

2014 Advanced Florida Building Code: Building - Significant Changes: 1 hour

FBC (Florida Building Commission) Accredited Course #806.0

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2014 Florida Advanced Building Code – Building -Significant Changes

LEARNING OBJECTIVES

Upon completion of this module, the student will be able to:

- Become familiar with some of the significant changes including additions, deletions, and modification to the 2014 5th Edition Florida Building Code: Building from the 2010 4th Edition Florida Building Code: Building.
- 2. Completely understand the 2014 5th Edition Florida Building Code: Building updates and changes, by utilizing the section links to access the complete code in its entirety online.
- 3. Comprehend, after reviewing the significant changes and additions to the 2014 5th Edition Florida Building Code- Building the large scope of the changes to the code, thereby seeking additional and more thorough reviews of the entire code, following completion of this course using the online resources.

Introduction

The 2014 Florida Building Code (FBC) is the 5th edition since inception in 2002 and the latest of the triennial updates. It became effective June 30, 2015.

The code is based from the International Building Code (IBC) 2012, the National Electric Code (NEC) 2011, and parts of American Society of Heating, Refrigerating and Air-conditioning Engineers' (ASHRAE) Standard 90.1-2010.

This course highlights several significant changes and updates from the 2010 FBC: Building to the 2014 FBC: Building.

The courses progresses through each section of this volume identifying chapters, sections, and tables of where and what changes occurred, an explanatory brief of the change, a listing of the exact code as seen in the FBC, and a quick link to the complete code chapter/section.



Note: This course presents only a sample of all the significant changes and updates in the FBC 5th Edition (2014), Building. It

is highly recommended that each student review the FBC in its entirety, In addition to the FBC 5th Edition (2014), Building, this also includes the following volumes:

- FBC 5th Edition (2014), Residential
- FBC 5th Edition (2014), Existing Building

- FBC 5th Edition (2014), Accessibility
- FBC 5th Edition (2014), Energy Conservation
- FBC 5th Edition (2014), Fuel Gas
- FBC 5th Edition (2014), Mechanical
- FBC 5th Edition (2014), Plumbing
- <u>FBC 5th Edition (2014), Test Protocols</u>

This course contains multiple quick links to the online FBC (Identified with underlined).

To access: Simply click on any underlined Chapter or Section title to open up the compete version of the FBC corresponding Chapter or Section.

Also, all chapters of 2014 FBC: Building may be accessed by selecting the following link.

http://floridabuilding2.iccsafe.org/app/book/ toc/2014/Florida/Building%20Code/index.ht

CHAPTER 1: SCOPE AND ADMINISTRATION

SECTION 102: APPLICABILITY

ADDED - 102.4.2: PRESENTS IN A CLEAR MANNER THAT THE FLORIDA BUILDING CODE - BUILDING 5TH EDITION (2014) WILL TAKE PRECEDENCE, EVEN IF A

REFERENCED STANDARD CONTAINS REQUIREMENTS THAT PARALLEL THE FLORIDA BUILDING CODE - BUILDING 5TH EDITION (2014)

102.4.2 Provisions in referenced codes and standards.

Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code or the Florida Codes listed in Section 101.4, the provisions of this code or the Florida Codes listed in Section 101.4, as applicable, shall take precedence over the provisions in the referenced code or standards.

SECTION 107: SUBMITTAL DOCUMENTS

ADDED - 107.2.3: REQUIRES CONSTRUCTION DOCUMENTS TO SHOW THE LOCATION, CONSTRUCTION, SIZE AND CHARACTER OF ALL PORTIONS OF THE MEANS OF EGRESS

107.2.3 Means of egress.

The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

ADDED - 107.2.4: REQUIRES THAT CONSTRUCTION DOCUMENTS DESCRIBE THE EXTERIOR WALL ENVELOPE

107.2.4 Exterior wall envelope.

Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

ADDED - 107.2.5 REQUIRES CONSTRUCTION DOCUMENTS BE ACCOMPANIED BY A SITE PLAN

107.2.5 Site plan.

The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

ADDED - 107.2.5.2 PERMITS SITE PLANS TO BE MAINTAINED AS ELECTRONIC COPIES AT THE WORKSITE

107.2.5.2.

For the purpose of inspection and record retention, site plans for a building may be maintained in the form of an electronic copy at the worksite. These plans must be open to inspection by the building official or a duly authorized representative, as required by the Florida Building Code.

SECTION 109: FEES

UPDATED - 109.4 ALLOWS BUILDING OFFICIAL TO ESTABLISH THE FEE/PENALTY FOR BEGINNING WORK BEFORE ISSUANCE OF A PERMIT

109.4 Work commencing before permit issuance.

Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees.

CHAPTER 2: DEFINITIONS

SECTION 202: DEFINITIONS

ADDED, DELETED, UPDATED - MULTIPLE CHANGES TO DEFINITIONS WITH NEWLY ADDED, DELETED, AND/OR MODIFIED.

The following is some of the newly added definitions

CARE SUITE – A group of treatment rooms, care recipient sleeping rooms and their associated support rooms or space and circulation space within Group I-2 occupancies where staff are in attendance for supervision of all care recipients within the suite, and the suite is in compliance with the requirements of Section 407.4.3.

CUSTODIAL CARE – Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. Custodial care includes persons receiving care who evacuate at a slower rate and/or who have mental and psychiatric complications.

FIXED SEATING - Furniture or fixture designed and installed for the use of sitting and secured in place including bench-type seats and seats with or without backs or arm rests.

HELIPAD - A structural surface that is used for the landing, taking off, taxiing and parking of helicopters.

HIGH-PRESSURE DECORATIVE EXTERIOR-GRADE COMPACT LAMINATE (HPL) – Panels consisting of layers of cellulose fibrous material impregnated with thermosetting resins and bonded together by a high- pressure process to form a homogeneous nonporous core suitable for exterior use.

L RATING – The air leakage rating of through penetration firestop system or a fire-resistant joint system when tested in accordance with UL 1479 or UL 2079, respectively.

LIVE/WORK UNIT – A dwelling unit or sleeping unit in which a significant portion of the space includes a nonresidential use that is operated by the tenant.

RETRACTABLE AWNING – A retractable awning is a cover with a frame that retracts against a building or other structure to which it is entirely supported.

SELF-SERVICE STORAGE FACILITY – Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

SUSCEPTIBLE BAY – A roof or portion thereof with:

1. A slope less than $^{1\!\!/}_{4}$ inch per foot (0.0208 rad); or

2. On which water is impounded upon it, in whole or in part, and the secondary drainage system is functional but the primary drainage system is blocked. A roof surface with a slope of ¼ inch per foot (0.0208 rad) or greater towards points of free drainage is not a susceptible bay.

TECHNICAL PRODUCTION AREA - Open

elevated areas or spaces intended for entertainment technicians to walk on and occupy for servicing and operating entertainment technology systems and equipment. Galleries, including fly and lighting galleries, gridirons, catwalks, and similar areas are designed for these purposes.

<u>CHAPTER 4: SPECIAL DETAILED</u> <u>REQUIREMENTS BASED ON USE AND</u> <u>OCCUPANCY</u>

SECTION 402: COVERED MALL AND OPEN MALL BUILDINGS

ADDED – 402.4.3 REQUIRES A MINIMUM OF 20 FEET OF OPEN SPACE BETWEEN FLOOR AND ROOF ASSEMBLIES AND MALL OF OPEN MALL BUILDINGS

402.4.3 Open mall construction.

Floor assemblies in, and roof assemblies over, the open mall of an open mall building shall be open to the atmosphere for not less than 20 feet (9096 mm), measured perpendicular from the face of the tenant spaces on the lowest level, from edge of balcony to edge of balcony on upper floors and from edge of roofline to edge of roof line. The openings within, or the unroofed area of, an open mall shall extend from the lowest/grade level of the open mall through the entire roof assembly. Balconies on upper levels of the mall shall not project into the required width of the opening.

