|  |
| --- |
| **Roofing Technical Advisory Committee – 14 Comments**  |
| **8th Edition (2023) Florida Building Code, Building/Residential** **CHAPTER 2 DEFINITIONS****1) R- Ch. 2 - Comment #1 (Page 5)**Aaron R. Phillips Asphalt Roofing Manufacturers Association (ARMA)**FBC-Building, Chapter 2: HIGH VELOCITY HURRICANE ZONE****In FBC-Residential, Chapter 2:** **HIGH-VELOCITY HURRICANE ZONE (HVHZ)****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **8th Edition (2023) Florida Building Code, Building** **CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES** **2) R- Ch. 15- Comment #1 (Page 6)**Aaron R. Phillips Asphalt Roofing Manufacturers Association (ARMA)**1518.2.1****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **3) R- Ch. 15- Comment #2 (Page 7)**Aaron R. Phillips Asphalt Roofing Manufacturers Association (ARMA)**1518.2.1****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **8th Edition (2023) Florida Building Code, Residential** **CHAPTER 46 REFERENCED STANDARDS****4) R- Ch. 46 - Comment #1 (Page 9)**Aaron R. Phillips Asphalt Roofing Manufacturers Association (ARMA)D321M—2016M Specification for Asphalt Used in Roofing**TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **5) R- Ch. 46 - Comment #2 (Page 9)**Greg Keeler - Owens CorningResidential Referenced Standards - Chapter 46 FBC-R**TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **8th Edition (2023) Florida Building Code, Test Protocols for High-Velocity Hurricane Zones** **6) R- RASs 115/118/119/120 - Comment #1 (Page 10)****From:** Mike Silvers - FRSA**Modification** **(R10180 AS)/(R9909 AS)** **ROOFING APPLICATION STANDARD (RAS) No. 115 STANDARD PROCEDURES FOR ASPHALT SHINGLE INSTALLATION****TAC Recommendation:** (Denial 10-0 - Reconsider 10-0) **Final Action: Approval 8-2****Commission Action: Approval 10-3****Modification (R9915 AS)****ROOFING APPLICATION STANDARD (RAS) No. 118-20 INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS Direct Deck & Counter Battens Only****TAC Recommendation: Approval 9-1****Commission Action: Approval 10-3****Modification (R9916 AS)****ROOFING APPLICATION STANDARD (RAS) No. 119-20 INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS Direct Deck & Horizontal Battens Only (Preformed Metals With Edge Returns)****TAC Recommendation: Approval 10-0****Commission Action: Approval 9-3** **Modification (R9917 AS)****ROOFING APPLICATION STANDARD (RAS) No. 120-20 MORTAR AND ADHESIVE SET TILE APPLICATION****TAC Recommendation: Approval 8-2****Commission Action: Approval 9-3** |
| **ROOFING APPLICATION STANDARD (RAS) No. 115 STANDARD PROCEDURES FOR ASPHALT SHINGLE INSTALLATION****7) R- RAS 115 - Comment #1 (Page 13)**Gaspar Rodroguez- Miami-Dade CountyRAS 115 MOD **(R10180 AS)****TAC Recommendation:** (Approval motion: 3-7 motion failed) **Final Action: Denial: 7-3****Commission Action: Denial 10-3** |
| **ROOFING APPLICATION STANDARD (RAS) No. 118-20****INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS****Direct Deck & Counter Battens Only****8) R- RAS 118 – Comment #1 (Page 14)**Gaspar Rodroguez- Miami-Dade CountyRAS 118 MOD **(R9915)****TAC Recommendation: Denial: 7 - 3****Commission Action: No action** |
| **ROOFING APPLICATION STANDARD (RAS) No. 119-20****INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS****Direct Deck & Horizontal Battens Only****9) R- RAS 119 – Comment #1 (Page 16)**Gaspar Rodroguez- Miami-Dade CountyRAS 119 MOD **(R9916)****TAC Recommendation: Denial: 7 - 3****Commission Action: No action**  |
| **ROOFING APPLICATION STANDARD (RAS) No. 120-20****MORTAR AND ADHESIVE SET TILE APPLICATION****10) R- RAS 120 – Comment #1 (Page 18)**Gaspar Rodroguez- Miami-Dade CountyRAS 120 MOD **(R9917)****TAC Recommendation: Denial: 7 - 3****Commission Action: No action**  |
| **ROOFING APPLICATION STANDARD (RAS) No. 130-20 INSTALLATION CRITERIA FOR WOOD ROOF SHINGLES AND SHAKES APPLICATION****11) R- RAS 130 – Comment #1 (Page 21)**Aaron R. Phillips Asphalt Roofing Manufacturers Association (ARMA)4.1 and 5.1 Underlayment**TAC Recommendation: Approval 10-0Commission Action: Approval – Unanimous**  |
| **12) R- RAS 130 – Comment #2 (Page 23)**Gaspar Rodroguez- Miami-Dade CountyRAS 130 MOD **(R10178 AS)****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **TESTING APPLICATION STANDARD (TAS) No. 100(A)-95****TEST PROCEDURE FOR WIND AND WIND DRIVEN RAIN****RESISTANCE AND/OR INCREASED WINDSPEED RESISTANCE OF****SOFFIT VENTILATION STRIP AND CONTINUOUS OR INTERMITTENT****VENTILATION SYSTEM INSTALLED AT THE RIDGE AREA****13) R- TAS 100(A) – Comment #1 *(*Page 23)**Gaspar Rodroguez- Miami-Dade CountyTAS 130 MOD **(R9907)****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |
| **TESTING APPLICATION STANDARD (TAS) No. 110-2000****TESTING REQUIREMENTS FOR PHYSICAL PROPERTIES OF ROOF****MEMBRANES, INSULATION, COATINGS AND OTHER ROOFING COMPONENTS****14) R- TAS 110 – Comment #1 (Page 23)**Gaspar Rodroguez- Miami-Dade CountyTAS 110 MOD **(R10146 AS)****TAC Recommendation: Approval 10-0****Commission Action: Approval – Unanimous**  |

