

Evaluation Report

“Top Notch”

Roof Underlayment

Manufacturer:

Ridged Systems LLC

1071 SW 30th Avenue

Deerfield Beach, Florida 33442

for

Florida Product Approval

FL 8095.2 R6

Florida Building Code 8th Edition (2023)

Method: 1 - D

Category: Roofing

Sub - Category: Roofing Accessories that are an Integral Part of the Roofing System

Product Name: “Top Notch”

Product Description: Ridge Member for Roof Tile

Prepared by:

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Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Project Manager: Diana Galloway

Report No. 22-525-TN-4-HVHZ-ER

(Revises 20-230-TN-4-HVHZ-ER (New FL8095.2 R5))

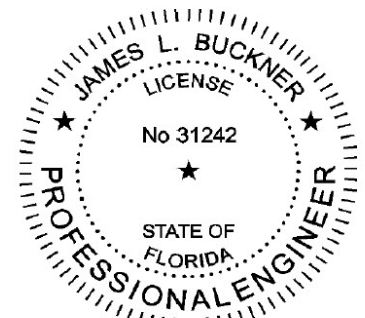
Date: 10/17/2023

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This item has been digitally signed and sealed by James L. Buckner, P.E., on this date below. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.



James L. Buckner, P.E.

FL31242

Date: 2023.10.17

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Business: 1374 Community Dr., Jupiter, FL 33458

Manufacturer: **Ridged Systems LLC**
 1071 SW 30th Avenue
 Deerfield Beach, Florida 33442
 (561) 276-9745
<http://topnotchridge.com/>

Product Name: **Top Notch**

Product Category: Roofing

Product Sub-Category Roofing Accessories that are an Integral part of the Roofing System

Compliance Method: State Product Approval Rule 61G20-3.005 (1) (d)

Product Description: Ridge Member for Roof Tile made of High Density Polyethylene (HDPE).

Product Assembly as Evaluated: Refer to Page 4 of this report for product assembly components/materials & standards:

1. Ridge Roof Tile
2. Roof Tile Adhesive
3. Top Notch Ridge member
4. Underlayment

Support: **Type:**
 Wood Deck
 (Design of support system is outside the scope of this evaluation.)

Description:

- 15/32 or greater plywood,
- or Wood plank (min. specific gravity of 0.42)

Performance Standards: The product described herein has demonstrated compliance with:

- **TAS 101-95** *Test Procedure for Static Uplift Resistance of Mortar of Adhesive Set Tile Systems*
- **ASTM D 1929-16** – *Standard test Method for Ignition Properties of Plastics*
- **ASTM D 635-14** - *Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position*

Standards Equivalency:

Test Standards Equivalency	
The following test standard versions used to test the product meets the prescribed standards as adopted by the current Florida Building for use as evaluated in this report.	
Test Standard per Current Code	Test Standard as Tested:
ASTM D 1929-16	ASTM D 1929-96
ASTM D 635-14	ASTM D 635-98

- Code Compliance:** The product described herein has demonstrated compliance with Florida Building Code 8th Edition (2023), Section 1504.2.1 and 1523.6.5.2.2.
- Evaluation Report Scope:** This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.
- Limitations and Conditions of Use:**
- Scope of “Limitations and Conditions of Use” for this evaluation:
This evaluation report for “Optional Statewide Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under “Optional Statewide Approval”.
 - Option for application outside “Limitations and Conditions of Use”
Rule 61G20-3.005(1)(e) allows engineering analysis for “project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code”. Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.
 - This report is a building code product evaluation per FLPE rule (FAC) 61G15-36 to comply with Florida product approval rule (FAC) 61G20-3. This evaluation report is part of the Florida Building Commission approval for the listed code related criteria. This report by James Buckner, P.E. and CBUGK Engineering is not a design certification of code compliance construction submittal documentation, per FBC section 107, for any individual structure, site specific or permit design.
 - All Top Notch units shall be permanently labeled with the manufacturer’s name and/or logo, and/or model.
 - Design of support system is outside the scope of this report.
 - Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
 - This report approves the use of this product assembly as described in this report for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)
- Quality Assurance:** The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.0005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through Keystone Certifications, Inc., (FBC Organization #QUA ID:1824)

**Components/Materials
(by Manufacturer):**

Ridge Roof Tile Option 1:

Material: Concrete

Standard: Material shall comply with TAS 112 per Florida Building Code 8th Edition (2023), Sections 1518.8, 1523 and TAS 110.