SECTION 406: MOTOR-VEHICLE-RELATED-OCCUPANCIES

UPDATED - 406.3.4 REVISED TO REQUIRE DOOR OPENINGS BETWEEN A PRIVATE GARAGE AND THE DWELLING UNIT TO BE A SOLID WOOD DOOR, OR SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1- 3/8 INCHES (34.9 MM) IN THICKNESS, OR DOORS IN COMPLIANCE WITH SECTION 716.5.3 WITH A FIRE PROTECTION RATING OF NOT LESS THAN 20 MINUTES. SEPARATION REQUIREMENTS FROM A DWELLING UNIT AND ITS ATTIC AREA MUST PROVIDE A COMPLETE SEPARATION BETWEEN THE GARAGE AREAS AND ANY HABITABLE AREAS OF THE DWELLING UNIT AND PROVIDE PROTECTION OF ASSEMBLY-SUPPORTING WALLS AND MEMBERS

406.3.4 Separation.

Separations shall comply with the following:

1. The private garage shall be separated from the dwelling unit and its attic area by means of gypsum board, not less than 1/2 inch (12.7 mm) in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8 inch (15.9 mm) Type X gypsum board or equivalent and 1/2 inch (12.7 mm) gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) in thickness, or doors in compliance with Section 716.5.3 with a fire protection rating of not less than 20 minutes. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.

2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit, including its attic area, from the garage shall be constructed of sheet steel of not less than 0.019 inches (0.48 mm), in thickness, and shall have no openings into the garage.

3. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above

ADDED – 406.5.2.1 REQUIRES THE OUTSIDE HORIZONTAL CLEAR SPACE MEASURE PERPENDICULAR TO THE OPENING BE 1-1/2 TIMES THE DEPTH OF THE OPENING WHERE OPENINGS BELOW GRADE PROVIDE NATURAL VENTILATION

406.5.2.1 Openings below grade.

Where openings below grade provide required natural ventilation, the outside horizontal clear space shall be one and one half times the depth of the opening. The width of the horizontal clear space shall be maintained from grade down to the bottom of the lowest required opening.

SECTION 407: GROUP I-2

UPDATED – 407.5.1 WHEN A SMOKE COMPARTMENT IS ADJOINED BY TWO OR

MORE SMOKE COMPARTMENTS, THE MINIMUM AREA OF THE REFUGE AREA MUST BE SIZED TO ACCOMMODATE THE LARGEST OCCUPANT LOAD OF THE ADJOINING COMPARTMENTS

407.5.1 Refuge area.

Refuge areas shall be provided within each smoke compartment. The size of the refuge area shall accommodate occupants and care recipients from the adjoining smoke compartment. Where a smoke compartment is adjoined by two or more smoke compartments, the minimum area of the refuge area shall accommodate the largest occupant load of the adjoining compartments. The size of the refuge area shall provide the following:

1. Not less than 30 net square feet (2.8 \mbox{m}^2 those parent for each care recipient confined to bed or litter.

2. Not less than 6 ft.² (0.56 m^2) for each ambulatory care recipient not confined to bed or litter and for other occupants. Areas or spaces permitted to be included in the calculation of refuge area are corridors, sleeping areas, treatment rooms, lounge and dining areas and other low-hazard areas.

SECTION 419: LIVE/WORK UNITS

UPDATED – 419.3 MEANS OF EGRESS FOR A LIVE/WORK UNIT IS BASED ON THE FUNCTION SERVED

419.3 Means of egress.

Except as modified by this section, the means of egress components for a live/work unit shall be designed in accordance with Chapter 10 for the function served.

ADDED – 419.9 THE NONRESIDENTIAL AREA OF A LIVE/WORK UNIT MUST BE PROVIDED WITH PLUMBING FACILITIES BASED ON THE AREA'S FUNCTION

419.9 Plumbing facilities.

The nonresidential area of the live/work unit shall be provided with minimum plumbing facilities as specified by Chapter 29, based on the function of the nonresidential area. Where the nonresidential area of the live/work unit is required to be accessible by the Florida building Code, Accessibility, the plumbing fixtures specified by Chapter 29 shall be accessible.

<u>CHAPTER 5: GENERAL BUILDING HEIGHTS</u> <u>AND AREAS</u>

SECTION 507: UNLIMITED AREA BUILDINGS

UPDATED – 507.3 CLARIFIES THAT GROUPS B, F, M OR S CAN BE OF ANY CONSTRUCTION TYPE. BUILDINGS MUST BE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM THROUGHOUT

507.3 Sprinklered, one-story.

The area of a group B, F, M or S building no more than one story above grade plane of any construction type, or the area of a group A-4 building no more than one story above grade plane of other than Type V construction, shall not be limited where the building is provided with an automatic sprinkler system throughout in accordance with section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18288 mm) in width. **Exceptions:**

1. Buildings and structures of Types I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of section 507.3 and 903.3.1.1 and the Florida Fire Prevention Code.

2. The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in group A-4, provided that:

2.1 Exit doors directly to the outside are provided for occupants of the participant sports areas; and

2.2 The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.

CHAPTER 6: TYPES OF CONSTRUCTION

SECTION 601 - GENERAL

UPDATED – TABLE 601 REVISES FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS

> SECTION 602 CONSTRUCTION CLASSIFICATION

UPDATED – TABLE 602 REVISES FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS

Reference Tables 601 & 602 and on the following page

CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES

SECTION 711: HORIZONTAL ASSEMBLIES

ADDED – 711.4.1 REQUIRES JOINTS IN OR BETWEEN FLOOR ASSEMBLIES WITHOUT A REQUIRED FIRE-RESISTANCE RATING TO COMPLY WITH ONE OF THE FOLLOWING (EXCEPTIONS ARE JOINTS MEETING ONE OF THE JOINT EXCEPTIONS IN SECTION 715.1)

1. JOINT CONCEALED WITHIN THE CAVITY OF A WALL

2. JOINT LOCATED ABOVE A CEILING

3. JOINT SEALED, TREATED OR COVERED WITH APPROVED MATERIAL OR SYSTEM TO RESIST FREE PASSAGE OF FLAMES AND PRODUCTS OF COMBUSTION

711.4.1 Non-fire-resistance-rated assemblies.

Joints in or between floor assemblies without a required fire-resistance rating shall comply with one of the following:

1. The joint shall be concealed within the cavity of a wall.

2. The joint shall be located above a ceiling.

3. The joint shall be sealed, treated or covered with an approved material or system to resist the free passage of flame and the products of combustion.

Exception: Joints meeting one of the joint exceptions listed in Section 715.1

Table 601 Fire-Resistance Rating Requirements for Building Elements (Hours)

BUILDING ELEMENT		TYPE I		TYPE II TYPE III			TYPE IV	TYPE V	
		в	Ad	в	Ad	в	HT	Ad	в
Primary structural frame ⁹ (see Section 202)	3ª	2ª	1	0	1	0	HT	1	0
Bearing walls									
Exterior ^{f. g}	3	2	1	0	2	2	2	1	0
Interior	3ª	2ª	1	0	1	0	1/HT	1	0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior ^e	0	0	0	0	0	0	See Section 602.4.6	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°	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 shall be allowed where a 1-hour or less fire-resistance rating is required.

d. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.

e. Not less than the fire-resistance rating required by other sections of this code.

f. Not less than the fire-resistance rating based on fire separation distance (see Table 602).

g. Not less than the fire-resistance rating as referenced in Section 704.10

Table 602 Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance ^{a, e, h}

FIRE SEPARATION DISTANCE = X (feet)			OCCUPANCY	OCCUPANCY	
	TTPE OF CONSTRUCTION	OCCUPANCE GROUP H	GROUP F-1, M, S-1 ⁹	GROUP A, B, E, F-2, I, R, S-2 ⁹ , U ^b	
X < 5°	All	3	2	1	
5 ≤ X < 10	IA	3	2	1	
	Others	2	1	1	
10 ≤ X < 30	IA, IB	2	1	1 ^d	
	IIB, VB	1	0	0	
	Others	1	1	1 ^d	
X ≥ 30	All	0	0	0	

For SI: 1 foot = 304.8 mm

a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.

b. For special requirements for Group U occupancies, see Section 406.3.

c. See Section 706.1.1 for party walls.

d. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.

e. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.

f. For special requirements for Group H occupancies, see Section 415.5.

g. For special requirements for Group S aircraft hangars, see Section 412.4.1.

h. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.

SECTION 716: OPENING PROTECTIVES

ADDED – 716.5.9.1.1 – IN CASE OF A LATCH SPRING FAILURE DURING A FIRE,

REQUIRES POSITIVE LATCHING FOR CHUTE INTAKE DOORS AND THAT CHUTE DOORS REMAIN LATCHED AND CLOSED

716.5.9.1.1 Chute intake door latching.

Chute intake doors shall be positive latching, remaining latched and closed in the event of latch spring failure during a fire emergency.