**Roofing Technical Advisory Committee – Comments**

**8th Edition (2023) Florida Building Code, Building/Residential**

**CHAPTER 2 DEFINITIONS**

**1) R- Ch. 2 - Comment #1**

**Aaron R. Phillips** | Vice President of Technical Services

**Asphalt Roofing Manufacturers Association (ARMA)**

**In FBC-Building, Chapter 2:**

**HIGH VELOCITY HURRICANE ZONE.** This zone consists of Broward and Miami-Dade counties.

**In FBC-Residential, Chapter 2:**

**HIGH-VELOCITY HURRICANE ZONE (HVHZ).** This zone consists of Broward and Miami-Dade counties.

**RATIONALE:**

This comment is a follow-up to prior communications with FBC staff about making an editorial correction to the definition of High Velocity Hurricane Zone in both the Building and Residential codes to recognize the county name was changed from Dade County to Miami-Dade County on November 13, 1997.

**8th Edition (2023) Florida Building Code, Building**

**CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES**

 **2) R- Ch. 15- Comment #1**

**Aaron R. Phillips** | Vice President of Technical Services

**Asphalt Roofing Manufacturers Association (ARMA)**

**1518.2.1**

**Underlayment for asphalt shingles, metal roof panels or shingles, mineral surfaced roll roofing, slate and slate-type shingles**

Underlayment for asphalt shingles, metal roof panels or shingles, mineral surfaced roll roofing, slate and slate-type shingles shall comply with one of the following methods:

1. The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen underlayment complying with ASTM D1970 installed in accordance with both the underlayment manufacturer’s and roof covering manufacturer’s installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

**Exception:**

1. An existing self-adhering modified bitumen underlayment that has been previously installed over the roof decking and, where it is required, renailing off the roof sheathing in accordance with Section 706.7.1 of the Florida Building Code, Existing Building can be confirmed or verified. An approved underlayment in accordance with Table 1507.1.1.1 for the applicable roof covering shall be applied over the entire roof over the existing self-adhered modified bitumen underlayment.

2. A minimum 3-3/4 -inch-wide (102 96 mm) strip of selfadhering polymer-modified bitumen membrane complying with ASTM D1970 or selfadhering flexible flashing tape complying with AAMA 711, Level 3 [for exposure up to 176°F (80°C)], installed in accordance with the manufacturer’s instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment in accordance with Table 1518.2.1 for the applicable roof covering shall be applied over the entire roof over the membrane strips.

 3. Two layers of ASTM D226 Type II or ASTM D4869 Type III, Type IV, or ASTM D8257 underlayment shall be installed as follows: Apply a strip of underlayment for the first course that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply a full sheet~~s~~ of ~~reinforced~~ underlayment, for the second course. Apply the third course of underlayment overlapping the second course ~~successive sheets~~ half the width of a full sheet plus 2 inches. Overlap all successive courses half the width of a full sheet plus 1 inch. End laps shall be 6 inches (152 mm) and shall be offset by 6 feet (1829 mm). Underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with a maximum fastener spacing measured horizontally and vertically of 12 inches (305 mm) o.c. between side laps, and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch (25.4 mm). Metal caps are required where the ultimate design wind speed, Vult, equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. The minimum thickness of the outside edge of plastic caps shall be 0.035 inch (0.889 mm). The cap nail shank shall be not less than 0.083 inch (2.1082 mm) for ring shank cap nails. The cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than 3/4 inch (19.05 mm) into the roof sheathing.

**RATIONALE:**

This comment recommends changes to section 1518.2.1, which are shown as red text and turquoise highlights.

R10071-A5 brought in improved instructions for installation of a two-layer underlayment system in 1507.1.1.1, Item 3. R10073-A3 incorporated the same guidance in FBC-Residential Section R905.1.1.1, Item 3.

This comment proposes the same changes in Section 1518.2.1 to create equivalent requirements for installation of two-layer underlayment systems within and outside the HVHZ.

**3) R- Ch. 15- Comment #2**

**Aaron R. Phillips** | Vice President of Technical Services

**Asphalt Roofing Manufacturers Association (ARMA)**

**1518.2.1**

**Underlayment for asphalt shingles, metal roof panels or shingles, mineral surfaced roll roofing, slate and slate-type shingles**

Underlayment for asphalt shingles, metal roof panels or shingles, mineral surfaced roll roofing, slate and slate-type shingles shall comply with one of the following methods:

1. The entire roof deck shall be covered with an approved self-adhering polymer modified bitumen underlayment complying with ASTM D1970 installed in accordance with both the underlayment manufacturer’s and roof covering manufacturer’s installation instructions for the deck material, roof ventilation configuration and climate exposure for the roof covering to be installed.

**Exception:**

1. An existing self-adhering modified bitumen underlayment that has been previously installed over the roof decking and, where it is required, renailing off the roof sheathing in accordance with Section 706.7.1 of the Florida Building Code, Existing Building can be confirmed or verified. An approved underlayment in accordance with Table 1507.1.1.1 for the applicable roof covering shall be applied over the entire roof over the existing self-adhered modified bitumen underlayment.

2. A minimum 3-3/4 -inch-wide (~~102 96~~ 95 mm) strip of self-adhering polymer-modified bitumen membrane complying with ASTM D1970 or self-adhering flexible flashing tape complying with AAMA 711, Level 3 [for exposure up to 176°F (80°C)], installed in accordance with the manufacturer’s instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment in accordance with Table 1518.2.1 for the applicable roof covering shall be applied over the entire roof over the membrane strips.

