

## RULE 9B-3.0475

### HURRICANE MITIGATION RETROFITS FOR EXISTING SITE-BUILT SINGLE FAMILY RESIDENTIAL STRUCTURES

**101 Retrofits Required.** Pursuant to Section 553.844, Florida Statutes, strengthening of existing site-built, single family residential structures to resist hurricanes shall be provided. Site built single-family residential structures shall mean site built single family detached residential structures.

- 101.1** When a roof on an existing site-built, single family residential structure is replaced, the following procedures shall be permitted to be performed by the roofing contractor:
- (a) Roof-decking attachment and fasteners shall be strengthened and corrected as required by section 201.1.
  - (b) A secondary water barrier shall be provided as required by section 201.2.
- 101.2** When a roof is replaced on a building that is located in the wind-borne debris region as defined in s. 1609.2 of 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 201.3.
  - (b) Mandated retrofits of the roof-to-wall connection shall not be required beyond a 15 percent increase in the cost of re-roofing.
  - (c) Where complete retrofits of all the roof-to-wall connections as prescribed in Section 201.3 would exceed 15 percent of the cost of the re-roofing project, the priorities outlined in Section 201.3.75 shall be used to limit the scope of work to the 15 percent limit.
- 101.3** When any activity requiring a building permit that is applied for on or after July 1, 2008, and for which the estimated cost is \$50,000 or more for a building that is located in the wind borne debris region as defined in s. 1609.2 of the Florida Building Code, Building and that has an insured value of \$750,000 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 \$750,000 or more.:
- (a) Opening protections as required within the Florida Building Code, Building or Florida Building Code, Residential for new construction shall be provided.
- 101.4** When retrofit enhancement of gable end bracing is provided during construction which otherwise requires a permit the techniques in Appendix A shall be allowed.

**201 Roof System Mitigation Techniques.** Roof sheathing fastening, secondary water barriers, roof to wall connection and gable end bracing shall be permitted pursuant to this section.

**201.1 Roof sheathing fastening for site-built single family residential structures.** For site-built single family residential structures the fasteners and spacing required in Table

201.1 are deemed to comply with the requirements of Section 507.2.2, of the 2004 Florida Building Code, Existing Building.

Board roof decking secured with at least two 8d nails into roof framing members shall be deemed to be sufficiently connected. Board roof decking secured with smaller fasteners than 8d nails or with fewer than two 8d nails per board shall be deemed sufficiently connected if two 8d clipped head, round head, or ring shank nails are in place on each framing member.

Supplemental fasteners as required by Table 201.1 shall be 8d ring shank nails with round heads and the following minimum dimensions:

1. 0.113 inch nominal shank diameter
2. Ring diameter of 0.012 over shank diameter
3. 16 to 20 rings per inch
4. 0.280 inch full round head diameter
5. Ring shank to extend a minimum of 1 1/2" from the tip of the nail.
6. Minimum 2-1/4 inch nail length

**Table 201.1**  
**Supplement Fasteners at Panel Edges and Intermediate Framing**

<b>Existing fasteners</b>	<b>Existing spacing</b>	<b>Wind speed 110 mph or less supplemental fastening shall be no greater than</b>	<b>Wind speed greater than 110 mph supplemental fastening shall be no greater than</b>
Staples or 6d	Any	6" o.c. <sup>b</sup>	6" o.c. <sup>b</sup>
8d clipped head, round head, or ring shank	6" o.c. or less	None necessary	None necessary
8d clipped head, <del>or</del> round head, <u>or ring shank</u>	Greater than 6" o.c.	6" o.c. <sup>a</sup>	6" o.c. <sup>b a</sup>
<del>8d round head ring shank</del>	<del>Greater than 6" o.c.</del>	<del>6" o.c.<sup>a</sup></del>	<del>6" o.c.<sup>a</sup></del>

- a. Maximum spacing determined based on existing fasteners and supplemental fasteners.
- b. Maximum spacing determined based on supplemental fasteners only.

**201.2 Roof secondary water barrier for site-built single family residential structures.** A secondary water barrier shall be installed using one of the following methods when ~~roofing replacement~~ when reroofing.

- a) All joints in structural panel roof sheathing or decking shall be covered with a minimum 4 in. wide strip of self-adhering polymer modified bitumen tape applied directly to the sheathing or decking. The deck and self adhering polymer modified

bitumen tape shall be covered with one of the underlayment systems approved for the particular roof covering to be applied to the roof.

b) The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen cap sheet. No additional underlayment shall be required on top of this cap sheet for new installations.

c) The entire roof deck shall be covered with an approved asphalt impregnated 30# felt underlayment installed with nails and tin-tabs as required for the HVHZ. (No additional underlayment shall be required over the top of this sheet).

d) Outside of the HVHZ, an underlayment complying with section 1507.2.3 of the Florida Building Code, Building fastened as described below or a layer of asphalt impregnated approved #30 felt shall be installed. The felt is to be fastened with 1" round plastic cap or metal cap nails, attached to a nailable deck in a grid pattern of 12 inches (305 mm) staggered between the overlaps, with 6-inch (152 mm) spacing at the overlaps. For slopes of 2:12 to 4:12 an additional layer of felt shall be installed in a shingle-fashion and lapped 19" and fastened as described above. (No additional underlayment shall be required over the top of this sheet).

**Exceptions:**

1. Roof slopes < 2:12 having a continuous roof system shall be deemed to comply with section 201.2 requirements for a secondary water barrier.

2. Clay and Concrete tile roof systems installed as required by the Florida Building Code are deemed to comply with the requirements of section 201.2 for Secondary Water Barriers.

~~1. An asphalt impregnated 30# felt underlayment installed with nails and tin tabs as required for the HVHZ and covered with either an approved self-adhering polymer modified bitumen cap sheet or an approved cap sheet applied using an approved hot mop application shall be deemed to meet the requirements for the secondary water barrier.~~