CHAPTER 9: FIRE PROTECTION SYSTEMS

SECTION 901: GENERAL

ADDED – 901.8 – REQUIREMENTS FOR DESIGN, SIZE AND LAYOUT OF PUMP AND RISER ROOMS ENSURING ADEQUATE CLEARANCE FOR MAINTENANCE AND REPAIRS OF EQUIPMENT.

901.8 Pump and riser room size.

Fire pump and automatic sprinkler system riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance- rated assembly. Fire pump and automatic sprinkler system riser rooms shall be provided with a door(s) and unobstructed passageway large enough to allow removal of the largest piece of equipment.

SECTION 907: FIRE ALARM AND DETECTION SYSTEMS

ADDED – 907.2.1.2 REQUIRES CAPTIONING OF PUBLIC ANNOUNCEMENTS IN STADIUMS, ARENAS AND GRANDSTANDS

907.2.1.2 Emergency voice/alarm communication captions.

Stadiums, arenas and grandstands required to caption audible public announcements shall be in accordance with Section 907.5.2.2.4

ADDED – 907.2.9.3 – REQUIRES INTERCONNECTION OF R-2 COLLEGE AND UNIVERSITY BUILDINGS' INDIVIDUAL DWELLING SMOKE ALARMS TO THE BUILDING'S FIRE ALARM AND DETECTION SYSTEM AND REQUIRES TIE-IN OF NOTIFICATION SYSTEM IN PUBLIC AND

COMMON SPACES TO A SMOKE DETECTION SYSTEM

907.2.9.3 Group R-2 college and university buildings.

An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 college and university buildings in the following locations:

1. Common spaces outside of dwelling units and sleeping units.

2. Laundry rooms, mechanical equipment rooms, and storage rooms.

3. All interior corridors serving sleeping units or dwelling units.

Required smoke alarms in dwelling units and sleeping units in Group R-2 college and university buildings shall be interconnected with the fire alarm system in accordance with NFPA 72. **Exception:**

An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units or dwelling units and where each sleeping unit or dwelling unit either has a means of egress door opening directly to an exterior exit access that leads directly to an exit or a means of egress door opening directly to an exit

ADDED – 907.4.2.6 – REQUIRES THE UNOBSTRUCTED ACCESSIBILITY OF MANUAL FIRE ALARM BOXES

907.4.2.6 Unobstructed and unobscured.

Manual fire alarm boxes shall be accessible, unobstructed, unobscured and visible at all times.

ADDED – 907.5.2.2.4 – REQUIRES CAPTIONING OF MASS ALARM SIGNALS IN STADIUMS, ARENAS AND GRANDSTANDS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, ACCESSIBILITY

907.5.2.2.4 Emergency voice/alarm communication captions

Where stadiums, arenas and grandstands are required to caption audible public announcements in accordance with the Florida Building Code, Accessibility, the emergency/voice alarm communication system shall also be captioned. Prerecorded or live emergency captions shall be from an approved location constantly attended by personnel trained to respond to an emergency.

CHAPTER 10: MEANS OF EGRESS

SECTION 1001: ADMINISTRATION

ADDED – 1001.4 – REQUIRES FIRE SAFETY EVACUATION PLANS WHERE REQUIRED BY THE FLORIDA FIRE PREVENTION CODE AND FURTHER REQUIRES THAT SUCH

PLANS ARE IN COMPLIANCE WITH THE FLORIDA FIRE PREVENTION CODE

1001.4 Fire safety and evacuation plans.

Fire safety and evacuation plans shall be provided for all occupancies and buildings where required by the Florida Fire Prevention Code. Such fire safety and evacuation plans shall comply with the applicable provisions of the Florida Fire Prevention Code.

SECTION 1003: GENERAL MEANS OF EGRESS

UPDATED – 1003.5 – REQUIRES ANY CHANGE IN ELEVATION OF MEANS OF EGRESS TO BE BY RAMPS OR SLOPED WALKWAYS FOR GROUP I-2 OCCUPANCIES

1003.5 Elevation change.

Where changes in elevation of less than 12 inches (305 mm) exist in the means of egress, sloped surfaces shall be used. Where the slope is greater than one unit vertical in 20 units horizontal (5-percent slope), ramps complying with Section 1010 shall be used. Where the difference in elevation is 6 inches (152 mm) or less, the ramp shall be equipped with either handrails or floor finish materials that contrast with adjacent floor finish materials.

Exceptions:

1. A single step with a maximum riser height of 7 inches (178 mm) is permitted for buildings with occupancies in Groups F, H, R-2, R-3, S and U at exterior doors not required to be accessible by Chapter 11.

2. A stair with a single riser or with two risers and a tread is permitted at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1009.7, the minimum depth of the tread is 13 inches (330 mm) and at least one handrail complying with Section 1012 is provided within 30 inches (762 mm) of the centerline of the normal path of egress travel on the stair.

3. A step is permitted in aisles serving seating that has a difference in elevation less than 12 inches (305 mm) at locations not required to be accessible by Chapter 11, provided that the risers and treads comply with Section 1028.11 and the aisle is provided with a handrail complying with Section 1028.13.

Throughout a story in a Group I-2 occupancy, any change in elevation in portions of the means of egress that serve non-ambulatory persons shall be by means of a ramp or sloped walkway. SECTION 1004: OCCUPANT LOAD

ADDED - 1004.1.1 – SETS REQUIREMENTS FOR CUMULATIVE OCCUPANT LOADS FOR EGRESS TO SECTION STANDARDS

1004.1.1 Cumulative occupant loads.

Where the path of egress travel includes intervening rooms, areas or spaces, cumulative occupant loads shall be determined in accordance with this section.

ADDED - 1004.1.1.1 - REQUIRES DESIGN OCCUPANT LOAD TO BE BASED ON CUMULATIVE OCCUPANT LOADS OF ALL ROOMS WHERE OCCUPANTS EGRESS FROM ONE ROOM, AREA OR SPACE THROUGH ANOTHER

1004.1.1.1 Intervening spaces.

Where occupants egress from one room, area or space through another, the design occupant load shall be based on the cumulative occupant loads of all rooms, areas or spaces to that point along the path of egress travel.

SECTION 1005: MEANS OF EGRESS SIZING

UPDATED – 1005.1 TO 1005.6 – REVISES MEANS OF EGRESS SIZING

1005.1 General.

All portions of the means of egress system shall be sized in accordance with this section. **Exception:**

Means of egress complying with Section 1028.

1005.2 Minimum width based on component.

The minimum width, in inches (mm), of any means of egress components shall not be less than that specified for such component, elsewhere in this code.

1005.3 Required capacity based on occupant load.

The required capacity, in inches (mm), of the means of egress for any room, area, space or story shall not be less than that determined in accordance with Sections 1005.3.1 and 1005.3.2.

1005.3.1 Stairways.

The capacity, in inches (mm), of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.3 inch (7.6 mm) per occupant. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required capacity of the stairways serving that story. **Exception:** 2014 Florida Advanced Building Code: Building - Significant Changes

For other than Group H and I-2 occupancies, the capacity, in inches (mm), of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

1005.3.2 Other egress components.

The capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant.

Exception:

For other than Group H and I-2 occupancies, the capacity, in inches (mm), of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

1005.4 Continuity.

The capacity of the means of egress required from any story of a building shall not be reduced along the path of egress travel until arrival at the public way.

1005.5. Distribution of egress capacity.

Where more than one exit, or access to more than one exit, is required, the means of egress shall be configured such that the loss of any one exit, or access to one exit, shall not reduce the available capacity to less than 50 percent of the required capacity.

1005.6 Egress convergence.

Where the means of egress from stories above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall not be less than the sum of the required capacities for the two adjacent stories.

SECTION 1011: EXIT SIGNS

ADDED – 1011.2 – ESTABLISHES REQUIREMENTS FOR LOW-LEVEL EXIT SIGNS IN GROUP R-1 OCCUPANCIES

1011.2 Floor-level exit signs in Group R-1.

Where exit signs are required in Group R-1 occupancies by Section1011.1, additional low-level exit signs shall be provided in all areas serving guestrooms in Group R-1 occupancies

and shall comply with Section 1011.5. The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 12 inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.

SECTION 1015: EXIT AND EXIT ACCESS DOORWAYS

ADDED - 1015.6 – CLARIFIES REQUIREMENTS FOR MEANS OF EGRESS FOR DAY CARE OCCUPANCIES

1015.6 Day care means of egress.

Day care facilities, rooms or spaces where care is provided for more than 10 children that are 2-1/2 years of age or less, shall have access to not less than two exits or exit access doorways.