 3. Two layers of ASTM D226 Type II or ASTM D4869 Type III, Type IV, or ASTM D8257 underlayment shall be installed as follows: Apply a strip of underlayment that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply full sheets of reinforced underlayment, overlapping successive sheets half the width of a full sheet plus 2 inches. End laps shall be 6 inches (152 mm) and shall be offset by 6 feet (1829 mm). Underlayment shall be attached to a nailable deck with corrosion-resistant fasteners with a maximum fastener spacing measured horizontally and vertically of 12 inches (305 mm) o.c. between side laps, and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment shall be attached using annular ring or deformed shank nails with metal or plastic caps with a nominal cap diameter of not less than 1 inch (25.4 mm). Metal caps are required where the ultimate design wind speed, Vult, equals or exceeds 170 mph. Metal caps shall have a thickness of not less than 32-gage sheet metal. The minimum thickness of the outside edge of plastic caps shall be 0.035 inch (0.889 mm). The cap nail shank shall be not less than 0.083 inch (2.1082 mm) for ring shank cap nails. The cap nail shank shall have a length sufficient to penetrate through the roof sheathing or not less than 3/4 inch (19.05 mm) into the roof sheathing.

TABLE 1518.2.1UNDERLAYMENT WITH SELF-ADHERING STRIPS OVER ROOF DECKING JOINTS

|  |  |  |
| --- | --- | --- |
| Roof Covering | Underlayment Type | Underlayment Attachment |
| Roof Slope 2:12 and Less Than 4:12 | Roof Slope 4:12 and Greater |
| Asphalt Shingles, Metal Roof Panels, Photovoltaic Shingles | ASTM D226Type IIASTM D4869Type III or IVASTM D 6757 | Apply in accordance with Section 1518.2.1, Item 3 | Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches; end laps shall be 6 inches and shall be offset by 6 feet. Underlayments shall be fastened with approved minimum 12 gage by 11/4 in. corrosion-resistant annular ring shank roofing nails fastened through minimum 32 gage by 15/8 in. diameter approved tin caps. Underlayment shall be attached to a nailable deck in a grid pattern of 12 inches (305 mm) between the overlaps, with 6-inch (152 mm) spacing at the overlaps. Nails shall be of sufficient length to penetrate through the sheathing or wood plank a minimum of ~~3/16~~ 1/8 in. or penetrate 1 inch (25 mm) or greater thickness of lumber a minimum of 1 in., except where architectural appearance is to be preserved, in which case a minimum of 3/4 in. nail may be used. |
| Metal Roof Shingles, Mineral-Surface Roll Roofing, Slate and Slate-type Shingles, Wood Shingles, Wood Shake | ASTM D226Type II ASTM D4869 Type III or IV |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s

**RATIONALE:**

Three corrections are requested, shown via red text and turquoise highlights:

1. In Section 1518.2.1, Item 2, the correct conversion of 3 ¾” is 95 mm. This was corrected in Section 1507.1.1.1 via R9882-G1 and in FBC-Residential Section R905.1.1.1 via both R9884-G1 and R10073-G1. Unfortunately, it was overlooked here. Changing “96 mm” to “95 mm” in Section 1518.2.1. will establish the same metric equivalent for this seam tape width dimension throughout the Building and Residential codes. Also, the word “selfadhering” is changed to “self-adhering” in two instances.
2. In Table 1518.2.1, the correct standard is ASTM D6757 rather than ASTM D675. Correcting this was overlooked but doing so now will eliminate confusion and potential future questions.
3. In Table 1518.2.1, the minimum nail penetration through sheathing or planks is shown as 3/16”. This was changed to 1/8” in RAS115 via R9909 and in Section 1518.7.3.2 via R9910. Changing it in Table 1518.2.1 will create equivalent requirements throughout the FBC-Building.

**8th Edition (2023) Florida Building Code, Residential**

**CHAPTER 46 REFERENCED STANDARDS**

**4) R- Ch. 46 - Comment #1**

**Aaron R. Phillips** | Vice President of Technical Services

**Asphalt Roofing Manufacturers Association (ARMA)**

D312/D312M-15 Specification for Asphalt Used in Roofing Table R905.9.2

D321M—2016M Specification for Asphalt Used in Roofing

~~D3161/D3161M-2016~~D3162M-2016A

 Test Method for Wind Resistance of Steep Slope Roofing

Products (Fan Induced Method) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . R905.2.6.1, Table R905.2.6.1,

R905.4.4.1, Table R905.4 4.1, R905.16.7

**RATIONALE:**

The designations of two ASTM standards shown above are incorrectly expressed in the FBC-Residential Referenced Standards supplement. The designations should be as follows:

D312/D312M-16a

Specification for Asphalt Used in Roofing

D3161/D3161M-16a

Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan Induced Method)

**5) R- Ch. 46 - Comment #2**

**From:** Keeler, Greg [mailto:Greg.Keeler@owenscorning.com]
**Sent:** Saturday, January 28, 2023 3:26 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Subject:** Public Comment - Residential Referenced Standards - Chapter 46 FBC-R

|  |
| --- |
| **[NOTICE] This message comes from a system outside of DBPR. Please exercise caution when clicking on links and/or providing sensitive information. If you have concerns, please contact your Knowledge Champion or the DBPR Helpdesk.** |

Mo –

Somehow I missed submitting a proposal for inclusion of ASTM D8257 into the FBC-R. A proposal for inclusion in the FBC was approved as submitted (10145). This referenced standard correlates with several proposals related to Sections R905.1.1 and R905.1.1.1, and Table R905.1.1.1. Please accept this Public Comment to add this Standard. You will find the additional referenced standard on page 33 of the attached file, in red text and highlighted yellow. Please let me know if you have questions. Thanks!

