

**Training Presented by:**

**Building Officials Association of Florida**

**and**

**Florida Home Builders Association**

**as a Result of a Grant from:**

**Florida Department of Business and Professional  
Regulation through Building a Safer Florida, Inc.**



**Provider #0004764**





**MITIGATION TECHNIQUES, INSPECTIONS AND  
DFS/OIR FORM B1-1802**

**Presented by**  
**The Florida Home Builders Association**  
**And**  
**The Building Officials Association of Florida**  
***"Together we can go farther"***



Slide 2

**Course information**

Class title: *Mitigation & Form 1802*  
Date: \_\_\_\_\_ Location: \_\_\_\_\_  
Hours: *3.0 hr.* Instructor: \_\_\_\_\_  
Approval Numbers:  
Contractors - CILB # *0609067*  
Building Dept. Personnel - BCAIB # *5007601*  
Engineers - FBPE *0546*  
Architects: AIA # *11JT004*

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Slide 3

**PART I**  
**“MITIGATION TECHNIQUES**  
  
**2010 Florida Building Code**

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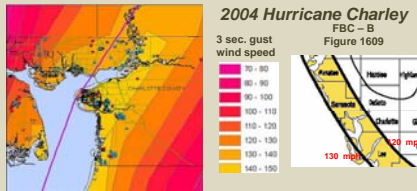
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Slide 4

 *Mitigation Techniques, Inspections and DFS-ORB Form 1802* 

**I. An overview of the Florida Laws and Rules relating to hurricane mitigation**

**2004 Hurricane Charley**  
FBC - B  
Figure 1609  
3 sec. gust wind speed



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Slide 5

 **“MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802”** 

Source of the Scope of the Mitigation Requirements:

**Senator Posey, Chairman Senate Committee on Insurance during a hearing on the 2007 Insurance bill said:**

*“The strengthening of existing site-built, single family residential structures to resist hurricanes was of major importance to Floridians.”*

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# MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802

Slide 6

 **"MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802"** 

Exerts from Florida Statutes 553.884

(1) The Legislature finds that:

- (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.
- (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.

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Slide 7

 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

Florida Statute 489.115(4)(b)

1. The board shall establish by rule that a portion of the required 14 hours must deal with the subject of workers' compensation, business practices, workplace safety, and, for applicable licensure categories, **wind mitigation methodologies**, and 1 hour of which must deal with laws and rules.

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
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Slide 8

 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

Florida Building Code  
2009 Supplement

As part of the 2009 Glitch Code change process the Florida Building Commission moved the requirements of the "Mitigation Rule", 9B-3.0475, into the body of the code.

The provisions of the rule are now located in the Florida Building Code - Existing Building.



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# MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802

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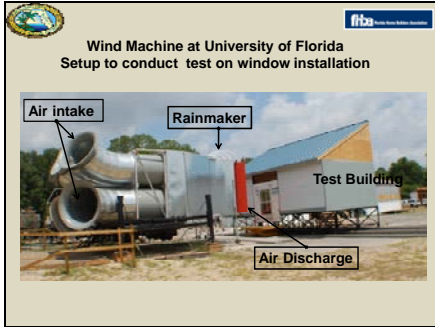
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Slide 10



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Slide 11



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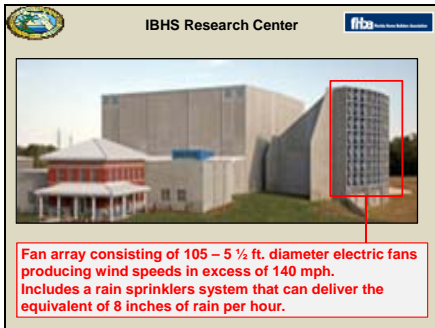
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Slide 12



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# MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802

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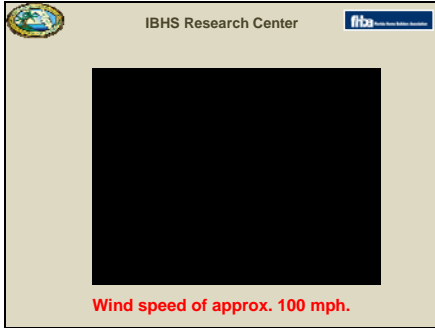
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Slide 14



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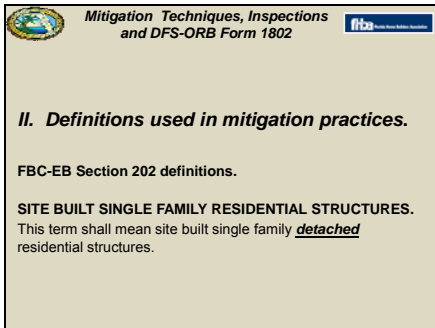
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Slide 15