SECTION 1017: AISLES

ADDED - 1017.5 – ESTABLISHES REQUIREMENTS FOR MINIMUM CLEAR AISLE WIDTH IN ROOMS OR SPACES OTHER THAN ASSEMBLY OR GROUP B OR M SPACES

1017.5 Aisles in other than assembly spaces and Groups B and M.

In other than rooms or spaces used for assembly purposes and Group B and M occupancies, the minimum clear aisle width shall be determined by Section 1005.1 for the occupant load served, but shall not be less than 36 inches (914 mm).

SECTION 1028: ASSEMBLY

ADDED – 1028.1.1 BLEACHERS, GRANDSTANDS AND FOLDING AND TELESCOPIC SEATING, THAT ARE NOT BUILDING ELEMENTS, SHALL COMPLY WITH ICC 300

ADDED – 1028.1.1.1 REQUIRES SPACES UNDER GRANDSTANDS AND BLEACHERS TO BE SEPARATED BY FIRE BARRIERS AND HORIZONTAL ASSEMBLIES WHEN SUCH SPACES ARE USED FOR PURPOSES OTHER THAN TICKET BOOTHS (LESS THAN 100 SF) AND TOILET ROOMS

1028.1.1.1 Spaces under grandstands and bleachers.

When spaces under grandstands or bleachers are used for purposes other than ticket booths less than 100 square feet (9.29 m2) and toilet rooms, such spaces shall be separated by fire barriers complying with Section 707 and horizontal assemblies complying with Section 711 with not less than 1-hour fire- resistancerated construction.

CHAPTER 12: INTERIOR ENVIRONMENT

SECTION 1203: VENTILATION

UPDATED – 1203.2 – CHANGES REQUIREMENTS FOR NET FREE VENTILATION OF VENTILATED SPACE

1203.2 Attic spaces.

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof framing members shall have cross ventilation for each separate space by ventilation openings protected against the entrance of rain and snow. Blocking and bridging shall be arranged so as not to interfere with the movement of air. An airspace of not less than 1 inch (25 mm) shall be provided between the insulation and the roof sheathing. The net free ventilating area shall not be less than 1/150th of the area of the space ventilated. Exceptions:

1. The net free cross-ventilation area shall be permitted to be reduced to 1/300 provided that not less than 50 percent and not more than 80 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

2. The net free cross-ventilation area shall be permitted to be reduced to 1/300 where a Class I or II vapor barrier is installed on the warm-inwinter side of the ceiling.

3. Attic ventilation shall not be required when determined not necessary by the building official due to atmospheric or climatic conditions.

CHAPTER 14: EXTERIOR WALLS

SECTION 1403: PERFORMANCE REQUIREMENTS

ADDED – 1403.5 – REQUIRES TESTING AND COMPLIANCE OF COMBUSTIBLE WATER-RESISTIVE BARRIERS ON EXTERIOR WALLS OF CERTAIN TYPES OF CONSTRUCTION

1403.5 Vertical and lateral flame propagation.

Exterior walls on buildings of Type I, II, III or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and contain a combustible water-resistive barrier shall be tested in accordance with and comply with the acceptance criteria of NFPA 285.

SECTION 1404: MATERIALS

ADDED – 1404.12 – PROVIDES REGULATIONS FOR FLAME SPREAD INDEX, HEAT RELEASE AND FIRE SEPARATION DISTANCE OF POLYPROPYLENE SIDING

1404.12 Polypropylene siding.

Polypropylene siding shall be certified and labeled as conforming to the requirements of ASTM D 7254 and those of Section 1404.12.1 or 1404.12.2 by an approved quality control agency. Polypropylene siding shall be installed in accordance with the requirements of Section 1405.18 and in accordance with the manufacturer's installation instructions. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.

SECTION 1405: INSTALLATION OF WALL COVERINGS

UPDATED – 1405.7 – DISTINGUISHES BETWEEN WOOD STUD BACKING AND COLD-FORMED STEEL STUD BACKING, AND ADDS NEW REQUIREMENTS FOR COLD-FORMED STEEL STUD BACKING

1405.7 Stone veneer.

Stone veneer units not exceeding 10 inches (254 mm) in thickness shall be anchored directly to masonry, concrete or to stud construction by one of the following methods:

1. With concrete or masonry backing, anchor ties shall be not less than 0.1055-inch (2.68 mm) corrosion-resistant wire, or approved equal, formed beyond the base of the backing. The legs of the loops shall be not less than 6 inches (152 mm) in length bent at right angles and laid in the mortar joint, and spaced so that the eyes or loops are 12 inches (305 mm) maximum on center (o.c.) in both directions. There shall be provided not less than a 0.1055- inch (2.68 mm) corrosion-resistant wire tie, or approved equal, threaded through the exposed loops for every 2 square feet (0.2 m2) of stone veneer. This tie shall be a loop having legs not less than 15 inches (381 mm) in length bent so that it will lie in the stone veneer mortar joint. The last 2 inches (51 mm) of each wire leg shall have a right-angle bend. One-inch (25 mm) minimum thickness of cement grout shall be placed between the backing and the stone veneer.

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2. With wood stud backing, a 2-inch by 2-inch (51 by 51 mm) 0.0625-inch (1.59 mm) zinccoated or non-metallic coated wire mesh with two lavers of water-resistive barrier in accordance with Section 1404.2 shall be applied directly to wood studs spaced a maximum of 16 inches (406 mm) o.c. On studs, the mesh shall be attached with 2-inch long (51 mm) corrosion-resistant steel wire furring nails at 4 inches (102 mm) o.c. providing a minimum 1.125- inch (29 mm) penetration into each stud and with 8d annular threaded nails at 8 inches (203 mm) o.c. into top and bottom plates or with equivalent wire ties. There shall be not less than a 0.1055-inch (2.68 mm zinc-coated or nonmetallic coated wire, or approved equal, attached to the stud with a minimum of an 8d (0.120 in. diameter) annular threaded nail for every 2 square feet (0.2 m2) of stone veneer. This tie shall be a loop having legs not less than 15 inches (381 mm) in length, so bent that it will lie in the stone veneer mortar joint. The last 2 inches (51 mm) of each wire leg shall have a right-angle bend. One-inch (25 mm) minimum thickness of cement grout shall be placed between the backing and the stone veneer.

3. With cold-formed steel stud backing, a 2inch by 2-inch (51 by 51 mm) 0.0625-inch (1.59 mm) zinc-coated or nonmetallic coated wire mesh with two layers of water-resistive barrier in accordance with Section 1404.2 shall be applied directly to steel studs spaced a maximum of 16 inches (406 mm) o.c. The mesh shall be attached with corrosion-resistant #8 self-drilling, tapping screws at 4 inches (102 mm) o.c., and at 8 inches (203 mm) o.c. into top and bottom tracks or with equivalent wire ties. All screws shall extend through the steel connection a minimum of three exposed threads. There shall be not less than a 0.1055-inch (2.68 mm) corrosionresistant wire, or approved equal, attached to the stud with a minimum of a #8 self-drilling, tapping screw extending through the steel framing a minimum of three exposed threads for every 2 square feet (0.2 m2) of stone veneer. This tie shall be a loop having legs not less than 15 inches (381 mm) in length, so bent that it will lie in the stone veneer mortar joint. The last 2 inches (51 mm) of each wire leg shall have a right-angle bend. One-inch (25 mm) minimum thickness of cement grout shall be placed between the backing and the stone veneer. The cold-formed steel framing members shall have a minimum bare steel thickness of 0.0428 inches (1.087 mm).

ADDED - 1405.10.1.2 - ADDS REQUIREMENTS FOR FLASHING AT FOUNDATIONS OF EXTERIOR ADHERED MASONRY

1405.10.1.2 Flashing at foundation.

A corrosion-resistant screed or flashing of a minimum 0.019-inch (0.48 mm) or 26 gauge galvanized or plastic with a minimum vertical attachment flange of 3-1/2 inches (89 mm) shall be installed to extend a minimum of 1 inch (25

mm) below the foundation plate line on exterior stud walls in accordance with Section 1405.4. The water-resistive barrier shall lap over the exterior of the attachment flange of the screed or flashing.

