**Supplement to the Draft Florida Building Code, 8th Edition (2023) – Based on the March 14, 2023 Workshop**

**Florida Building Code – Building**

**CHAPTER 2 DEFINITIONS**

Revise the term “Sun Control Structure” to read as follows:

**Sun Control Structure.**An ~~independently supported~~ accessory structure consisting of columns or posts supporting an open roof of girders, beams, or cross rafters with or without fixed or operational louvers serving to direct sunlight. ~~Sun Control Structures attached to and depending on a building for support are considered the same occupancy class as the supporting building.~~

**S – B-Chs. 2/17 - Comment #1**

Revise the term “HVHZ” to read as follows:

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

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

**CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE**

**SECTION 449 HOSPITALS**

**449.4.2.2.1**

Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

~~The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:~~

1. ~~Two feet above the base flood elevation as defined in this code.~~
2. ~~The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)~~
3. ~~The design flood elevation as defined in this code.~~
4. ~~The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.~~

**~~Exceptions:~~**

1. ~~Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.~~
2. ~~Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code’s site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.~~
3. **~~449.4.2.2.2~~**

~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 449.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 449.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 449.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 449.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**SP-B-Ch. 4 Comment #1**

**SECTION 450 NURSING HOMES**

**450.4.2.2.1**

Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the base flood elevation as defined in Section 1612 of this code, plus 2 feet, or to the height of hurricane Category 3 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

~~The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:~~

1. ~~Two feet above the base flood elevation as defined in this code.~~
2. ~~The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)~~
3. ~~The design flood elevation as defined in this code.~~
4. ~~The 500-year flood elevation (elevation with a .02% chance of being equaled or exceeded in any given year) as described in ASCE 24.~~

**~~Exceptions:~~**

1. ~~Fuel supply storage tanks located below ground and/or sufficiently ballasted or anchored to resist uplift due to buoyancy and designed to resist hydrostatic pressures exerted by a 500-year flood event or a category 5 hurricane storm surge inundation.~~
2. ~~Additions that are not a substantial improvement to an existing facility that was designed and constructed in accordance with the Florida Building Code’s site standards for a hospital in effect at the time of construction shall be located at or above the finish floor elevation of the existing facility.~~

**~~450.4.2.2.2~~**

~~For all existing facilities, the lowest floor elevations of all additions, and all patient support areas including food service, and all patient support utilities, including mechanical, and electrical (except fuel storage as noted in Section 450.4.2.9.3 of this code) for the additions shall be at or above the elevation of the existing building, if the existing building was designed and constructed to comply with either the site standards of Section 450.4 of this code or local flood-resistant requirements, in effect at the time of construction, whichever requires the higher elevation, unless otherwise permitted by Section 1612 of this code. If the existing building was constructed prior to the adoption of either the site standards of Section 450.4 of this code or local flood-resistant requirements, then the addition and all patient support areas and utilities for the addition as described in this section shall either be designed and constructed to meet the requirements of Section 450.4.2.2.1 of this code or be designed and constructed to meet the dry flood proofing requirements of Section 1612 of this code.~~

**SP-B-Ch. 4 Comment #2**

**CHAPTER 10 MEANS OF EGRESS**

Revise Section 1015.8 to read as follows:

**1015.8 Window openings.** Windows in Group R-2 and R-3 buildings including *dwelling units*, where the top of the sill of an operable window opening is located less than ~~24~~ 36 inches above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

1. Operable windows where the top of the sill of the opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F2006.

2. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.

3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.

4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

**F-B-Ch.10 – Comment #1**

**CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES**

Revise Section 1518.2.1 to read as follows:

**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.

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

Revise Section 1518.2.1 to read as follows:

**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

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

**CHAPTER 16 STRUCTURAL DESIGN**

Add the following new note to Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4) in the Florida Building Code, Building:

6.  Location-specific wind speeds shall be permitted to be determined using the ASCE Wind Design Geodatabase.  The ASCE Wind Design Geodatabase can be accessed at the ASCE 7 Hazard Tool (<https://asce7hazardtool.online>) or equivalent.

**S – B-Ch. 16 & R-Ch. 3 - Comment #2**

**CHAPTER 17 SPECIAL INSPECTIONS AND TESTS**

Revise Section 1703.6.2.1 to read as follows:

**1703.6.2.1 Concrete Testing Reports.**Where this code, a referenced standard, a building official or inspection agency requires testing of concrete on a project, test reports shall be provided to the building official or inspection agency, the registered design professional of record, and the material supplier concurrent ~~with~~ when reporting results to the client.

**S – B-Chs. 2/17 - Comment #1**

**Florida Building Code – Residential**

Revise the term “HVHZ” to read as follows:

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

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

**CHAPTER 3 BUILDING PLANNING**

Add the following new note to Figure R301.2(4) in the Florida Building Code, Residential:

8.  Location-specific wind speeds shall be permitted to be determined using the ASCE Wind Design Geodatabase.  The ASCE Wind Design Geodatabase can be accessed at the ASCE 7 Hazard Tool (<https://asce7hazardtool.online>) or equivalent.

**S – B-Ch. 16 & R-Ch. 3 - Comment #2**

**CHAPTER 46 REFERENCED STANDARDS**

Revise as follows:

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

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

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

|  |
| --- |
| 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 |

 |

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

**Florida Building Code - Existing Building**

Revise the following Florida Existing Building Code sections as follows:

**505.2 Window fall prevention ~~opening control devices~~ on replacement windows.** In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential,* window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

**702.4 Window fall prevention ~~opening control devices~~ on replacement windows.** In Group R-2 or R-3 buildings containing dwelling units and one- and two-family dwellings and townhouses regulated by the *Florida Building Code, Residential,* window opening control devices or other window fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

**E-B Chapter 5 – Comment #1**

**Florida Building Code - Test Protocols for High-Velocity Hurricane Zones**

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

Revise section 4.2 to read as follows:

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.

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

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

Revise Table 1 to read as follows:

**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 |

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

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

Revise Table 1 to read as follows:

**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 |

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

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

Revise Table 1 to read as follows:

**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 |

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

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

Revise Section 4.1 to read as follows:

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.

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

Revise Section 4.8 to read as follows:

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.

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

**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**

Revise section 5 Apparatus to read as follows:

**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.

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

**TESTING APPLICATION STANDARD (TAS) No. 110-2000 TESTING REQUIREMENTS FOR PHYSICAL PROPERTIES OF ROOF MEMBRANES, INSULATION, COATINGS AND OTHER ROOFING COMPONENTS**

Revise section 18 Referenced Standards to read as follows:

**18. Referenced Standards**

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

Used in Steep Slope Roofing

No change to the remaining text.

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