**Greg Keeler | Technical Services Leader**

Owens Corning Science & Technology

2790 Columbus Road

Granville, OH 43023

O 740.321.6345

M 740.404.7829

[greg.keeler@owenscorning.com](file:///Users/jeff/Documents/1-Current%20Projects%20and%20Facilitated%20Solutions/FBC%20Current%20%281999-Current%29/2023%20Code%20Update%20Process%20%288th.%20Edition%29/6-TAC%20Comments%20for%20Rule%20Workshop%20Process/FBC%20Code%20Comments%20February%2022-24%2C%202023/greg.keeler%40owenscorning.com)

**Florida Building Code – Residential**

**CHAPTER 46 REFERENCED STANDARDS**

|  |  |
| --- | --- |
|

|  |
| --- |
| ASTM D8257-20 Standard Specification for Mechanically Attached Polymeric Roof Underlayment Used in Steep Slope Roofing R905.1.1, R905.1.1.1, Table R905.1.1.1 |

 |

**8th Edition (2023) Florida Building Code, Test Protocols for High-Velocity Hurricane Zones**

**6) R- RASs 115/118/119/120 - Comment #1**

**From:** Mike Silvers [mailto:Silvers@floridaroof.com]
**Sent:** Monday, January 23, 2023 3:32 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** John Hellein <John@floridaroof.com>
**Subject:** Public Comment on FBC 8th Edition 2023 SUPPLEMENTS - POST COMMISSION - December 13, 2022

|  |
| --- |
| **[NOTICE] This message comes from a system outside of DBPR. Please exercise caution when clicking on links and/or providing sensitive information. If you have concerns, please contact your Knowledge Champion or the DBPR Helpdesk.** |

Mo,

Please accept the following as FRSA’s four Public Comments on the Supplements:

**Modification** **(R10180 AS)/(R9909 AS)**

**ROOFING APPLICATION STANDARD (RAS) No. 115 STANDARD PROCEDURES FOR ASPHALT SHINGLE INSTALLATION**

4.2 ~~All~~ ~~u~~ Underlayments shall be fastened with approved minimum 12 gage by 11/4in. corrosion-resistant annular ring shank roofing nails fastened through minimum 32 gage by 15/8in. diameter approved diameter tin caps. Underlayment shall be attached to a nailable deck in a grid pattern of 12 inches (305mm) between overlaps, with 6-inch (152 mm) spacing at overlaps at the overlaps. Nails shall be of sufficient length to penetrate through the sheathing or wood plank a minimum of 3/16in. or penetrate 1 inch (25 mm) or greater thickness of lumber a minimum of 1 in., except where architectural appearance is to be preserved, in which case a minimum of 3/4in. nail may be used.

Rational: The underscored U in underlayment was capitalized because the intent was to strike the word “All” at the beginning of the sentence. The strikethrough of “All” was inadvertently removed when originally submitted. The “All” should be deleted. After the commission’s previous actions on related modifications, it is no longer applicable.

**Modification (R9915 AS)**

**ROOFING APPLICATION STANDARD (RAS) No. 118-20 INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS Direct Deck & Counter Battens Only**

**TABLE 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Roof Pitch** | **Counter Battens or Direct Deck** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 4:12 or Greater | Either | 1.   ASTM D226 Type II (#30) or ASTM D2626 (#43) organic base sheet nailed to deck, min. (#90) ASTM D6380, Class M or WS, Type II organic cap sheet set in Type IV hot asphalt. | Required | 3.01A |
| Either | 2.      Any Product Approval Approved underlayment system with a mechanically fastened base sheet, and cap sheet set in hot, cold, or self-adhered | Per Product Approval | 3.01B, C, or D |
| Either | 3.      Product Approval Listed Approved ~~nail-on~~ single-ply underlayment | Per Product Approval | 3.01E |

**Modification (R9916 AS)**

**ROOFING APPLICATION STANDARD (RAS) No. 119-20 INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS Direct Deck & Horizontal Battens Only (Preformed Metals With Edge Returns)**

**TABLE 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Roof Pitch** | **Counter Battens or Direct Deck** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 4:12 or Greater | Either | ASTM D226 Type II (#30) or ASTM D2626 (#43) organic base sheet nailed to deck, min. (#90) ASTM D6380, Class M or WS, Type II organic cap sheet set in Type IV hot asphalt. | Required | 3.01A |
| Either | 2.      Any Product Approval Approved underlayment system with a mechanically fastened base sheet, and cap sheet set in hot, cold, or self-adhered | Per Product Approval | 3.01B, C, or D |
| Either | 3.      Product Approval Listed Approved ~~nail-on~~ single-ply underlayment | Per Product Approval | 3.01E |

**Modification (R9917 AS)**

**ROOFING APPLICATION STANDARD (RAS) No. 120-20 MORTAR AND ADHESIVE SET TILE APPLICATION**

**TABLE 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Roof Pitch** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 2:12 or Greater | ASTM D226 Type II (#30) or ASTM D2626 (#43) ~~in~~organic base nailed to deck, min ASTM D6380, Class M or WS, Type II (#90) organic cap sheet set in Type IV hot asphalt. | Required | 3.01 A |
| 2.      Any product approved underlayment ~~system with a mechanically fastened base sheet, and cap sheet set hot, cold, or self-adhered~~. | per Product Approval | 3.01 B, C, D or E |

Rationale for the proposed changes in the 3 previous Tables:

After the commission’s previous actions on related modifications, the inclusion of “nail-on” or “system with a mechanically fastened base sheet, and cap sheet set hot, cold, or self-adhered” is no longer applicable. See “E” in the “Reference” column in the three Tables and shown as it currently appears in the code below.

3.01 Underlayment Applications—CHOOSE ONE of the following:

E. Self-Adhered Underlayment (Single Ply). A single-ply underlayment system utilizing any Product approved self-adhered underlayment. The roof cover is terminated at approved metal flashings. Apply one layer of any self-adhered underlayment in compliance with the underlayment manufacturers approved/requirements.

**ROOFING APPLICATION STANDARD (RAS) No. 115 STANDARD PROCEDURES FOR ASPHALT SHINGLE INSTALLATION**

**7) R- RAS 115 - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:30 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** RAS 115 MOD R10180

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle.

Considering the approved modification allowing self-adhered underlayment installation directly onto Wood, we feel the following comments need to be incorporated in the Code.  The changes will more clearly and precisely indicate that all underlayment for asphalt shingle installation need to comply with Table 1518.1. FBC.  We feel that any additional instructions, currently indicated in section 4.2 below, will only confuse some readers.

4.Underlayment

4.1 Underlayment shall be in accordance with Chapter 15 (High-Velocity Hurricane Zones), Table 1518.1 of the *Florida Building Code, Building*.