ADDED - 1405.10.1.3 – SPECIFIES MINIMUM CLEARANCES ABOVE GROUND FOR EXTERIOR ADHERED MASONRY

1405.10.1.3 Clearances.

On exterior stud walls, adhered masonry veneer shall be installed a minimum of 4 inches (102 mm) above the earth, or a minimum of 2 inches (51 mm) above paved areas, or a minimum of $\frac{1}{2}$ inch (12 mm) above exterior walking surfaces which are supported by the same foundation that supports the exterior wall.

ADDED – 1405.10.2 – NEW REQUIREMENTS FOR PORCELAIN TILE AS A VENEER FOR EXTERIOR ADHERED MASONRY

1405.10.2 Exterior adhered masonry veneers - porcelain tile.

Adhered units shall not exceed 5/8 inch (15.8 mm) thickness and a maximum of 24 inches (610 mm) in any face dimension nor more than 3 square feet (0.28 m2) in total face area and shall not weigh more than 9 pounds psf (0.43 kN/m2). Porcelain tile shall be adhered to an approved backing system.

ADDED – 1405.18 – ESTABLISHES LIMITATIONS FOR POLYPROPYLENE SIDING

1405.18 Polypropylene siding.

Polypropylene siding con- forming to the requirements of this section and complying with Section 1404.12 shall be limited to exterior walls of Type VB construction located in areas where the wind speed specified in Chapter 16 does not exceed 100 miles per hour (45 m/s) and the building height is less than or equal to 40 feet (12192 mm) in Exposure C. Where construction is located in areas where the basic wind speed exceeds 100 miles per hour (45 m/s), or building heights are in excess of 40 feet (12 192 mm), tests or calculations indicating compliance with Chapter 16 shall be submitted. Polypropylene siding shall be installed in accordance with the manufacturer's installation instructions. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.

SECTION 1406: COMBUSTIBLE MATERIALS ON THE EXTERIOR SIDE OF EXTERIOR WALLS

ADDED – 1406.2.3 – ADDS EXCEPTION FOR SPACING BETWEEN THE BACK OF THE EXTERIOR WALL COVERING AND THE

EXTERIOR WALL WHEN THE SPACE IS NOT REQUIRED TO BE FIREBLOCKED

1406.2.3 Fire-blocking.

Where the combustible exterior wall covering is furred out from the exterior wall and forms a solid surface, the distance between the back of the exterior wall covering and the exterior wall shall not exceed 1-5/8 inches (41 mm). The concealed space thereby created shall be fireblocked in accordance with Section 718. Exception: The distance between the back of the exterior wall covering and the exterior wall shall be permitted to exceed 1-5/8 inches (41 mm) where the concealed space is not required to be fire-blocked by Section 718.

CHAPTER 15: ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

SECTION 1505: FIRE CLASSIFICATION

UPDATED – 1505.2 – CLASSIFIES CERTAIN COPPER SHEETS AS CLASS A ROOF ASSEMBLIES

1505.2 Class A roof assemblies.

Class A roof assemblies are those that are effective against severe fire test exposure. Class A roof assemblies and roof coverings shall be listed and identified as Class A by an approved testing agency. Class A roof assemblies shall be permitted for use in buildings or structures of all types of construction.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.

2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.

3. Class A roof assemblies include minimum 16 oz/sq.ft. (0.0416 kg/m2) copper sheets installed over combustible decks.

SECTION 1507: REQUIREMENTS FOR ROOF COVERINGS

UPDATED – 1507.2.8 – REVISED UNDERLAYMENT INSTALLATION REQUIREMENTS AS IT PERTAINS TO ASPHALT SHINGLES

1507.2.8 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. For roof slopes from two units vertical in 12 units horizontal (17- percent slope), and less than four units vertical in 12 units horizontal (33-

percent slope). Underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV or ASTM D 6757 and shall be two layers applied in the following manner. Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches on center (305 mm), and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations.

2. For roof slopes of four units vertical in 12 units horizontal (33- percent slope) or greater. Underlayment shall comply with ASTM D 226, Type II or ASTMD 4869, Type IV or ASTM D 6757 and shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations. End laps shall be offset by 6 feet (1829 mm).

3. As an alternative, the entire roof deck shall be covered with an approved self-adhering polymer modified bitumen sheet meeting ASTM D 1970 or an approved self-adhering synthetic underlayment installed in accordance with the manufacturer's installation instructions.

UPDATED – 1507.4.5.1 - CHANGES UNDERLAYMENT REQUIREMENTS AS IT RELATES TO METAL ROOF PANELS

1507.4.5.1 Underlayment.

Underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV or ASTM D 1970 or ASTM D 6757.

UPDATED – 1507.5.3.2 – CHANGES UNDERLAYMENT APPLICATION REQUIREMENTS AS IT PERTAINS TO METAL ROOF SHINGLES

1507.5.3.2 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. Two layer underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV or ASTM D 6757. Apply a 19inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations.

2. One layer underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV or ASTM D 6757. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations. End laps shall be offset by 6 feet (1829 mm).

3. As an alternative, the entire roof deck shall be covered with an approved self-adhering polymer modified bitumen sheet meeting ASTM D 1970 or an approved self-adhering synthetic underlayment installed in accordance with the manufacturer's installation instructions.

UPDATED – 1507.6.3.2 – CHANGES UNDERLAYMENT INSTALLATION REQUIREMENTS AS IT PERTAINS TO MINERAL- SURFACED ROLL ROOFING

1507.6.3.2 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. Two-layer underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV or ASTM D 6757. Apply a 19inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations.

2. One layer underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV or ASTM D 6757. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations. End laps shall be offset by 6 feet (1829 mm).

3. As an alternative, the entire roof deck shall be covered with an approved self-adhering polymer modified bitumen sheet meeting ASTM D 1970 or an approved self-adhering synthetic underlayment installed in accordance with the manufacturer's installation instructions.

UPDATED – 1507.7.3.2 - CHANGES UNDERLAYMENT INSTALLATION REQUIREMENTS AS IT PERTAINS TO SLATE SHINGLES

1507.7.3.2 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. Two layer underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV or ASTM D 6757. Apply a 19inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations.

2. One layer underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV or ASTM D 6757. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. Synthetic underlayment shall be fastened in accordance with this section and the manufacturer's recommendations. End laps shall be offset by 6 feet (1829 mm).

3. As an alternative, the entire roof deck shall be covered with an approved self-adhering polymer modified bitumen sheet meeting ASTM D 1970 or an approved self-adhering synthetic underlayment installed in accordance with the manufacturer's installation instructions.

UPDATED – 1507.8.3.2 - CHANGES UNDERLAYMENT INSTALLATION

REQUIREMENTS AS IT PERTAINS TO WOOD SHINGLES

1507.8.3.2 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. Two layer underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV. Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center.

2. One layer underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. End laps shall be offset by 6 feet (1829 mm).

UPDATED – 1507.9.3.2 - CHANGES UNDERLAYMENT INSTALLATION REQUIREMENTS AS IT PERTAINS TO WOOD SHAKES

1507.9.3.2 Underlayment application.

Underlayment shall be installed using one of the following methods:

1. Two layer underlayment shall comply with ASTM D 226, Type I or Type II or ASTM D 4869, Type II or Type IV. Apply a 19-inch (483 mm) strip of underlayment felt parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment, overlapping successive sheets 19 inches (483 mm), and fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with one row in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6inches (152 mm) on center.

2. One layer underlayment shall comply with ASTM D 226, Type II or ASTM D 4869, Type IV. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened with 1-inch (25 mm) round plastic cap, metal cap nails or nails and tin-tabs attached to a nailable deck with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches (305 mm) on center, and one row at the overlaps fastened 6 inches (152 mm) on center. End laps shall be offset by 6 feet (1829 mm).

SECTION 1509: ROOFTOP STRUCTURES

ADDED – 1509.6 – ESTABLISHES REQUIREMENTS FOR THE INSTALLATION OF MECHANICAL EQUIPMENT SCREENS

1509.6 Mechanical equipment screens.

Mechanical equipment screens shall be constructed of the materials specified for the exterior walls in accordance with the type of construction of the building. Where the fire separation distance is greater than 5 feet (1524 mm), mechanical equipment screens shall not be required to comply with the fire-resistance rating requirements.

ADDED – 1509.7 – ESTABLISHED REQUIREMENTS FOR THE DESIGN, LABELING AND INSTALLATION OF ROOF-MOUNTED PHOTOVOLTAIC SYSTEMS

1509.7 Photovoltaic systems.

Rooftop mounted photovoltaic systems shall be designed in accordance with this section.

