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Certificate of Authorization #9503
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EVALUATION REPORT

ICP Adhesives and Sealants, Inc.
12505 NW 44th Street
Coral Springs, FL 33065
(888) 774-1419

Evaluation Report 02768.02.06-R6
FL6276-R6
Date of Issuance: 03/21/2006
Revision 6: 10/12/2017

SCOPE:
This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The products described herein have been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: ICP Adhesives Polyset® RTA-1

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

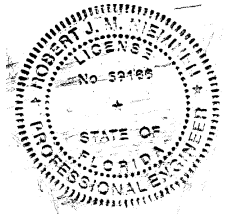
ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity | ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 8.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 10/12/2017. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. Exterior Research & Design, LLC. d/b/a Trinity | ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Exterior Research & Design, LLC. d/b/a Trinity | ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Roof Tile Adhesive
Compliance Statement: ICP Adhesives Polyset® RTA-1, as produced by **ICP Adhesives and Sealants, Inc.**, has demonstrated compliance with the **6th Edition (2017) Florida Building Code** through testing in accordance with the Standards set forth herein. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Sections	Property	Standard	Year
1504.2.1.1	Overturning resistance	SSTD 11	1997

3. REFERENCES:

Entity	Examination	Reference	Date
ERD (TST6049)	Static Uplift – SSTD 11	E42730.08.13	08/23/2013
ERD (TST6049)	Static Uplift – SSTD 11	ECM-SC6795.12.14-2	02/27/2015
Miami-Dade (CER 1592)	HVHZ compliance	16-0315.03	04/07/2016
PRI (TST5878)	Static Uplift – SSTD 11	PFI-006-02-01	05/09/2005
PRI (TST5878)	Static Uplift – SSTD 11	PFI-008-02-03	12/14/2005
PRI (TST5878)	Static Uplift – SSTD 11	PFI-008-02-04	12/14/2005
PRI (TST5878)	Static Uplift – SSTD 11	FOP-009-02-02 Rev1	03/24/2015
PRI (TST5878)	Static Uplift – SSTD 11	FOP-009-02-01 Rev1	03/24/2015
PRI (TST5878)	Static Uplift – SSTD 11	FOP-009-02-03 Rev1	03/25/2015
PRI (TST5878)	Static Uplift – SSTD 11	FOP-009-02-04 Rev1	03/25/2015
PRI (TST5878)	Static Uplift – SSTD 11	FOP-009-02-05 Rev2	06/01/2015
UL, LLC. (QUA9625)	Quality Assurance	Service Confirmation	Exp. 06/05/2018

4. PRODUCT DESCRIPTION:

4.1 **ICP Adhesives Polyset® RTA-1** is a single component polyurethane foam roof tile adhesive distributed in factory, pre-mixed canisters.

5. LIMITATIONS:

5.1 This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.

5.3 Fire classification is not part of this evaluation. Refer to a current Roofing Materials Directory for fire ratings of this product and **FBC 1505.2**.

5.4 **ICP Adhesives Polyset® RTA-1** can be used with flat, low and high profile tiles or any rigid, discontinuous roof assembly having a current Florida Statewide Product Approval or approved on a local-level by the Authority Having Jurisdiction.

5.5 Minimum underlayment shall be per **FRSA/TRI April 2012 (04-12)** or having a current Florida Statewide Product Approval or approved on a local-level by the Authority Having Jurisdiction for use with **ICP Adhesives Polyset® RTA-1**.

5.6 Field tiles, meeting the limitations of **FBC 1609.5.3**, using **ICP Adhesives Polyset® RTA-1** are limited to projects having an Aerodynamic Uplift Moment (Ma), determined in accordance with **FBC 1609.5.3** or **Tables 2A and 2B of FRSA/TRI April 2012 (04-12)**, not greater than the following Allowable Overturning Moment values. Refer to Section 10 and **ICP Adhesives and Sealants, Inc.** published installation instructions for Adhesive Paddy Placement details.