~~4.1 Minimum prescriptive underlayments shall be one of the following, unless otherwise specifically noted in roofing assembly Product Approval:~~

* + ~~•A double layer of an ASTM D226, Type I, with a 19-inch headlap; or~~
	+ ~~•A single layer of an ASTM D226, Type II with a 4-inch headlap; or~~
	+ ~~•A single layer of an ASTM D2626 coated base sheet with a 4-inch headlap.~~
	+ ~~•All endlaps shall be a minimum of 6 inches.~~
	+ ~~•All valleys shall be woven.~~

4.2 Reserved. ~~All u Underlayments shall be fastened with approved minimum 12 gage by 1~~~~1~~~~/~~~~4~~~~in. corrosion-resistant annular ring shank roofing nails fastened through minimum 32 gage by 1~~~~5~~~~/~~~~8~~~~in. diameter approved diameter tin caps. Underlayment shall be attached to a nailable deck in a grid pattern of 12 inches (305mm) between overlaps, with 6-inch (152 mm) spacing at overlaps at the overlaps. Nails shall be of sufficient length to penetrate through the sheathing or wood plank a minimum of~~~~3~~~~/~~~~16~~~~in. or penetrate 1 inch (25 mm) or greater thickness of lumber a minimum of 1 in., except where architectural appearance is to be preserved, in which case a minimum of~~~~3~~~~/~~~~4~~~~in. nail may be used.~~

~~4.3 If the underlayment is a self-adhering membrane, the membrane shall be applied over a mechanically attached anchor/base sheet attached in compliance with this section above.~~

**(R10180 AS)**

**ROOFING APPLICATION STANDARD (RAS) No. 118-20**

**INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS**

**Direct Deck & Counter Battens Only**

**8) R- RAS 118 - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:33 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** RAS 118 MOD R9915

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle.

Considering the approved modification allowing self-adhered underlayment installation directly onto Wood, we feel the following comments need to be incorporated in the Code.  The changes will more clearly and precisely indicate that all tile underlayment systems must be provided with a product approval.  The reserving of the sections into one section is to allow inclusion of any system be it, hot applied, cold applied, single-ply etc..

**RAS 118-23**

**Direct Deck & Counter Battens Only**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Roof Pitch** | **Counter Battens or Direct Deck** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 4: 12” or greater | Either | 1. ASTM D226 Type II (#30) or ASTM D2626 (#43) organic base sheet nailed to deck, min. (#90) ASTM D6380, Class M or WS, Type II organic cap sheet set in Type IV hot asphalt. | Required | 3.01A |
| Either | 2. Any Product ~~Approval~~ Approved Underlayment System ~~with a mechanically fastened base sheet, and cap sheet set in hot, cold or self-adhered~~. | Per Product Approval | 3.01B~~, C or D~~ |
| ~~Either~~ | ~~3. Product Approval Listed Approved nail-on single- ply underlayment.~~ | ~~Per Product Approval~~ | ~~3.01E~~ |

RAS 118-23

PART III—EXECUTION 3.01

Underlayment Applications—CHOOSE ONE of the following:

NOTE #3: Anchor/base sheet shall have a minimum of two plies in the valleys. A No. 30 or No. 43 can be used as a dry in prior to installing the underlayment with this system.

A.            Hot Mop 30/90, Hot Mop 43/90 (see Drawing 1). A No. 30 or No 43 anchor/ base sheet ASTM D226, Type II, or ASTM D2626 shall be mechanically attached to the wood deck with approved fasteners spaced in a 12-in. grid staggered in two rows in the field, and 6 in. on center at the laps. Extend anchor/base sheet a minimum of 4 in. up vertical surfaces. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of mineral surfaced cap sheet ASTM D6380 in full 25 lb./sq, ± l5 percent mopping of asphalt. End laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tin caps or by Miami-Dade listed for corrosion resistance prefabricated fasteners in accordance with Florida Building Code, Building Sections 1517.5.1 and 1517.5.2.

NOTE #4: The above system may be upgraded by hot mopping an interply of ASTM listed fiberglass or perforated organic felt to the anchor sheet before applying the cap sheet. Asphalt application shall be per above specifications.

B.            ~~Hot-Applied~~ Product Approved Underlayment System supported with applicable uplift testing. (TAS 114, FM 4474, or UL 1897). ~~(see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck (unless directed otherwise by Product Approval) with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps or as specified in the underlayment manufacturer’s Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of cap sheet in a full 25#/ sq. ± 15 percent mopping of asphalt. End laps shall be a minimum of 6 in. on center; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building Sections 1517.5.1 and 1517.5.2.~~

C.            Reserved. ~~Cold-Applied Product Approved Underlayment System (see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of cap sheet in a continuous layer of cold process adhesive at the rate of 1.5 gallons per 100 sq. ft. or at the rate if so stated in the Product Approval. Adhesive shall be applied uniformly in accordance with the Product Approval with a squeegee or knotted brush. Cap sheet side laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building Sections 1517.5.1 and 1517.5.2.~~

D.            Reserved. ~~Product Approved Anchor/Base Sheet/ Self-Adhered Underlayment System. The roof cover is terminated at approved metal flashings. Any approved anchor/base sheet as listed in the Product Approval shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturer’s Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of any Product Approved, self-adhered underlayment in compliance with the self-adhered underlayment manufacturers’ approval/requirements.~~

E.            Reserved. ~~Self-Adhered Underlayment (single ply). A single-ply underlayment system utilizing any Product Approved self-adhered underlayment. The roof cover is terminated at approved metal flashings. Apply one layer of any self-adhered underlayment in compliance with the underlayment manufacturer’s approved/requirements.~~

(R9915)

**ROOFING APPLICATION STANDARD (RAS) No. 119-20**

**INSTALLATION OF MECHANICALLY FASTENED ROOF TILE SYSTEMS**

**Direct Deck & Horizontal Battens Only**

**9) R- RAS 119 - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:32 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** RAS 119 MOD R9916

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle.