1509.7.1 Wind resistance.

Rooftop mounted photovoltaic systems shall be designed for wind loads for component and cladding in accordance with Chapter 16 using an effective wind area based on the dimensions of a single unit frame.

1509.7.2 Fire classification.

Rooftop mounted photovoltaic systems shall have the same fire classification as the roof assembly required by Section 1505.

1509.7.3 Installation.

Rooftop mounted photovoltaic systems shall be installed in accordance with the manufacturer's installation instructions.

1509.7.4 Photovoltaic panels and modules.

Photovoltaic panels and modules mounted on top of a roof shall be listed and labeled in accordance with UL 1703 and shall be installed in accordance with the manufacturer's installation instructions.

SECTION 1511: SOLAR PHOTOVOLTAIC PANELS/MODULES

ADDED – 1511 – ADDS REQUIREMENTS FOR INSTALLATION OF PHOTOVOLTAIC PANELS ON A ROOF OR AS PART OF A ROOF ASSEMBLY

1511.1 Solar photovoltaic panels/modules.

Solar photovoltaic panels/modules installed upon a roof or as an integral part of a roof assembly shall comply with the requirements of this code and the Florida Fire Prevention Code.

1511.1.1 Structural fire resistance.

The structural frame and roof construction supporting the load imposed upon the roof by the photovoltaic panels/modules shall comply with the requirements of Table 601

CHAPTER 16: STRUCTURAL DESIGN

SECTION 1604: GENERAL DESIGN REQUIREMENTS

UPDATED – 1604.3.6 – REVISED TO ADDRESS POTENTIAL DEFLECTION REQUIREMENTS FOR CERTAIN FINISHES

1604.3.6 Limits.

The deflection limits of Section 1604.3.1 shall be used unless more restrictive deflection limits are required by a referenced standard for the element or finish material.

UPDATED – 1604.5 – REQUIRES BUILDINGS AND STRUCTURES TO BE ASSIGNED A RISK CATEGORY IN ACCORDANCE WITH TABLE 1604.5

1604.5 Risk category.

Each building and structure shall be assigned a risk category in accordance with Table 1604.5. Where a referenced standard specifies an occupancy category, the risk category shall not be taken as lower than the occupancy category specified therein.

SECTION 1605: LOAD COMBINATIONS

UPDATED - 1605.2.1

1. REQUIRES ICE-SENSITIVE STRUCTURES TO MEET THE LOAD COMBINATIONS OF ASCE 7

2. REQUIRES THE LOAD COMBINATIONS OF SECTION 2.3.3 OF ASCE 7 TO BE USED WHERE FLOOD LOADS ARE TO BE CONSIDERED IN THE DESIGN

3. WHEN CONSIDERED IN DESIGN, REQUIRES THE STRUCTURAL EFFECTS OF SELF-STRAINING LOADS IN COMBINATION WITH OTHER LOADS TO BE DETERMINED IN ACCORDANCE WITH SECTION 2.3.5 OF ASCE 7

1605.2.1 Other loads.

Where flood loads, Fa, are to be considered in the design, the load combinations of Section 2.3.3 of ASCE 7 shall be used. Where selfstraining loads, T, are considered in design, their structural effects in combination with other loads shall be determined in accordance with Section 2.3.5 of ASCE 7. Where an ice-sensitive structure is subjected to loads due to atmospheric icing, the load combinations of Section 2.3.4 of ASCE 7 shall be considered.

SECTION 1609: WIND LOADS

UPDATED - 1609.1.2.1 – REQUIRES LOUVERS TO OPEN FOR LIFE-SAVING PURPOSES

1609.1.2.1 Louvers.

Louvers protecting intake and exhaust ventilation ducts not assumed to be open that are located within 30 feet (9144 mm) of grade shall meet the requirements of ANSI/AMCA 540 or shall be protected by an impact-resistant cover complying with the large missile test of ASTM E 1996 or an approved impact-resistance standard. Louvers required to be open for life safety purposes such as providing a breathable atmosphere shall meet the requirements of AMCA 540.

UPDATED – 1609.4.2 – CHANGE IN LANGUAGE AS IT RELATES TO "SURFACE ROUGHNESS C" AND SHORT-TERM CHANGES IN PRE- EXISTING TERRAIN FOR THE PURPOSES OF DEVELOPMENT

1609.4.2 Surface roughness categories.

A ground surface roughness within each 45degree (0.79 rad) sector shall be determined for a distance upwind of the site as defined in Section 1609.4.3 from the categories defined below, for the purpose of assigning an exposure category as defined in Section 1609.4.3. **Surface Roughness B.**

Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions having the size of single- family dwellings or larger.

Surface Roughness C.

Open terrain with scattered obstructions having heights generally less than 30 feet (9144 mm). This category includes flat open country, and grasslands. This surface roughness shall also apply to any building located within surface roughness B-type terrain where the building is within 100 feet (30 m) horizontally in any direction of open areas of surface roughness C or D-type terrain that extends more than 600 feet (182.9 m) in the upwind direction and a width greater than 150 feet (46 m).

Surface Roughness D.

Flat, unobstructed areas and water surfaces. This category includes smooth mud flats, salt flats and unbroken ice. SECTION 1626: HIGH-VELOCITY HURRICANE ZONES - IMPACT TESTS FOR WIND-BORNE DEBRIS

UPDATED – 1626.2.4 – REQUIRES LARGE MISSILES TO IMPACT THE SURFACE OF THE TEST SPECIMEN AT 80 FEET PER SECOND FOR RISK CATEGORY IV BUILDINGS/STRUCTURES

1626.2.4.

The large missile shall impact the surface of each test specimen at a speed of 50 feet per second (15.2 m/s); 80 feet per second (24.38 m/s) for Risk Category IV— essential facility buildings or structures.

UPDATED – 1626.3.1 – REQUIRES ELEMENTS, ABOVE 30 FT, OF RISK CATEGORY IV BUILDINGS AND STRUCTURES TO FOLLOW THE LARGE MISSILE IMPACT TESTING IN SECTION 1626.2.4 AT 50 FEET PER SECOND

1626.3.1.

This test shall be conducted on three test specimens per test protocols TAS 201 and TAS 203. This test shall be applicable to the construction units, assemblies, and materials to be used above 30 feet (9.1 m) in height in any and all structures; Risk Category IV—essential facility buildings or structures shall follow the large missile impact testing in Section 1626.2.4 at 50 feet per second (15.2 m/s).

<u>CHAPTER 17: SPECIAL INSPECTIONS AND</u> <u>TESTS</u>

SECTION 1703: APPROVALS

ADDED - 1703.5.4 – ADDS LABELING REQUIREMENTS

1703.5.4 Method of labeling.

Information required to be permanently identified on the product shall be acid etched, sand blasted, ceramic fired, laser etched, embossed or of a type that, once applied, cannot be removed without being destroyed.

SECTION 1710: PRECONSTRUCTION LOAD TESTS

UPDATED – 1710.5.1 – CARRIES FORWARD AND RELOCATES REQUIREMENTS FROM SECTION 1715.5 OF THE 2010 FLORIDA BUILDING CODE, BUILDING, FOR QUALIFYING STRUCTURAL WIND LOAD DESIGN PRESSURES FOR WINDOW AND

DOOR UNITS OTHER THAN THE SIZE TESTED

1710.5.1.2 Glass strength.

Products tested and labeled as conforming to ANSI/AAMA/NWWDA 101/ I.S.2 or ANSI/AAMA/WDMA/101/I.S.2/NAFS or AAMA/WDMA/CSA 101/I.S.2/A440 or TAS 202 shall not be subject to the requirements of Section 2403.2, 2403.3 or 2404.1. Determination of load resistance of glass for specific loads of products not tested and certified in accordance with Section 1710.5.1 shall be designed to comply with ASTM E 1300 in accordance with Section 2404.

CHAPTER 18: SOILS AND FOUNDATIONS

SECTION 1807: FOUNDATION WALLS, RETAINING WALLS AND EMBEDDED POSTS <u>AND POLES</u>

ADDED - 1807.2.3 – REQUIRES RETAINING WALLS TO BE DESIGNED FOR SLIDING AND OVERTURNING USING A MINIMUM SAFETY FACTOR OF 1.5

1807.2.3 Safety factor.

Retaining walls shall be designed to resist the lateral action of soil to produce sliding and overturning with a minimum safety factor of 1.5 in each case. The load combinations of Section 1605 shall not apply to this requirement. Instead, design shall be based on 0.7 times nominal earthquake loads, 1.0 times other nominal loads, and investigation with one or more of the variable loads set to zero. The safety factor against lateral sliding shall be taken as the available soil resistance at the base of the retaining wall foundation divided by the net lateral force applied to the retaining wall. **Exception:**

Where earthquake loads are included, the minimum safety factor for retaining wall sliding and overturning shall be 1.1.