TABLE 1: FIELD TILES IN ICP ADHESIVES POLYSET® RTA-1
ALLOWABLE OVERTURNING MOMENT PERFORMANCE DATA
4 TO 1 MARGIN OF SAFETY ALREADY APPLIED

Tile (FBC 1609.5.3)		Adhesive Paddy Placement		Allowable Overturning Moment (ft-lbf)
Type	**Profile**	**Placement**	**Contact Area**	
Concrete	Flat	Interdependent, Cross Bond Tile Application: On Underlayment: One (1) ~5-inch long x ~9 gram oblong shaped bead on underlayment at strengthening rib closest to underlock side starting ~4-inch below the tile course line working up towards the ridge, continuing 1-inch above the tile course line and place the tile. At Tile Headlap: Continue on top of the ~1-inch exposed portion of the underlayment-bead and onto the head of the lower course tile and carry the adhesive bead minimum 4.5-inches horizontally across the head of the lower course tile. See Section 10, Placement Detail #1.	Tile Underside: 8 to 10 in^2 Tile Head Lap: 10 in^2	51.8
Concrete	Medium	Interdependent, Cross Bond Tile Application: On Underlayment: One (1) ~5-inch long x ~9 gram oblong shaped bead on underlayment at strengthening rib closest to underlock side starting ~4-inch below the tile course line working up towards the ridge, continuing 1-inch above the tile course line and place the tile. At Tile Headlap: Continue on top of the ~1-inch exposed portion of the underlayment-bead and onto the head of the lower course tile and carry the adhesive bead minimum 4.5-inches horizontally across the head of the lower course tile. See Section 10, Placement Detail #2.	Tile Underside: 6 to 8 in^2 Tile Head Lap: 10 in^2	44.0
Concrete	High	Interdependent, Cross Bond Tile Application: On Underlayment: Two (2) ~6-inch long x ~12 gram oblong shaped beads on underlayment, side-by-side, where the pan portion of the tile is to be located starting ~5-inch below the tile course line working up towards the ridge, continuing 1-inch above the tile course line and place the tile. At Tile Headlap: Continue on top of the ~1-inch exposed portion of the underlayment-beads and onto the head of the lower course tile and carry the adhesive bead minimum 10-inches horizontally, or the entire width of the file, across the head of the lower course tile. See Section 10, Placement Detail #3.	Tile Underside: 12 to 16 in^2 Tile Head Lap: 18 in^2	36.2
Clay	High			33.5
Clay	Cap & Pan (Barrel)	Pan Tile to Underlayment: Two (2) ~7-inch long x ~6 gram oblong shaped beads on underlayment, side-by-side, where the center of the pan tile contacts the deck starting ~2 to 3-inches from the eave end of the pan tile. Cap Tile to Pan Tile: One (1) ~7-inch long x ~6 gram oblong shaped bead at each long edge of the cap tile, ¾ to 1-inch from each edge, starting ~2 to 3-inches from the eave end working towards the ridge. Turn cap tile over and install onto pan, butting the second course pan tile eave end on underlayment, side-by-side, where the center of the pan tile contacts the deck starting ~2 to 3-inches from the eave end of the pan tile. See Section 10, Placement Detail #4.	Tile Underside: 35 to 40 in^2 Long Edge of Cap Tile: 20 to 25 in^2	162.2

5.6.1 Data in Table 1 relates to installation over a '30/90' underlayment system, as detailed in the **FRSA/TRI April 2012 (04-12)**. Alternate underlayment systems include those having a current Florida Statewide Product Approval and/or approved on a local-level by the Authority Having Jurisdiction specifically for use with **ICP Adhesives Polyset® RTA-1**.

5.6.2 Tile roof systems using tile types or profiles other than those listed above acquiring acceptance for use with **ICP Adhesives Polyset® RTA-1** shall be tested in accordance with **SSTD 11** or **Testing Application Standard TAS 101**. For the interdependent multi-paddy method, an additional 2-to-1 margin of safety above that specified in **SSTD 11** or **Testing Application Standard TAS 101** shall be applied in determining the 'allowable overturning moment'.

5.7 Hip and ridge tiles using **ICP Adhesives Polyset® RTA-1** are limited to projects having hip/ridge design pressure requirements, determined in accordance with **Table 1A of FRSA/TRI April 2012 (04-12)**, not greater than the following values. Refer to **ICP Adhesives and Sealants, Inc.** published installation instructions for Adhesive Paddy Placement details.

TABLE 2: HIP & RIDGE TILES IN ICP ADHESIVES POLYSET® RTA-1
ALLOWABLE UPLIFT RESISTANCE PERFORMANCE DATA
2 TO 1 MARGIN OF SAFETY ALREADY APPLIED FOR INDEPENDENT PLACEMENT
4 TO 1 MARGIN OF SAFETY ALREADY APPLIED FOR INTERDEPENDENT PLACEMENT

