

Navigating Residential Roofing Codes

1

Course Information

Navigating Residential Roofing Codes

1 Hour Wind Mitigation Credit Training Provider: Florida Home Builders Association 2600 Centennial Place Tallahassee, FL 32308 Phone: (850)402-1849 FHBA.com CLIB & BCAIB Provider # 0000916 FBPE Provider # 0008653

DATE July 24 & 25, 2024 Location Orlando, FL CILB Approval # 0614911 BCAIB Approval # 5009515 Instructor: Shane Gerwig, <u>southeastcode@gmail.com</u>

fhba RURDERS ASSOCIA

2

Outline

- Scope
- General Requirements
- Child Safety
- Electrical Requirements

fhba BUILDERS



Florida Statutes 553.844 Wind Loss Mitigation

(1) The Legislature finds that:

(a) The effects of recent hurricanes on the state have demonstrated the effectiveness of the Florida Building Code in reducing property damage to buildings constructed in accordance with its requirements, and have also exposed a vulnerability of some construction undertaken prior to implementation of the Florida Building Code.

fhba RURDA HOM

5

Florida Statutes 553.844 Wind Loss Mitigation

(b) Hurricanes represent a continuing threat to the health, safety, and welfare of the residents of this state due to the direct destructive effects of hurricanes as well as their effects on windstorm insurance rates.

(c) The mitigation of property damage constitutes a valid and recognized objective of the Florida Building Code.

(d) Cost-effective techniques for integrating proven methods of the Florida Building Code into buildings built prior to its implementation benefit all residents of the state as a whole.

```
fhba RURDERS ANOCAN
```

Florida Statutes 553.844 Wind Loss Mitigation

(2) The Florida Building Commission shall:

(a) Analyze the extent to which a proposed Florida Building Code provision will mitigate property damage to buildings and their contents in evaluating that proposal. If the nature of the proposed Florida Building Code provision relates only to mitigation of property damage and not to a lifesafety concern, the proposal shall be reviewed based on its measurable benefits in relation to the costs imposed.

fhba BURDERS HOME

7

Florida Statutes 553.844 Wind Loss Mitigation

(2) The Florida Building Commission shall:

(b) Develop and adopt within the Florida Building Code a means to incorporate recognized mitigation techniques for site-built, single-family residential structures constructed before the implementation of the Florida Building Code

fhba MULDERS

8

Florida Statutes 553.844 Wind Loss Mitigation

Topics adopted by October 1, 2007:

- Gable end bracing
- Roof secondary water barrier .
- Roof to wall connectors
- Strengthening roof-decking attacumente
 Adding or strengthening opening protections

fhba HOME BUILDERS AND CO

Code Edition	FE	101 3C			04 3C			200 FBC		20 FE	10 8C	E	5 th diti 201	on	6 th Edition (2017)	7 th Edition (2020)	8 th Edition (2023)
	Original	2003 Supplement	Original	2005 Supplement	2006 Supplement	2007 Supplement	Original	1# 2009 Supplement	2 nd 2009 Supplement	Original	2012 Supplement	Original	Supplement 1	Supplement 2			
Effective Date	March 1, 2002	June 30, 2003	Oct 1, 2005	Dec 16, 2005	Dec 8, 2006	July 1, 2007	March 1, 2009	March 1, 2009	Oct 1, 2009	March 15, 2012	April 15, 2012	June 30, 2015	July 1, 2016	October 8, 2016	December 31, 2017	December 31, 2020	December 31, 2023

10

Florida Statutes Section 553.73

(1)(a) The (building) commission shall adopt, by rule pursuant to ss. 120.536(1) and 120.54, the Florida Building Code which shall contain or incorporate by reference all laws and rules which pertain to and govern the design, construction, erection, alteration, modification, repair, and demolition of public and private buildings, structures, and facilities and enforcement of such laws and rules, except as otherwise provided in this section.

(b) Florida Accessibility Code

(c) Florida Fire Prevention Code

fhba PLOBDA HOME BUILDERS ASSOCIATION

11

Scope and Application

Florida Administrative Code: 61G20-1.001 Florida Building Code Adopted.