NOTE: The exception for earthquake loads in the code above is addressed in the Preface to the Florida Building

Code - Building 5th Edition (2014) as follows: "The Florida Building Code is based on national model building codes and national consensus standards which are amended as necessary for Florida's specific needs. However, code requirements that address snow loads and earthquake protection are pervasive; they are left in place but should not be utilized or enforced because Florida has no snow load or earthquake threat." 2014 Florida Advanced Building Code: Building - Significant Changes

SECTION 1810: DEEP FOUNDATIONS

UPDATED - 1810.3.3.1.6 – WHERE GROUPED DEEP FOUNDATION ELEMENTS ARE SUBJECTED TO UPLIFT AND ARE PLACED AT A CENTER-TO-CENTER SPACING OF AT LEAST 2-1/2 TIMES THE LEAST HORIZONTAL DIMENSION OF THE LARGEST SINGLE ELEMENT, CALCULATE THE ALLOWABLE WORKING UPLIFT LOAD AS THE LESSER OF:

1. PROPOSED INDIVIDUAL UPLIFT LOAD TIMES THE NUMBER OF ELEMENTS IN THE GROUP

2. TWO-THIRDS OF THE EFFECTIVE WEIGHT OF AND THE SOIL CONTAINED WITHIN A BLOCK DEFINED BY THE PERIMETER OF THE GROUP AND THE LENGTH OF THE ELEMENT, PLUS TWO-THIRDS OF THE ULTIMATE SHEAR RESISTANCE ALONG THE SOIL BLOCK

1810.3.3.1.6 Uplift capacity of grouped deep foundation elements.

For grouped deep foundation elements subjected to uplift, the allowable working uplift load for the group shall be calculated by an approved method of analysis. Where the deep foundation elements in the group are placed at a center-to-center spacing of at least 2.5 times the least horizontal dimension of the largest single element, the allowable working uplift load for the group is permitted to be calculated as the lesser of:

1. The proposed individual uplift working load times the number of elements in the group.

2. Two-thirds of the effective weight of the group and the soil contained within a block defined by the perimeter of the group and the length of the element, plus two-thirds of the ultimate shear resistance along the soil block.

CHAPTER 20: ALUMINUM

SECTION 2002: MATERIALS

UPDATED – 2002.6.2 – REQUIRES SUNROOMS TO BE CATEGORIZED

2002.6.2

For the purpose of applying the criteria of the AAMA/NPEA/NSA 2100, sunrooms shall be categorized in one of the following categories by the permit applicant, design professional or the property owner where the sunroom is being constructed.

Category I: A thermally isolated sunroom with walls that are either open or enclosed with

insect screening or 0.5 mm (20 mil) maximum thickness plastic film. The space is defined as a non-habitable, non-conditioned sunroom.

Category II: A thermally isolated sunroom with enclosed walls. The openings are permitted to be enclosed with translucent or transparent plastic or glass. The space is defined as a non-habitable, non-conditioned sunroom.

Category III: A thermally isolated sunroom with enclosed walls. The openings are permitted to be enclosed with translucent or transparent plastic or glass. The sunroom fenestration complies with additional requirements for air infiltration resistance and water penetration resistance. The space is defined as a non-habitable, non-conditioned sunroom.

Category IV: A thermally isolated sunroom with enclosed walls. The sunroom is designed to be heated and or cooled by a separate temperature control or system and is thermally isolated from the primary structure. The sunroom fenestration complies with additional requirements for air infiltration resistance, water penetration resistance, and thermal performance. The space is defined as a non-habitable and conditioned sunroom.

Category V: A sunroom with enclosed walls. The sunroom is designed to be heated and or cooled and is open to the main structure. The sunroom fenestration complies with additional requirements for air infiltration resistance, water penetration resistance, and thermal performance. The space is defined as a habitable and conditioned sunroom.

UPDATED – 2002.7 – PERMITS LOADS ON THE STRUCTURAL FRAME OF THE SCREEN ENCLOSURE TO BE BASED ON PORTIONS OF THE SCREEN IN THE SCREEN WALLS REMOVED, RETRACTED, MOVED TO THE OPEN POSITION OR CUT

2002.7 Alternative design method for screen enclosure.

(1) The purpose of this section is to provide an alternate method for designing aluminum screen enclosures as defined by the Florida Building Code, permitting the loads of the structural frame to be based on portions of the screen in the screen walls removed, retracted, moved to the open position, or cut. The use of framing materials other than aluminum is allowed in accordance with Section 104.11. The method applies only to walls and roofs with 100-percent screen.

(a) Screen enclosure frames designed in accordance with the screen removal alternates of this section, shall be designed using signed and sealed site-specific engineering and shall be designed in accordance with the wind load provisions of Section 1609.1.1.

(b) Designs that consider these screen alternates shall comply with Section 2002.4 and Table 2002.4, using the 110 mph (49.17 m/s) column as modified by Table 2002.4A with all screen panels in place. (c) Designs using strength design or load and resistance factor design in accordance with Section1605.2 or allowable stress design methods of Section 1605.3.1 shall be permitted.

(d) The design shall be by rational analysis or by 3D finite element analysis. Either method will be acceptable.

(2) Where screen enclosures are designed in accordance with the screen removal alternates of this section, removable screen may consist of removable panels, retractable panels, or by designating specific screen panels in the design in which the screen is to be removed by cutting the screen. Removable panels shall be removed retractable panels shall be placed in the retracted position without increasing the load on the affected area. Screen designated in the design to be cut shall be completely cut when wind speeds are forecast to exceed 75 mph (33.5 m/s). *Section 3 thru 8 not shown*

SECTION 2003: HIGH VELOCITY HURRICANE ZONES - ALUMINUM

ADDED – 2003.9.2 – REQUIRES SUNROOMS TO BE CATEGORIZED

2003.9.2 Sunroom categories.

Sunrooms shall be categorized in one of the following categories by the permit applicant, design professional, or the property owner where the sunroom is being constructed:

Category I: A roof or a covering of an outdoor space. The openings shall be permitted to be enclosed with insect screening or 0.5 mm (20 mil) maximum thickness plastic film. The space is defined as non-habitable and unconditioned.

Category II: A roof or a covering of an outdoor space with enclosed walls. The openings are permitted to be enclosed with translucent or transparent plastic or glass. The space is defined as non-habitable and unconditioned.

Category III: A roof or a covering of an outdoor space with enclosed walls. The openings are permitted to be enclosed with translucent or transparent plastic or glass. The sunroom complies with additional requirements for forced-entry resistance, air-leakage resistance and water-penetration resistance. The space is defined as non-habitable and unconditioned.

Category IV: A roof or a covering of an outdoor space with enclosed walls. The sunroom is designed to be heated and/or cooled by a separate temperature control or system and is thermally isolated from the primary structure. The sunroom complies with additional requirements for forced-entry resistance, water-penetration resistance, air-leakage resistance, and thermal performance. The space is defined as habitable and conditioned.

Category V: A roof or a covering of an outdoor space with enclosed walls. The sunroom is designed to be heated and/or cooled and is open to the main structure. The sunroom complies with additional requirements for forcedentry resistance, water-penetration resistance, air- leakage resistance, and thermal performance. The space is defined as habitable and conditioned.

CHAPTER 21: MASONRY

SECTION 2113: MASONRY CHIMNEYS

ADDED –2113.91 REQUIRES MASONRY CHIMNEYS TO HAVE A CONCRETE, METAL, OR STONE CAP TO SHED WATER, A DRIP EDGE, AND CAULKED BOND BREAK

2113.9.1 Chimney caps.

Masonry chimneys shall have a concrete, metal or stone cap, sloped to shed water, a drip edge and a caulked bond break around any flue liners in accordance with ASTM C 1283.

ADDED – 2113.9.3 REQUIRES SPECIFYING VENTILATION REQUIREMENTS WHEN RAIN CAPS ARE INSTALLED

2113.9.3 Rain caps.

Where a masonry or metal rain cap is installed on a masonry chimney, the net free area under the cap shall not be less than four times the net free area of the outlet of the chimney flue it serves.