Tile	Substrate	Attachment Method	Allowable Design Pressure (psf)
Clay or Concrete	2x PT ridge board	Interdependent: Head: One (1) #10 x 2½" screw; Overlap: 1x6-inch x ~10.5 gram See Section 10, Placement Detail #5	186.5
Concrete	Hip & Ridge Channel Metal (FBC FL5374): *galvanized only*	Independent: Tile-to-metal, centered along tile: 3x6-inch x ~30 gram, starting 3-inch from the tile head. See Section 10, Placement Detail #6	122.6
Clay	Hip & Ridge Channel Metal (FBC FL5374): *galvanized only*	Independent: Tile-to-metal, centered along tile: 3x6-inch x ~30 gram, starting 4-inch from the tile head. See Section 10, Placement Detail #6	251.2
Clay or Concrete	Trim Lock™ (FBC FL5394): *aluminum* or Trim Lock™ Plus (FBC FL5394): *aluminum, galvanized, Galvalume® or stainless steel*	Interdependent: On Trim-Lock™ metal: One (1) ~7-inch long x ~10 gram oblong shaped paddy centered on metal. At Tile Headlap: One (1) ~7-inch long x ~10 gram oblong shaped bead at tile headlap. See Section 10, Placement Detail #7.	93
Clay or Concrete	Trim Lock™ (FBC FL5394): *galvanized, Galvalume® or stainless steel*		110

6. INSTALLATION:

6.1 **ICP Adhesives Polyset® RTA-1** and the tile roof assembly shall be installed in accordance with **FRSA/TRI April 2012 (04-12)** and **ICP Adhesives and Sealants, Inc.** published installation instructions, subject to the limitations outlined in Section 5.

6.2 Hip and ridge boards or hip/ridge metal shall be installed in accordance with the **FRSA/TRI April 2012 (04-12)**. Proprietary hip and ridge metal shall be installed in accordance with the manufacturer's Florida Product Approval.

6.3 Installation shall be performed by applicators that hold a valid **Qualified Applicator Card** presented by **ICP Adhesives and Sealants, Inc**.

6.4 All tiles must be set in adhesive prior to tack free time (approximately 2 to 3 minutes).

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

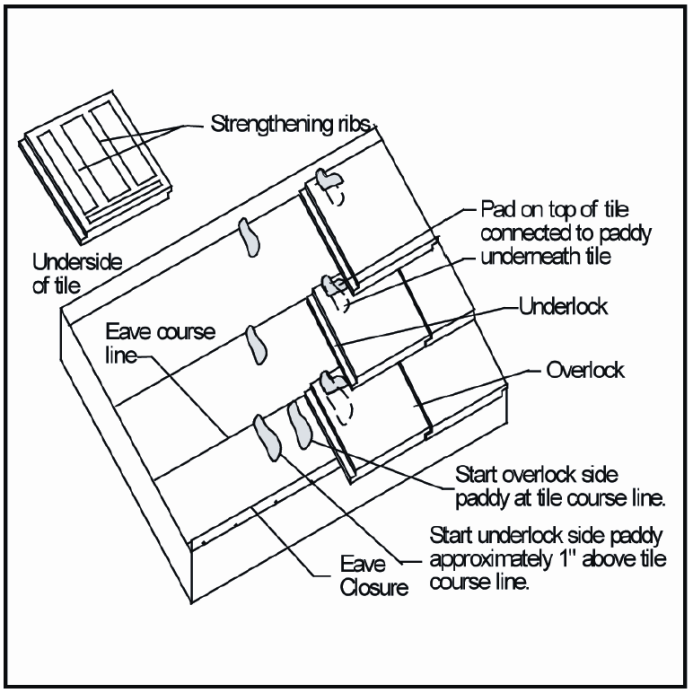
Norton, OH

9. QUALITY ASSURANCE ENTITY:

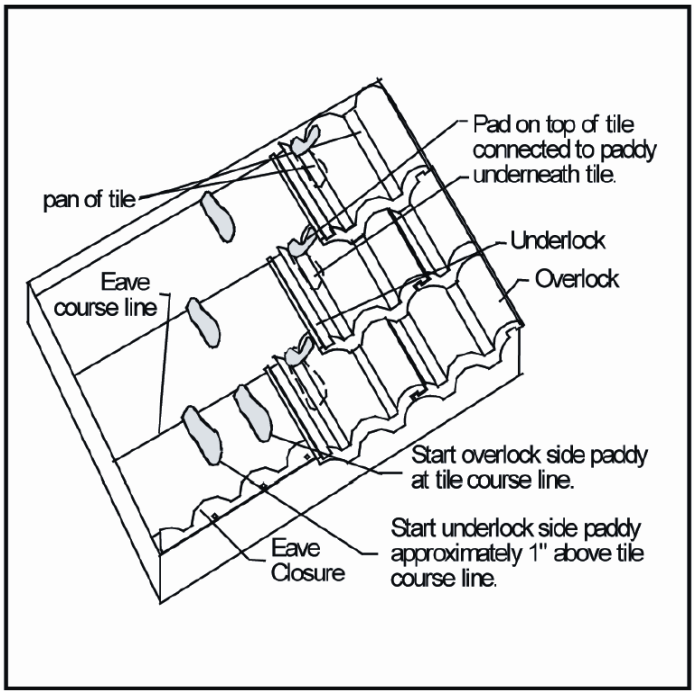
UL, LLC. – QUA9625; (847) 664-3623; LeAnna.Gradecki@ul.com