Ridge Roof Tile Option 2:

Material: Clay

Standard: Material shall comply with ASTM C 1167 per Florida Building Code 8th Edition (2023), Sections 1518.8, 1523 and TAS 110.

Roof Tile Adhesive:

Product Name: Polyset® AH-160
Manufactured by: ICP Adhesives and Sealants, Inc.
Type: Two-Component Adhesive
Material: Polyurethane froth
Current Approvals: FBC: FL#6332 R7, NOA# 17-0322.03

“Top Notch” Ridge Member

Material Type: Extruded Plastic
Material: High Density Polyethylene (HDPE)
Polymer Type: Thermoplastic
Physical Properties Standard: ASTM D 638
Tensile Stress: 23 MPa (minimum)

“4” Top Notch” Ridge Member

Dimensions: 10” (l) x 2.375” (w) x 4.25” (h), or

“2.5” Top Notch” Ridge Member

Dimensions: 10” (l) x 2.375” (w) x 2.75” (h)

Underlayment:

Material and application shall be in compliance with FBC Chapter 15 based on the type of roof covering, applicable codes and in accordance with manufacturer’s recommendations.

Installation:

Installation Method:

(Refer to drawings at the end of this evaluation report.)

1. **Roof adhesive**

Average paddy weight: **32 grams** per foot minimum.

A continuous strip paddy placement of roof tile adhesive shall be applied along the underlayment.

2. **“Top Notch” Ridge Member**

Install the “Top Notch” Ridge Member into the continuous strip paddy of roof tile adhesive.

3. **Roof adhesive**

Average paddy weight: **32 grams** per foot minimum.

A continuous strip paddy placement of roof tile adhesive shall be applied along the top length of the “Top Notch” Ridge Member.

4. **Concrete or Clay Ridge Tile**

Attach the ridge tile to the “Top Notch” Ridge Member with paddy placement starting at the head beneath the watercourse area of the tile and extending along the length of the member.

Install as an alternative to wood nailer as specified in the following FBC Test Protocols for High Velocity Hurricane Zone:

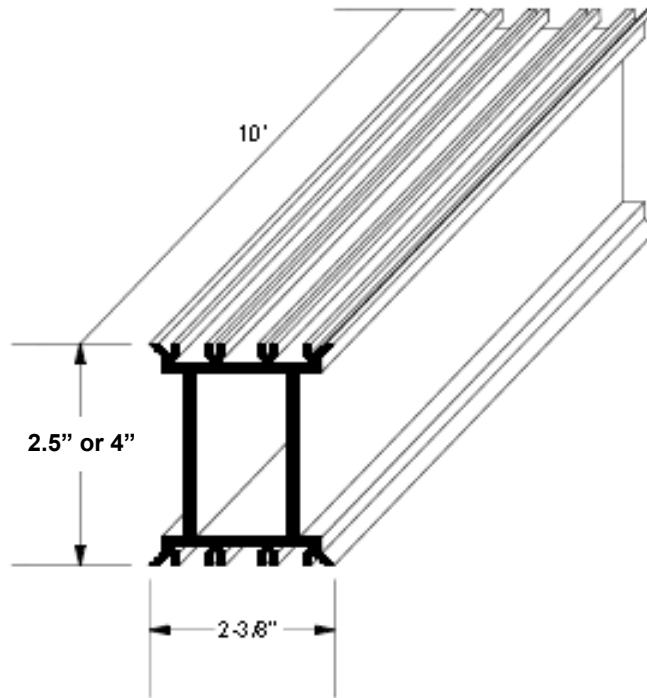
1. RAS 118, Section 3.11, Detail #2
2. RAS 119, Section 3.12, Detail #2
3. RAS 120, Section 3.10, Detail #2

