BUILDING OFFICIALS ASSOCIATION OF FLORIDA

GUIDELINES FOR IMPLEMENTATION OF THE HURRICANE DAMAGE MITIGATION PROVISIONS OF HB 7057

1. BACKGROUND

The Building Officials Association of Florida has undertaken to establish these guidelines for fair and reasonable implementation of the Hurricane Damage Mitigation provisions of HB 7057 adopted by the Florida Legislature for inclusion in Section 553.844, F.S., and effective October 1, 2007. Deliberations included input from Building Officials of various jurisdictions within the State, representatives of the roofing contractors, manufacturers, homebuilders, and other affected industries. Consideration was given to several facts; (1) no clear responsibility was assigned to building departments in the bill, (2) the bill is not part of any commonly acknowledged construction code, (3) practical construction and installation applications of certain provisions in the bill were not addressed and, (4) reasonable thought and common practice should apply as to its implementation date.

2. PURPOSE

These guidelines were developed for distribution and consideration for use by building departments in Florida which do not currently enforce equivalent, or more stringent, hurricane mitigation requirements for existing single family homes. These guidelines do not constitute a directive or legal opinion. They should only be used after careful consideration and in conjunction with all information provided in the entire document, including notes and commentary

3. GOAL

It is the intent of the Building Officials Association of Florida, through development and distribution of these guidelines, to encourage and facilitate reasonable, consistent implementation statewide of certain provisions of the bill. These guidelines represent a "best effort" to interpret the vague and ambiguous statutory language of the bill and provide support for its stated intent of integrating cost-effective techniques of proven methods of the Florida Building Code into certain buildings constructed prior to the Code's implementation March 1, 2002.

4. CONCLUSIONS

The Building Officials Association of Florida concludes that implementation and application of the following guidelines will reasonably meet the implied intent of Section 553.844, *F.S.* and Rule 9B-3.0475, FAC and the Hurricane Mitigation Manual referenced therein. (The Hurricane Mitigation Manual is available at http://www.dca.state.fl.us/fbc/Hurricane_Mitigation/Reference%20Document%20version-%20combined-%20draft%20v2.doc)

BOAF Guidelines for

Hurricane Mitigation Retrofits for Existing Site Built Single Family Residential Structures

Effective Date October 1, 2007 (applicable to permits applied for on or after this date)

Applies to site built single family residential structures build before the implementation of the Florida Building Code 3/1/02

Based on HB 7057, s. 553.844, Florida Statutes and Rule 9B-3.0475, Florida Administrative Code and the "Hurricane Mitigation Manual" referenced therein

For the purposes of this guideline the code sections specified will be from the Hurricane Mitigation Retrofit Manual.

I. Supplemental Fasteners and Secondary Water Barrier

A. Trigger: When a roof on an existing site-built, single family residential structure is replaced. [According to the 2004 Florida Building Code (Section 1502 Definitions): ROOF REPLACEMENT: The process of removing the existing roof covering, repairing any damaged substrate and installing a new roof covering.]

B. Requirements:

1. Roof deck attachment and fasteners shall be strengthened and corrected as required by section 201.1.
2. A secondary water barrier shall be provided as required by section 201.2. Self-adhering polymer modified bitumen tape or sheets (peel and stick products) must comply with ASTM D1970

C. Guidelines

Q. Is there a required inspection (or affidavit certification) for the supplemental fasteners?
A. Yes

Q. Who can perform this inspection (or affidavit certification)?
A. Florida Professional Engineer, Registered Architect, Licensed General Contractor, Building Contractor, Residential Contractor, Roofing Contractor or persons certified in the structural discipline under FS 468.

Q. Can existing sheathing fasteners be used to satisfy the supplemental requirement in Table 201.1 where wind speed is greater than 110 mph?
A. Only if the existing fasteners are 8d clipped head, round head, or ring shank and spaced at 6” or less on center.

Q. What type of fasteners must be installed to satisfy the supplemental requirement in Table 201.1?
A. Supplemental fasteners shall be 8d ring shank nails with round heads and the minimum dimensions as specified in 201.1.

Q. Are the enhanced fastener requirements and secondary water barrier required on new construction?
A. No.

Q. Is there a required inspection (or affidavit certification) for the secondary water barrier?
A. Yes

Q. Who can perform this inspection (or affidavit certification)?
A. Florida Professional Engineer, Registered Architect, Licensed General Contractor, Building Contractor, Residential Contractor, Roofing Contractor or persons certified in the structural discipline under FS 468.

Q. Can self-adhering polymer modified bitumen (peel & stick) be applied directly to the roof sheathing in the HVHZ as well?
A. Yes for the purposes of complying with these secondary waterproofing requirements only. (Subject to local approval)

Q. What is the minimum thickness of self-adhering polymer modified bitumen that can be installed?
A. A minimum of 40 mil is required, Per ASTM D 1970.

II. Roof to Wall Connections (Wind Bourne Debris Region only)

A. Trigger: When a roof on an existing site-built, single family residential structure within the wind borne debris region and having an insured value or just valuation for purposes of ad valorem taxation for the structure of $300,000 or more is replaced.