Considering the approved modification allowing self-adhered underlayment installation directly onto Wood, we feel the following comments need to be incorporated in the Code.  The changes will more clearly and precisely indicate that all tile underlayment systems must be provided with a product approval.  The reserving of the sections into one section is to allow inclusion of any system be it, hot applied, cold applied, single-ply etc...

 **(Preformed Metals With Edge Returns)**

**RAS 119-23**

**Direct Deck & Horizontal Battens Only**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Roof Pitch** | **Battens or Direct Deck** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 4: 12” or greater | Either | 1. ASTM D226 Type II (#30) or ASTM D2626 (#43) organic base sheet nailed to deck, min. (#90) ASTM D6380, Class M or WS, Type II organic cap sheet set in Type IV hot asphalt. | Required | 3.01A |
| Either | 2. Any Product Approved Underlayment System ~~with a mechanically fastened base sheet, and cap sheet set in hot, cold or self-adhered~~. | Per Product Approval | 3.01B~~, C or D~~ |
| ~~Either~~ | ~~3. Product Approval listed nail-on single- ply underlayment~~. | ~~Per Product Approval~~ | ~~3.01E~~ |

RAS 119-23

PART III—EXECUTION

3.01 Underlayment Applications—CHOOSE ONE of the following:

NOTE #4: Anchor/base sheet shall have a minimum of two plies in the valleys. A No. 30 or No. 43 can be used as a dry in prior to installing the underlayment with this system.

A.            Hot Mop 30/90, Hot Mop 43/90 (see Drawing 1). A No. 30 or No 43 anchor/ base sheet ASTM D226, Type II, or ASTM D2626 Shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps. Extend anchor/base sheet a minimum of 4 in. up vertical surfaces. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of mineral surfaced cap sheet ASTM D6380 in full 25 #/sq, ± l5% mopping of asphalt. End laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tin caps or by Miami-Dade listed prefabricated fasteners.

NOTE #5: The above system may be upgraded by hot mopping an interply of ASTM listed fiberglass or perforated organic felt to the anchor sheet before applying the cap sheet. Asphalt application shall be per above specifications.

B.            ~~Hot Applied~~ Product Approved Underlayment System supported with applicable uplift testing (TAS 114, FM 4474 or UL 1897). ~~(see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps or as specified in the underlayment manufacturer’s Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of cap sheet in a full 25#/sq. ± 15 percent mopping of asphalt. End laps shall be a minimum of 6 in. on center; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building Sections 1517.5.1 and 1517.5.2.~~

C.            Reserved. ~~Cold-Applied Product-Approved Underlayment System (See Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlament manufacturers Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of cap sheet in a continuous layer of cold DRAWING 1 TYPICAL 30/90 HOT MOP process adhesive at the rate of 1.5 gallons per 100 sq. ft. or at the rate if so stated in the Product Approval. Adhesive shall be applied uniformly in accordance with the Product Approval with a squeegee or knotted brush. Cap sheet side laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building Sections 1517.5.1 and 1517.5.1.~~

D.            Reserved.  ~~Product-Approved Anchor/Base Sheet/ Self-Adhered Underlayment System. The roof cover is terminated at approved metal flashings. Any approved anchor/ base sheet as listed in the Product Approval shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of any Product Approved, self-adhered underlayment in compliance with the self-adhered underlayment manufacturers’ approval/requirements.~~

E.            Reserved. ~~Self-Adhered Underlayment (Single Ply). A single ply underlayment system utilizing any Product approved selfadhered underlayment. The roof cover is terminated at approved metal flashings. Apply one layer of any selfadhered underlayment in compliance with the underlayment manufacturers’ approved/requirements.~~

(R9916)

**ROOFING APPLICATION STANDARD (RAS) No. 120-20**

**MORTAR AND ADHESIVE SET TILE APPLICATION**

**10) R- RAS 120 - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:33 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** RAS 120 MOD R9917

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle.

Considering the approved modification allowing self-adhered underlayment installation directly onto Wood, we feel the following comments need to be incorporated in the Code.  The changes will more clearly and precisely indicate that all tile underlayment systems must be provided with a product approval.  The reserving of the sections into one section is to allow inclusion of any system be it, hot applied, cold applied, single-ply etc...

**RAS 120-23**

**Mortar and Adhesive Set**

|  |  |  |  |
| --- | --- | --- | --- |
| **Roof Pitch** | **Choice of Underlayment** | **Plastic or Compatible Roof Cement at Nails Penetrating Underlayment** | **Reference** |
| 2: 12” or greater | 1. ASTM D226 Type II (#30) or ASTM D2626 (#43) organic base sheet nailed to deck, min. (#90) ASTM D6380, Class M or WS, Type II organic cap sheet set in Type IV hot asphalt. | Required | 3.01A |
| 2. Any Product Approved Underlayment System ~~with a mechanically fastened base sheet, and cap sheet set in hot, cold or self-adhered~~. | Per Product Approval | 3.01B~~, C, D or E~~ |

RAS 120-23

PART III—EXECUTION 3.01 Underlayment Applications—

CHOOSE ONE of the following:

NOTE #2: Anchor/base sheet shall have a minimum of two plies in the valleys. Capsheets for mortar set systems shall be mineral surfaced. A No. 30 or No. 43 can be used as a dry-in prior to installing the underlayment with this system.

A.            Hot Mop 30/90, Hot Mop 43/90 (See Drawing 1). A No. 30 or No 43 anchor/ base sheet ASTM D226, Type II, or ASTM D2626 shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps. Extend anchor/base sheet a minimum of 4 in. up vertical surfaces. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of mineral surfaced cap sheet ASTM D6380M in full 25 lb./sq, ± l5 percent mopping of asphalt. End laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and back nailed 12 in. on center with approved nails through tincaps or by Miami-Dade listed prefabricated fasteners in accordance with Florida Building Code, Building 1517.5.1 and 1517.5.2. NOTE #3: The above system may be upgraded by hot mopping an interply of ASTM listed fiberglass or perforated organic felt to the anchor sheet before applying the cap sheet. Asphalt application shall be per above specifications.