UPDATED – 2113.20 – REQUIRES FIREBLOCKING TO BE SELF- SUPPORTING RATHER THAN EXTENDING TO A DEPTH OF 1 INCH

2113.20 Chimney fire-blocking.

All spaces between chimneys and floors and ceilings through which chimneys pass shall be fire-blocked with noncombustible material securely fastened in place. The fire-blocking of spaces between wood joists, beams or headers shall be self-supporting or be placed on strips of metal or metal lath laid across the spaces between combustible material and the chimney.

CHAPTER 22: STEEL

SECTION 2206: COMPOSITE STRUCTURAL STEEL AND CONCRETE STRUCTURES

ADDED -2206.1 – REQUIRES SYSTEMS OF STRUCTURAL STEEL ACTING COMPOSITELY WITH REINFORCED

CONCRETE TO BE DESIGNED IN ACCORDANCE WITH AISC 360 AND ACI 318

2206.1 General.

Systems of structural steel acting compositely with reinforced concrete shall be designed in accordance with AISC 360 and ACI 318, excluding ACI 318 Chapter 22. Where required, the seismic design of composite steel and concrete systems shall be in accordance with the additional provisions of Section 2206.2.

CHAPTER 23: WOOD

SECTION 2306: ALLOWABLE STRESS DESIGN

ADDED - 2306.2 - REQUIRES WOOD FRAME DIAPHRAGMS TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AF&PA SDPWS AND PERMITS PANELS FASTENED WITH STAPLES TO BE DESIGNED IN ACCORDANCE WITH TABLE 2306.2(1) OR TABLE 2306.2(2)

2306.2 Wood-frame diaphragms.

Wood-frame diaphragms shall be designed and constructed in accordance with AF&PA SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.2(1) or 2306.2(2) shall be permitted. The allowable shear values in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

UPDATED – 2306.3 - REQUIRES WOOD FRAME SHEAR WALLS TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AF&PA SDPWS AND PERMITS PANELS FASTENED WITH STAPLES TO BE DESIGNED IN ACCORDANCE WITH TABLE 2306.3(1), TABLE 2306.3(2) OR TABLE 2306.3(3)

2306.3 Wood-frame shear walls.

Wood-frame shear walls shall be designed and constructed in accordance with AF&PA SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.3(1), 2306.3(2) or 2306.3(3) shall be permitted. The allowable shear values in Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40 percent for wind design. Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AF&PA SDPWS. CHAPTER 25: GYPSUM BOARD AND PLASTER

SECTION 2510: LATHING AND FURRING FOR CEMENT PLASTER (STUCCO)

UPDATED - 2510.6 - REQUIRES INDIVIDUAL LAYERS OF WATER-RESISTIVE BARRIER TO BE INSTALLED INDEPENDENTLY SO THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE AND ANY FLASHING INTENDED TO DRAIN TO THE WATER-RESISTIVE BARRIER IS DIRECTED BETWEEN THE LAYERS

2510.6 Water-resistive barriers.

Water-resistive barriers shall be installed as required in Section 1404.2 and, where applied over wood-based sheathing, shall include a water-resistive vapor- permeable barrier with a performance at least equivalent to two layers of Grade D paper. The individual layers shall be installed independently such that each layer provides a separate continuous plane and any flashing (installed in accordance with Section 1405.4) intended to drain to the water-resistive barrier is directed between the layers. **Exception:**

Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60minute Grade D paper and is separated from the stucco by an intervening, substantially nonwaterabsorbing layer or drainage space.

CHAPTER 26: PLASTIC

SECTION 2603: FOAM PLASTIC INSULATION

ADDED - 2603.4.1.14 – PERMITS ELIMINATION OF A THERMAL BARRIER ON THE WALKING SURFACE OF A STRUCTURAL FLOOR SYSTEM CONTAINING FOAM PLASTIC INSULATION WHEN THE FOAM PLASTIC IS COVERED BY A MINIMUM NOMINAL ½" THICK WOOD STRUCTURAL PANEL OR APPROVED EQUIVALENT. THE REQUISITE THERMAL SYSTEM (SECTION 2603.4) IS REQUIRED ON THE UNDERSIDE OF THE STRUCTURAL FLOOR SYSTEM CONTAINING FOAM PLASTIC INSULATION WHEN THE UNDERSIDE OF THE STRUCTURAL FLOOR SYSTEM IS

EXPOSED TO THE INTERIOR OF THE BUILDING

2603.4.1.14 Floors.

The thermal barrier specified in Section 2603.4 is not required to be installed on the walking surface of a structural floor system that contains foam plastic insulation when the foam plastic is covered by a minimum nominal ½-inch-thick (12.7 mm) wood structural panel or approved equivalent. The thermal barrier specified in Section 2603.4 is required on the underside of the structural floor system that contains foam plastic insulation when the underside of the structural floor system is exposed to the interior of the building. **Exception:**

Foam plastic used as part of an interior floor finish.

UPDATED - 2603.7 – REQUIRES EXPOSED FOAM INSULATION USED AS INTERIOR WALL OR CEILING FINISH IN PLENUMS TO:

I. BE SEPARATED FROM THE PLENUM BY A THERMAL BARRIER IN COMPLIANCE WITH SECTION 2603.4; EXHIBIT A FLAME SPREAD INDEX OF 75 OR LESS; EXHIBIT A SMOKE-DEVELOPED INDEX OF 450 OR LESS (WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723 AT THE THICKNESS AND DENSITY INTENDED FOR USE)

2. A. EXHIBIT A FLAME INDEX OF 25 OR LESS; EXHIBIT A SMOKE-DEVELOPED INDEX OF 50 OR LESS (WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723 AT THE THICKNESS AND DENSITY INTENDED FOR USE AND SHALL MEET THE ACCEPTANCE CRITERIA OF SECTION 803.1.2 WHEN TESTED IN ACCORDANCE WITH NFPA 286)

3. BE COVERED BY CORROSION-RESISTANT STEEL WITH A BASE METAL THICKNESS OF NOT LESS THAN 0.0160"; EXHIBIT A FLAME SPREAD INDEX OF 75 OR LESS; EXHIBIT A SMOKE- DEVELOPED INDEX OF 450 OR LESS (WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723 AT THE THICKNESS AND DENSITY INTENDED FOR USE)

2603.7 Interior finish in plenums.

Foam plastic insulation used as interior wall or ceiling finish in plenums shall comply with one or more of the following: 1. The foam plastic insulation shall be separated from the plenum by a thermal barrier complying with Section 2603.4 and shall exhibit a flame spread index of 75 or less and a smokedeveloped index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

2. The foam plastic insulation shall exhibit a flame spread index of 25 or less and a smokedeveloped index of 50 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use and shall meet the acceptance criteria of Section 803.1.2 when tested in accordance with NFPA 286.

3. The foam plastic insulation shall be covered by corrosion-resistant steel having a base metal thickness of not less than 0.0160 inch (0.4mm) and shall exhibit a flame spread index of 75 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 or UL 723 at the thickness and density intended for use.

CHAPTER 33: SAFEGUARDS DURING CONSTRUCTION

SECTION 3310: MEANS OF EGRESS

UPDATED – 3310.1 – CHANGES THE REQUIREMENT FOR WHEN NO FEWER THAN ONE TEMPORARY LIGHTED STAIRWAY IS REQUIRED

3310.1 Stairways required.

Where a building has been constructed to a building height of 50 feet (15 240 mm) or four stories, or where an existing building exceeding 50 feet (15240 mm) in building height is altered, no fewer than one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

CONCLUSION

This concludes Florida Building Code Module "Florida Advanced Building Code: Building – Significant Changes (2014)".

This course presented only a sample of all the significant changes and updates in the FBC 5th Edition (2014), Building.

It is highly recommended that all students view the complete code in its entirety.

To view the complete version of 2014 FBC. Please visit:

https://floridabuilding.org/bc/bc_default.asp

REFERENCES

Florida Building Code, 5th Edition (2014) Online: <u>http://floridabuilding2.iccsafe.org/</u>

Florida Building Code, 4th Edition (2010): <u>http://publicecodes.cyberregs.com/st/fl/st/FL-P-</u>2010-000011.htm

Florida Building Code Resources: http://publicecodes.cyberregs.com/st/fl/st/FL-P-2010-000011.htm

T. Eric Stafford, P.E.; Douglas W. Thornburg, AIA, CBO; John R. Henry, P.E.; Jay Woodward. <u>2014.</u> <u>Significant Changes to 2014 Florida Building</u> <u>Code, 5th Edition</u>, International Code Council.