The 6th Edition Florida Building Code, (2023), as updated by the Florida Building Commission on June 20, 2023 incorporated herein by reference is hereby adopted as the building code for the State of Florida.

fhba RURDERS ASSOC

Scope and Application

Building Section 101.2

The provisions of this code shall apply to the construction, *alteration*, relocation, enlargement, replacement, requir, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

fhba BUILDERS AND AND

13

Scope and Application

Building Section 101.2 Exception 1

Detached one- and two-family *dwellings* and multiple single-family *dwellings* (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with the Florida Building Code, Residential.

fhba RUBBERS ASSOCIA

14

Scope and Application

Residential Section R101.2 Exception 3

Existing buildings undergoing repair, alteration, additions or changes of occupancy shall comply with the *Florida Building Code, Existing Building*.



fhba BUILDERS AND

Scope and Application

Existing Building R101.2 Scope

The provisions of the Florida Building Code, Residential shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and twofamily dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

fhba BUILDERS HOME

16

Existing Roofing Provisions of Florida Building Code-Residential

R908.7 Wind Mitigation for Roofing - When a roof covering on an existing structure is removed and replaced, the following procedures shall be permitted to be performed by the roofing contractor:

(a) Roof-decking attachment shall be as required by Section R908.7.1.

- 8D Nails
 0.113" in diameter
 Minimum 2 ¼" long
- Two fasteners in each framing member for plank
 6" on center for panel sheathing

(b) A secondary water barrier shall be provided as required by Section R908.7.2. (Refers back to R905.1.1)

fhba BUILDERS HOM





R905 Requirements for Roof Coverings

Underlayment Requirements are Now Consistent with the IBHS Fortified Sealed Roof Deck Provisions

- Does not apply to HVHZ
 - HVHZ
 - 4"-6" Modified bitumen tape
 - 30# Felt or synthetic attached with tin tabs

Does not apply to structural metal panels

19

R905 Requirements for Roof Coverings

R905.1.1 Underlayment Options

- Self-adhering polymer-modified bitumen underlayment installed per manufacturer's instructions
- 3 3/4" strips of self-adhering polymer-modified bitumen underlayment or 3 ¾" flashing tape installed at joints in the roof deck and underlayment installed in accordance with Table R905.1.1.1 or manufacturer's instructions

fhba RUEDERS ASSOCI

20

R905 Requirements for Roof Coverings

R905.1.1 Underlayment Options

- Two layers of Type II, III, IV, or synthetic underlayment
 - 19" Starter (half of the width for synthetic)
 - Overlapping joints by 6" offset by 6'
 - Fastened 6" on edge and 12" in the field
 - $_{\circ}$ $\,$ Specific corrosion-resistant tabbed fasteners with minimum $^{3}\!\!4"$ embedment

fhba PLORIDA HOME BUILDERS ASSOCIA

Existing Roofing Provisions of Florida Building Code-Residential

R908.8 - When a roof covering on an existing site-built single family residential structure is removed and replaced on a building that is located in the **wind-borne debris region** as defined in the Florida Building Code, Building **and** that has an insured value of **\$300,000** or more or, if the building is uninsured or for which documentation of insured value is not presented, has a just valuation for the structure for purposes of ad valorem taxation of \$300,000 or more:(a) Roof to wall connections shall be improved as required by Section R908.8.1(b) Mandated retrofits of the roof-to-wall connection shall not be required beyond a 15 percent increase in the cost of re-roofing.

fhba BUILDERS HOME

22

Existing Roofing Provisions of Florida Building Code-Residential

FBC, Existing Building 706.8 Prescriptive requirement for wind-borne debris

- region
- Additional connectors may be necessary
 Connections calculated using Table 706.8.1 or engineered design
 Net required if roof to foundation continuous load path was required at time of construction
 Gables and corners take priority
- Cables and corners take priority If panels are removed for access, they shall not be reused Specific patch requirements Gable end attachment Wood framed wall Masonry wall
- Hip roof attachment
 Wood framed wall
 Masonry wall

fhba BULDERS





Existing Roofing Provisions of Florida Building Code-Residential

R908.5 Reinstallation of Materials - Existing slate, clay or cement tile shall be permitted for re installation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Any existing flashings, edgings, outlets, vents or similar devices that are a part of the assembly shall be replaced where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.

fhba RUREA HOME

25

Existing Roofing Provisions of Florida Building Code-Residential

R908.6 Flashings - Flashings shall be reconstructed in accordance with approved manufacturer's installation instructions or in compliance with RAS 111. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

fhba RURDERS MOME



Slide 26

2, 9/19/2020