B.            ~~Hot Applied~~ Product Approved Underlayment System supported with applicable uplift testing (TAS 114, FM4474 or UL 1897). ~~(see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck (unless directed otherwise by Product Approval) with approved fasteners spaced in a 12 in. grid staggered in two rows in the field, and 6 in. on center at the laps or as specified in the underlayment manufacturer’s Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over installed anchor/base sheet, apply one layer of cap sheet in a full 25# /sq. ±15 percent mopping of asphalt. End laps shall be a minimum of 6 in. on center; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building 1517.5.1 and 1517.5.2.~~

C.            Reserved. ~~Cold Applied Product Approved Underlayment System (see Drawing 1). An anchor/base sheet shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor/base sheet, apply one layer of cap sheet in a continuous layer of cold process adhesive at the rate of 1.5 gallons per 100 square feet or at the rate if so stated in the Product Approval. Adhesive shall be applied uniformly in accordance with Product Approval with a squeegee or knotted brush. Cap sheet side laps shall be a minimum of 6 in.; head laps shall be a minimum of 3 in. and backnailed 12 in. on center with approved nails through tincaps or by prefabricated fasteners in accordance with Florida Building Code, Building 1517.5.1 and 1517.5.2.~~

D.            Reserved. ~~Product Approved Anchor/Base Sheet/ Self-Adhered Underlayment System. The roof cover is terminated at approved metal flashings. Any approved anchor/ base sheet as listed in the Product Approval shall be mechanically attached to the wood deck with approved fasteners spaced in a 12 in. grid staggered in two rows in the field and 6 in. on center at the laps or as specified in the underlayment manufacturers Product Approval. Anchor/base sheet end laps shall be a minimum of 6 in. and head laps shall be a minimum of 4 in. Over anchor /base sheet, apply one layer of any Product approved, self-adhered underlayment in compliance with the self-adhered underlayment manufacturers’ Approval/Requirements. Head laps shall be backnailed 12 inch on center with approved nails through tincaps or by prefabricated fasteners in accordance with Sections 1517.5.1 and 1517.5.2 Florida Building Code, Building.~~

E.            Reserved. ~~Self-Adhered Underlayment (Single Ply). A single-ply underlayment system utilizing any Product approved selfadhered underlayment. The roof cover is terminated at approved metal flashings. Apply one layer of any selfadhered underlayment in compliance with the underlayment manufacturers’ approved/requirements.~~

(R9917)

**ROOFING APPLICATION STANDARD (RAS) No. 130-20 INSTALLATION CRITERIA FOR WOOD ROOF SHINGLES AND SHAKES APPLICATION**

**11) R- RAS 130 - Comment #1**

**Aaron R. Phillips** | Vice President of Technical Services

**Asphalt Roofing Manufacturers Association (ARMA)**

4.1 Underlayment

Solid Sheathing: Two layers of ASTM D226 Type II or ASTM D4869 Type III, Type IV~~,~~ underlayment shall be installed as follows: Apply a strip of underlayment for the first course that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply a full sheet of underlayment~~,~~ for the second course. Apply the third course of underlayment overlapping the second course half the width of a full sheet plus 2 inches. Overlap all successive courses half the width of a full sheet plus 1 inch. End laps shall be 6 inches (152 mm) and shall be offset by 6 feet (1829 mm). Underlayment shall be fastened to a nailable deck with a maximum fastener spacing measured horizontally and vertically of 12 inches (305 mm) o.c. between side laps, and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment ~~F~~fasteners shall be corrosion resistant 12 ga. roofing nails through tin caps.

5.1          Underlayments:

Solid Sheathing: ~~Underlayment shall be installed with t~~Two layers of ASTM D226 Type II or ASTM D4869 Type III, Type IV~~, or ASTM D8257~~ underlayment shall be installed as follows: Apply a strip of underlayment for the first course that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply a full sheet~~s~~ of ~~reinforced~~ underlayment for the second course. Apply the third course of underlayment~~,~~ overlapping the second course ~~successive sheets~~ half the width of a full sheet plus 2 inches. Overlap all successive courses half the width of a full sheet plus 1 inch. End laps shall be 6 inches (152 mm) and shall be offset by 6 feet (1829 mm). Underlayment shall be fastened to a nailable deck with a maximum fastener spacing measured horizontally and vertically of 12 inches (305 mm) o.c. between side laps, and one row at the end and side laps fastened 6 inches (152 mm) o.c. Underlayment fasteners shall be ~~fastened with~~ corrosion resistant 12 ga. roofing nails through tin caps.

**RATIONALE:**

This comment offers changes to RAS 130, which are shown via red text with turquoise highlights.

R10238-A2 made changes to the two-layer underlayment installation requirements for wood shingles in RAS 130 Section 4.1. However, it omitted the important overlap dimension for “all successive courses.” This is corrected by inserting the number 1, as shown in red. Two punctuation and one capitalization errors are fixed also.

R10238-A2 also overlooked the need to make the same changes for wood shakes in Section 5.1. This comment offers equivalent changes to RAS 130, Section 5.1.

The same changes in two-layer underlayment installation were made by R10071-A5 (FBC-Building, Section 1507.1.1.1) and R10073-A3 (FBC-Residential, Section R905.1.1.1).

Making the changes shown in this comment will create consistency with other sections of the FBC-Building and FBC-Residential and within RAS 130.

**12) R- RAS 130 - Comment #2**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:34 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** RAS 130 MOD R10178

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle. These comments are truly editorial, and I believe self-explanatory.

If you have any questions, please contact me.

4.8     The beginning or starter course of wood shingles at the eave line shall be doubled as a minimum. The wood shingles shall be ~~project~~ a minimum 3/4 in. to a maximum of 2 in. beyond the drip edge at both eaves and rakes. Spacing between shingles (joints or keyways) shall be a minimum of 1/4 in. and a maximum of 3/8 in. Shingles shall be positioned so that they cover the joints in the preceding course and adjacent courses shall be offset a minimum of 11/2 in. In any three courses (adjacent), no two joints should be directly aligned (see Detail B).