10. PADDY PLACEMENT DETAILS (FROM ICP ADHESIVES AND SEALANTS, INC. PUBLISHED LITERATURE):

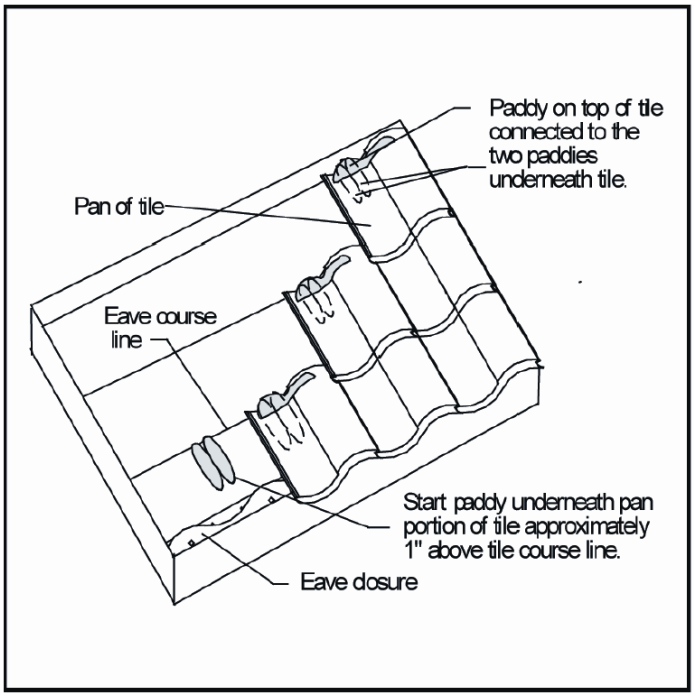
10.1 **Detail #1: Flat Profile Tile:**



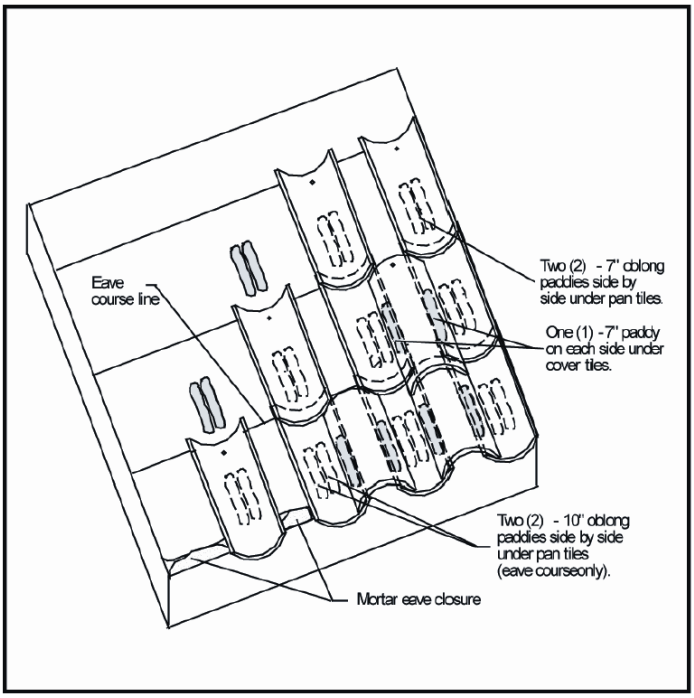
10.2 **Detail #2: Low/Medium Profile Tile:**



