residence. However, one or more grease interceptors are required where grease waste is produced in quantities that could otherwise cause line stoppage or hinder sewage disposal. The design of grease interceptors shall be based on standards found in paragraph (a) below. In addition, the following general requirements found in paragraphs (b), (c), and (d), apply when determining the proper use and installation of a grease interceptor used as a component of an onsite sewage treatment and disposal system.

(a) The inlet invert shall discharge a minimum 2 1/2 inches above the liquid level line and the outlet pipe shall have a tee with a minimum diameter of 4 inches that extends to within 8 inches of the bottom of the tank.

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

(c) Where a grease interceptor is required or used, only kitchen wastewater shall first pass through the interceptor and then be discharged into the first compartment of a septic tank or other approved system.

(d) Sizing of grease interceptors shall be based on the equations below. The minimum volume of any grease interceptor shall be 750 gallons and the maximum volume of an individual single grease interceptor chamber shall be 1250 gallons. When the required effective capacity of the grease interceptor is greater than 1250 gallons, installation of multi-chambered grease interceptors or grease interceptors in series is required.

1. Restaurants: $(S) \times (GS) \times (HR/12) \times (LF) =$ effective capacity of grease interceptor in gallons.

S = number of seats in the dining area.

GS = gallons of wastewater per seat; use 25 gallons for ordinary restaurant, use 10 gallons for single service article restaurants.

HR = number of hours establishment is open.

LF = loading factor: use 2.0 interstate highways, 1.5 other freeways, 1.25 recreational areas,

1.0 main highways, and 0.75 other roads.

2. Other type establishments with commercial kitchens: $(M) \times (GM) \times (LF) =$ effective capacity of grease interceptor in gallons.

M = meals prepared per day.

GM = gallons of wastewater per meal: use 5 gallons.

LF = loading factor: use 1.00 with dishwashing and 0.75 without dishwashing.