Install the ridge tile assembly in compliance with the installation method listed in this report and applicable code sections of Florida Building Code 8th Edition (2023). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

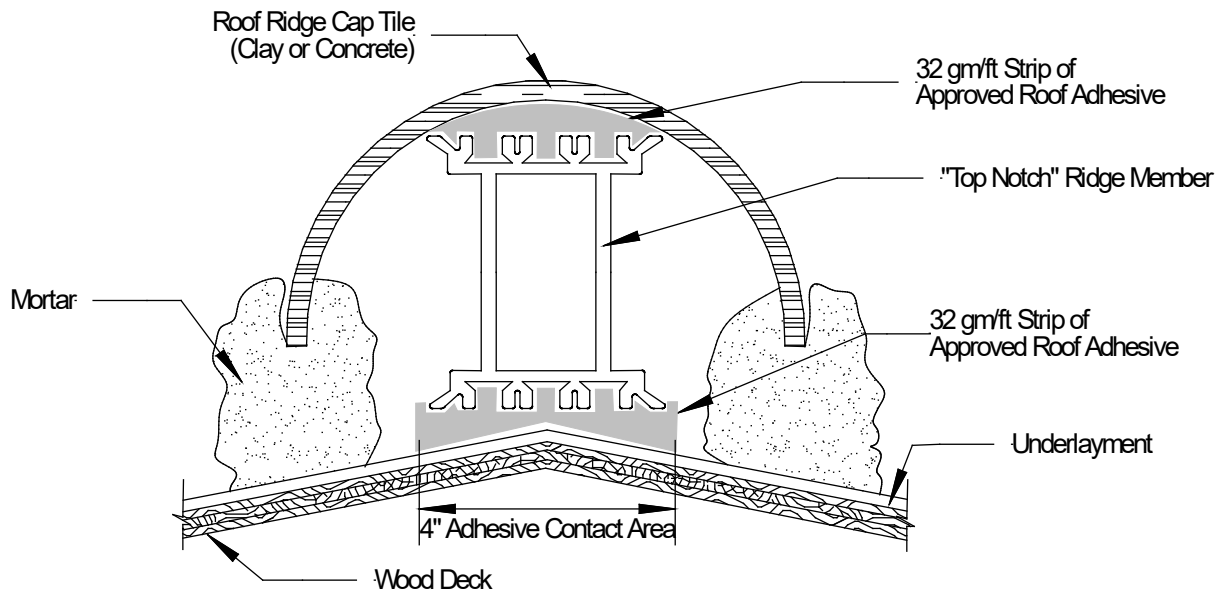
Referenced Data:

1. TAS 101-95 Uplift Test
By PRI Asphalt Technologies (FBC Organization #TST ID: 1679)
Report #: TGRI-001-02-01, Dated: 10/30/06
2. TAS 101-95 Uplift Test
By PRI Asphalt Technologies (FBC Organization #TST ID: 1679)
Report #: TGRI-001-02-02, Dated: 10/30/06
3. TAS 101-95 Uplift Test
By PRI Asphalt Technologies (FBC Organization #TST ID: 1679)
Report #: TGRI-004-02-01, Dated: 04/11/08
4. ASTM D 1929-96 & ASTM D 635-98 Tests
ETC Laboratories (FBC Organization #TST ID: 2411)
Report # ETC-08-718-20993.0, Dated 5/09/08
5. Equivalency of Test Standard Certification
By James L. Buckner, P.E. @ CBUGK Engineering
(FBC Organization # ANE 1916)
6. Quality Assurance
By Keystone Certifications, Inc., (FBC Organization #QUA ID:1824)
Ridged Systems, LLC, Licensee #: 448
7. Certification of Independence
By James L. Buckner, P.E. @ CBUGK Engineering
(ANE ID: 1916)

Installation Method Ridged Systems LLC "Top Notch" Tile Ridge Member



**"Top Notch"
Typical Profile View**



Typical Assembly Section View