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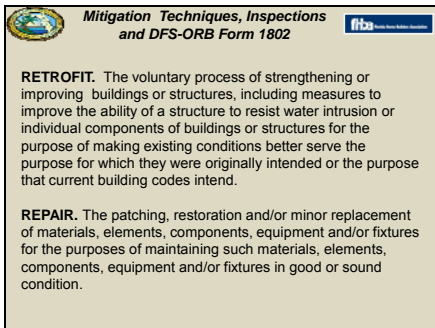
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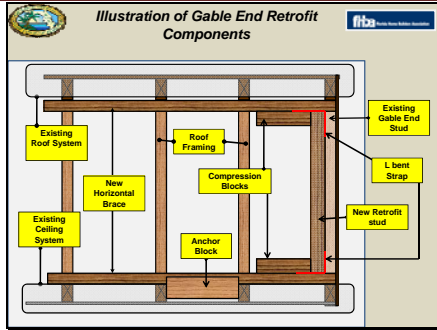
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Slide 18

**Mitigation Techniques, Inspections and DFS-ORB Form 1802**

**FBC-EB Section 1601 Definitions:**

**RETROFIT STUD.**  
A nominal 2-inch lumber member used to structurally supplement an existing gable end wall stud.

**HORIZONTAL BRACE.**  
A nominal 2-inch thick by at least 4" wide piece of lumber used to restrain both compression and tension loads applied by a retrofit stud. It is typically installed horizontally on the top of floor framing members (truss bottom chords or ceiling joists) or on the bottom of pitched roof framing members (truss top chord or rafters).

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Slide 19

**Mitigation Techniques, Inspections and DFS-ORB Form 1802**

**FBC-EB Section 1601 Definitions:**

**COMPRESSION BLOCK.**  
A nominal 2-inch thick by at least 4" wide piece of lumber used to restrain in the compression mode (force directed towards the interior of the attic) an existing or retrofit stud. It is attached to a horizontal brace and bears directly against the existing or retrofit stud.

**ANCHOR BLOCK.**  
A nominal 2-inch thick by at least 4" wide piece of lumber secured to horizontal braces and filling the gap between existing framing members for the purpose of restraining horizontal braces from movement perpendicular to the framing members.

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# MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802

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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**CONVENTIONALLY FRAMED GABLE END.**  
A conventionally framed gable end with studs whose faces are perpendicular to the gable end wall.

**TRUSS GABLE END.**  
An engineered factory made truss or site built truss that incorporates factory installed or field installed vertical studs with their faces parallel to the plane of the truss and are spaced no greater than 24-inches on center. Web or other diagonal members other than top chords may or may not be present. Gable end trusses may be of the same height as nearby trusses or may be drop chord trusses in which the top chord of the truss is lower by the depth of the top chord or outlookers.

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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**NAIL PLATE.**  
A manufactured metal plate made of minimum of 20 gauge galvanized steel with factory punched holes sized for 8d common nails. A nail plate may have the geometry of a strap.

**HURRICANE TIES.**  
Manufactured metal connectors designed to provide uplift and lateral restraint for roof framing members.

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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**RIGHT ANGLE GUSSET BRACKET.**  
A 14 gage or thicker metal right angle bracket with a minimum load capacity perpendicular to the plane of either face of 350 lbs when connected to wood or concrete with manufacturer specified connectors.

**STUD-TO-PLATE CONNECTOR.**  
A manufactured metal connector designed to connect studs to plates with a minimum uplift capacity of 500 lbs.

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# MITIGATION TECHNIQUES, INSPECTIONS AND DFS/OIR FORM B1-1802

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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**III. What is required and what is voluntary?**

**Required:**

- A. Roof Decking Attachment (FBC-EB 611.7.1)
- B. Secondary Water Barrier. (FBC-EB 611.7.2)
- C. Roof to Wall Connections. (FBC-EB 611.8.1)

**Voluntary:**

- A. Gable End Bracing

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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**611.7** When a roof covering on an existing site-built-single family residential structure is removed and replaced, the following procedures shall be permitted to be performed by the roofing contractor:

- A. Roof Decking Attachment
- B. Secondary Water Barrier.

**Exception:** Single family residential structures permitted subject to the Florida Building Code are not required to comply with this section.

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
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 **Mitigation Techniques, Inspections and DFS-ORB Form 1802** 

**611.7.1 Roof decking attachment for site-built single family residential structures.**

For site-built single family residential structures the fastening for sawn lumber or wood planks shall be in accordance with **section 611.7.1.1** or for wood structural panels shall be in accordance **section 611.7.1.2**.

Fasteners shall be 8d nails a minimum of **0.113** inch in diameter and shall be a minimum of 2-1/4 inch long to qualify for the provisions of this section for existing nails regardless of head shape or head diameter.

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