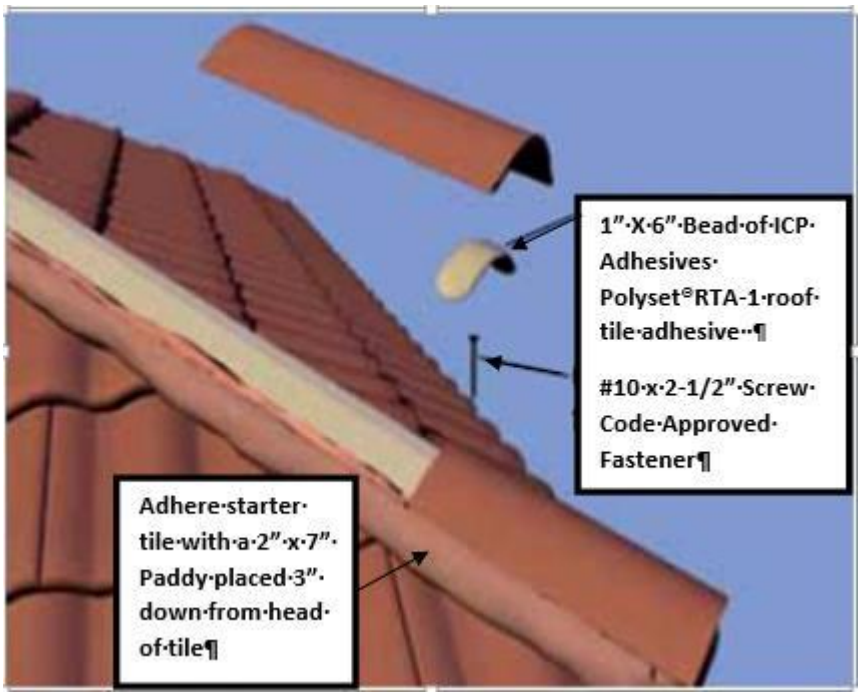
10.3 **Detail #3: High Profile Tile:**



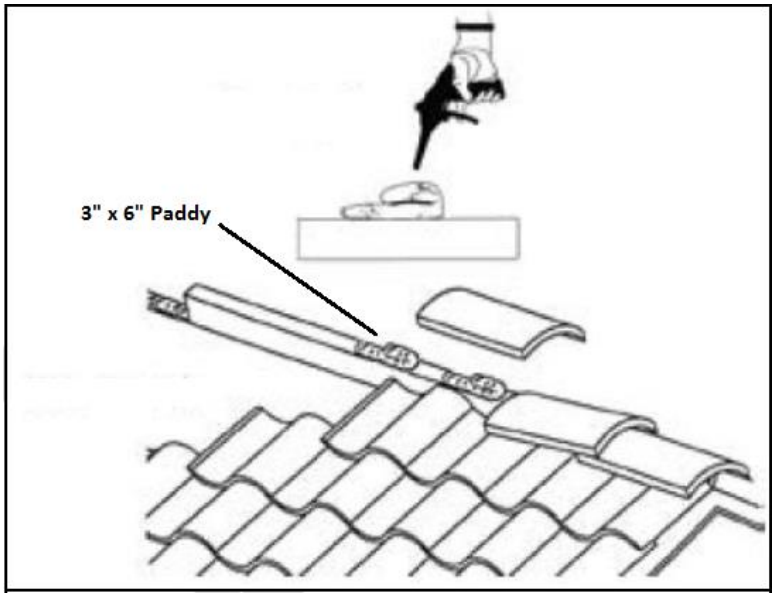
10.4 **Detail #4: Two Piece Barrel (Cap & Pan) Tile:**



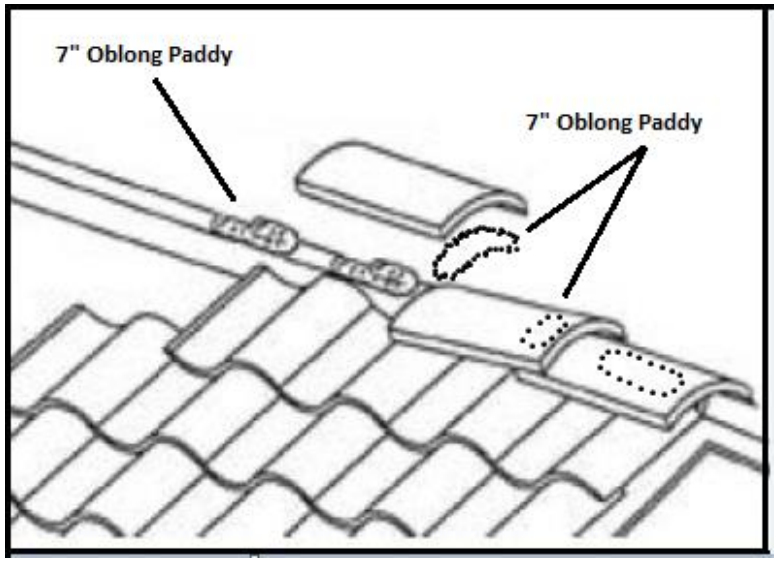
10.5 **Detail #5: Hip and Ridge (interdependent with screw):**



10.6 **Detail #6: Hip and Ridge (independent placement):**



10.7 **Detail #7: Hip and Ridge (interdependent placement):**



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