4.11   Metal flashing materials shall comply with Section 1517.6 of the Florida Building Code, Building. Metal step flashing shall be used at all vertical side walls. The length of the step flashing units shall be 3 in. longer than the exposure of the shingles. The step-flashing unit shall be installed just up slope from the exposed area of the wood shingle, in such a manner as to be covered by the next wood shingle, while maintaining a minimum 3 in. head lap. Step flashing metal shall extend 5 in. up the vertical surface and 5 in. horizontally onto the wood shingle. Nail each step-flashing unit near the upper corner. Location of the shingle fasteners must be adjusted to ~~insure~~ ensure that the step flashing is not penetrated. Vertical head walls shall be flashed with apron type metal flashing. Wood shingles shall be installed up to the vertical head wall and out over the top course of wood shingles a minimum of 5 in. Wall treatment or flashing or headwall flashing a minimum of 3 in. and shall terminate a minimum of 1 in. above the surface of the wood shingles. Metal counter flashing shall be installed in compliance with Roofing Application Standard RAS 111.

5.10      Hip and ridges may be installed from pre-manufactured units or field assembled units from manufacturer’s shakes. The exposed juncture of the roof hip and ridge areas shall be covered with a minimum 6 in. wide strip of ASTM D226 Type II ~~organic~~ felt or Approved ASTM D8257 synthetic underlayment, prior to installing the hip and ridge units. No felt shall be left exposed. Lay alternate overlapping hip and ridge units, starting with a double starter course. The weather exposure of the hip and ridge units shall be the same exposure as the field shingles. Each side of the hip and ridge units shall be a minimum of 4 in. wide. Each hip and ridge unit shall be fastened to the roof with two fasteners of the same type as that used for the field shakes. Fasteners shall be of sufficient length to penetrate the plywood panel or wood plank decking not less than 3/16 in.; or to penetrate into a 1 in., or greater, thickness of lumber not less than 1 in. Nails shall be driven straight and flush. Nails shall not be overdriven. (see Detail C).

5.11      Metal flashing materials shall comply with Section 1517.6 of the Florida Building Code, Building. Metal step flashing shall be used at all vertical side walls. The length of the step flashing units shall be 3 in. longer than the exposure of the shakes. The step-flashing unit shall be installed just up slope from the exposed area of the wood shake, in such a manner as to be covered by the next wood shake while maintaining a minimum 3 in. head lap. Step flashing metal shall extend 5 in. up the vertical surface and 5 in. horizontally onto the wood shake. Nail each step-flashing unit near the upper corner. Location of the shake fasteners must be adjusted to ~~insure~~ ensure that the step flashing is not penetrated. Vertical head walls shall be flashed with apron type metal flashing. Wood shake shall be installed up to the vertical head wall. The head wall flashing shall then be installed to extend up the vertical surface 5 in., and out over the top course of wood shake a minimum of 5 in. Wall treatment or metal counterflashing shall be brought down over all vertical flanges of the step flashing or head wall flashing a minimum of 3 in. and shall terminate a minimum of 1 in. above the surface of the wood shake. Metal counterflashing shall be installed in compliance with RAS 111.

**(R10178 AS)**

**TESTING APPLICATION STANDARD (TAS) No. 100(A)-95**

**TEST PROCEDURE FOR WIND AND WIND DRIVEN RAIN**

**RESISTANCE AND/OR INCREASED WINDSPEED RESISTANCE OF**

**SOFFIT VENTILATION STRIP AND CONTINUOUS OR INTERMITTENT**

**VENTILATION SYSTEM INSTALLED AT THE RIDGE AREA**

**13) R- TAS 100(A) - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:33 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** TAS 100(A) MOD R9907

Hello Mo,

The following are comments under the Public Comments provision for the 2023 Code Cycle.

These comments are truly editorial, and I believe self-explanatory.

**5. Apparatus**

5.1 The Test Frame

5.1.1 The test frame shall consist of a base structure of sufficient dimensions to hold the test specimen noted in Section 8, constructed from wood or steel framing, and a wood deck, constructed from plywood sheathing. ~~Deck support joists shall be placed at 24 in. centers. (See Figure 1.)~~ ~~The deck slopes, on the windward and leeward side, shall be adjustable or multiple interchangeable decks shall be available to test assemblies at slopes of 2 in., 4 in. and 6 in. in 12 in.~~The deck support assembly shall be capable of supporting not less than 55 lbs per square foot of dead load. The windward end and each side of the test frame shall be covered with plywood to ~~insure~~ ensure soffit to ridge airflow.

8.1.4 A tray or other means of collecting water shall be installed on the underside of the ridge and/or deck area to capture any water which infiltrates the ridge area ventilation system. The tray or other means shall be sized and configured to ~~insure~~ ensure that all water penetrating the ridge area ventilation system or the ventilation unit, is captured.

(R9907)

**TESTING APPLICATION STANDARD (TAS) No. 110-2000**

**TESTING REQUIREMENTS FOR PHYSICAL PROPERTIES OF ROOF**

**MEMBRANES, INSULATION, COATINGS AND OTHER ROOFING COMPONENTS**

**14) R- TAS 110 - Comment #1**

**From:** Rodriguez, Gaspar (RER) [mailto:Gaspar.Rodriguez@miamidade.gov]
**Sent:** Monday, January 30, 2023 2:34 PM
**To:** Madani, Mo <Mo.Madani@myfloridalicense.com>
**Cc:** Gascon, Jaime (RER) <Jaime.Gascon@miamidade.gov>
**Subject:** FBC MOD R10146

The following is a comment under the Public Comments provision for the 2023 Code Cycle.

This comment is strictly regarding the misspelled word, Mechanically.

If you have any questions, please contact me.

**18. Referenced Standards**

ASTM D8257-20 Standard Specification for **Mechanically** Attached Polymeric Roof Underlayment

Used in Steep Slope Roofing

(R10146 AS)