B. Requirements

1. Sufficient eave sheathing shall be removed to expose a minimum of 6 feet of framing members (Clarification: 6 feet from the corner on a horizontal plane along the edge of the roof to expose 3 roof trusses, rafters etc. The width from the edge or eve of the roof only has to be the minimum required to view the connectors which could be 12 inches, 16 inches, 24 inches etc. depending on the width of the overhang.)
2. Wherever a strap is missing or an existing strap has fewer than 4 fasteners on each end the intersection of roof framing with the wall below shall be strengthened by adding
   a. Metal connectors, clips, straps and fasteners such that the performance level equals or exceeds the uplift capacity as specified in Table 201.3

   <u>OR</u>

   b. Approved strap ties or right angle gusset brackets with a minimum uplift capacity of 500 lbs shall be installed to the top plate or masonry wall below.
   c. Refer to sections 201.3.1 to 201.3.4 for prescriptive requirements

C. Guidelines

Q. Can a Roofing Contractor pull the permit for the re-roofing and the roof to wall retrofit?
A. Yes, as long as the investigation, reporting, and retrofitting of the roof to wall connections is sub-contracted to a Licensed General Contractor, Building Contractor, or Residential Contractor.

Q. What additional paperwork must be submitted by the Roofing Contractor prior to the issuance of a re-roof permit?
A. Proof of insured value or a copy of the ad-valorem tax value. A valid permit application for the re-roof, and the required mitigation retrofit work, the contract value of which equals or exceeds 15% of the cost of re-roofing, subcontracted to a Licensed; General Contractor, Building Contractor, or Residential Contractor..

Q. Does the 15% of the cost of the re-roof include the cost of the investigation, subsequent report and the proposed roof to wall connections?
A. Yes

Q. Who can prepare a report to be submitted with the re-roof permit application addressing existing and proposed metal connectors, clips, straps, fasteners and additional structural elements when using the prescriptive methods specified in sections 201.3.1 to 201.3.4?
A. Florida Professional Engineer, Registered Architect, Licensed General Contractor, Building Contractor, or Residential Contractor.

Q. Is a separate permit required to install metal connectors, clips, straps, fasteners and additional structural elements?
A. No, this work can be subcontracted to a Licensed General Contractor, Building Contractor, or Residential Contractor.

Q. Is there a required inspection (or affidavit certification) for the installation of metal connectors, clips, straps, fasteners and additional structural elements?
A. Yes.

Q. Who can perform this inspection (or affidavit certification)?
A. Florida Professional Engineer, Registered Architect, Licensed General Contractor, Building Contractor, Residential Contractor or persons certified in the structural discipline under FS 468.

Q. Can a Roofing Contractor install metal connectors, clips, straps, fasteners and additional structural elements?
A. No.

Q. Which side of the wall can the retrofit connectors be installed on?
A. Either side, the manual states "Wherever access makes it possible (Without damage of the wall or soffit finishes)".

Q. If there is an existing strap with less than 4 fasteners, can fasteners be added?
A. Yes, that option appears for hip roofs on wood frame or masonry construction and for gable roofs on wood frame and may be determined acceptable by the local governing authority under alternate materials and methods provisions of the Florida Building Code.

Q. Does an existing 1/8" strap with 3 – 16d nails satisfy the 500 lb uplift requirement?
A. No, per the manual.

III. Opening Protection (Wind Bourne Debris Region only)

A. Trigger: When any activity requiring a building permit that is applied for *on or after July 1, 2008* for which an estimated cost is $50,000 or more for a single family residential building that is located in the wind borne debris region and having an insured value or just valuation for purposes of ad valorem taxation for the structure of $750,000 or more.

B. Requirements

1. Opening protection as required within the Florida Building Code, Building or Florida Building Code, Residential for new construction shall be provided.

C. Guidelines

Q. Does an accumulated value of permits within a 12 month period which exceeds $50,000 trigger this requirement?
A. No.

Q. Is a permit required to install the opening protection?
A. Yes.

Q. Who can perform this inspection?
A. The local Building Department.

IV. Gable End Bracing

A. Trigger: There is no trigger to require supplemental gable end bracing. These requirements are voluntary.

B. Requirements

1. If an owner voluntarily chooses to retrofit gable end walls, the prescriptive methods of section A104 may be used.

C. Guidelines

Q. Is a building permit required to retrofit gable end walls?
A. Yes

Q. Is there an inspection required to retrofit gable end walls?
A. Yes.

R. Who can perform this inspection?
A. The local Building Department.

5. COMMENTARY

The Building Officials Association of Florida, after having received and reviewed knowledgeable input from building officials, roofing contractors, roofing manufacturers, and other interested parties believes these guidelines to be reasonable, practical and consistent with the intent of the HB 7057. These guidelines are not an official interpretation of the law. For complete text of the applicable requirements, refer to s. 553.844, Florida Statutes and Rule 9B-3.0475, Florida Administrative Code and the Hurricane Mitigation Manual referenced therein.