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EVALUATION REPORT

Sentry Building Innovations
1209 Orange Street, Wilmington,
New Castle, DE 19801
(843) 735-1773

Evaluation Report 13925.02.17-1
FL21895
Date of Issuance: 02/16/2017

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 and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **5th Edition (2014) Florida Building Code** sections noted herein.

DESCRIPTION: Roofnado™ Mechanically Attached Synthetic Roofing Underlayments

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.

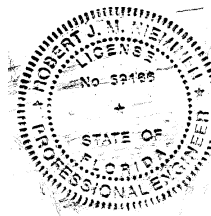
ADVERTISEMENT: The Evaluation Report number preceded by the words “Trinity|ERD Evaluated” may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

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 4.

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 02/16/2017. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. 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. 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: Underlayment

Compliance Statement: **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments**, as produced by **Sentry Building Innovations**, have demonstrated compliance with the intent of following sections of the **5th Edition (2014) Florida Building Code** through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Properties</u>	<u>Standard</u>	<u>Year</u>
1507.2.3, 1507.4.5.1, 1507.5.3, 1507.7.3, 1507.8.3, 1507.9.3, 1507.9.5	Unrolling, Breaking Strength, Pliability	ASTM D226	2006
1505.1	External Fire Classification	ASTM E108	2007

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
QAI (TST9808)	ASTM E108	RJ3502-1	09/29/2014
QAI (TST9808)	ASTM E108	RJ3502-2	09/29/2014
QAI (TST9808)	Physical Properties, AC188	RJ3502P-1	11/05/2014
QAI (TST9808)	Physical Properties, AC188	RJ3502P-2	11/05/2014
QAI (QUA7628)	Traceability/Inspections	Service Confirmation	02/09/2017

4. PRODUCT DESCRIPTION:

- 4.1 **Roofnado™ AnchorDeck™** is a synthetic polymer-based scrim-reinforced underlayment designed for use on roof decks as a water-resistant layer beneath prepared roof coverings. **Roofnado™ AnchorDeck™** consists of a woven polyolefin base with a layer of nonwoven polyolefin sheet and a polymer coating on the back side, is available in rolls 48-inch x 250-ft and has a nominal unit weight of 2.25 lbs/square.
- 4.2 **Roofnado™ StormTread™** is a synthetic polymer-based scrim-reinforced underlayment designed for use on roof decks as a water-resistant layer beneath prepared roof coverings. **Roofnado™ StormTread™** consists of a woven polyolefin base with a layer of nonwoven polyolefin sheet and a polymer coating on the back side, is available in rolls 48-inch x 250-ft and has a nominal unit weight of 3.80 lbs/square
- 4.3 **Roofnado™ ShingleLock™** is a synthetic polymer-based scrim-reinforced underlayment designed for use on roof decks as a water-resistant layer beneath prepared roof coverings. **Roofnado™ ShingleLock™** consists of a woven polyolefin base with a layer of nonwoven polyolefin sheet and a polymer coating on the back side, is available in rolls 48-inch x 250-ft and has a nominal unit weight of 3.80 lbs/square.

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 the HVHZ.
- 5.3 **ASTM E108** reports furnished by the applicant indicate **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments** may be used as a component of a classified roof assembly with a roof covering of Class A, B or C glass fiber mat asphalt-shingles complying with the 5th Edition (2014) Florida Building Code or in Class A roof assemblies with the roof coverings specified in the exceptions to **FBC Section 1505.2**, when installed report over minimum 3/8-inch thick AC Exterior Grade plywood deck. Refer to QAI Laboratories (www.qai.org) current Building Products Listing Directory for fire listings of this product.

- 5.4 **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments** may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this evaluation combined with supporting data for the prepared roof covering.
- 5.5 **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments** shall not be installed on roof slopes below 2:12.
- 5.6 **Allowable roof covers:**

TABLE 1: ROOF COVER OPTIONS					
Underlayment	Asphalt & Synthetic Shingles	Tile	Metal	Wood Shakes & Shingles	Slate
AnchorDeck™	Yes	No	Yes (residential only)	Yes (primed cedar)	Yes
StormTread™	Yes	No	Yes	Yes (primed cedar)	Yes
ShingleLock™	Yes	No	Yes	Yes (primed cedar)	Yes

- 5.7 **Exposure Limitations:**
Roofnado™ Mechanically Attached Synthetic Roofing Underlayments shall not be left exposed for longer than **30-days** after installation.

6. INSTALLATION:

- 6.1 **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments** shall be installed in accordance with **Sentry Building Innovations** published installation instructions subject to the Limitations set forth in Section 5 herein and the guidelines noted below.
- 6.2 Install in compliance with **Sentry Building Innovations** published installation instructions and the requirements for ASTM D226 underlayment in **FBC Sections 1507** for the type of prepared roof covering to be installed.
- 6.3 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.
- 6.4 **Fasteners:**
 - ✓ If primary roof cover is installed within 24-hours, fasteners may be corrosion resistant 3/8-inch head x 1-inch long roofing nails
 - ✓ If primary roof cover is installed after 24-hours, fasteners shall be plastic cap nails or metal cap nails with minimum 1-inch diameter head.

Do not use staples. Ensure fasteners are installed at 90 degree angle to the deck with flush contact between the cap and the upper surface of the underlayment. Fasteners shall be of sufficient length to penetrate through the underside of plywood or OSB decks, or minimum ¼-inch embedment into dimensional lumber / tongue-and-groove wood decks.
- 6.5 When required by the local building code or Authority Having Jurisdiction, install a leak barrier of ASTM D1970 or equal holding Florida Statewide Product Approval at vulnerable leak areas, including but not limited to eaves, valleys, rakes, skylights and dormers. At eaves and valleys, install the leak barrier prior to installation of **Roofnado™ Mechanically Attached Synthetic Roofing Underlayment**. Along the rake, install **Roofnado™ Mechanically Attached Synthetic Roofing Underlayment**, leaving 6 to 8-inch of the deck exposed, and then install the leak barrier over the **Roofnado™ Mechanically Attached Synthetic Roofing Underlayment** and exposed decking. At other areas, install the leak barrier over the **Roofnado™ Mechanically Attached Synthetic Roofing Underlayment**.

6.6 Single Layer, Slopes of 4:12 and more:

Starting at the eave, lay printed-side up and fasten at the printed fastening locations on the sheet.

Continue upslope in a similar manner, maintaining minimum 3-inch wide horizontal and minimum 6-inch wide vertical laps, and fasten as noted above. Ensure all vertical end-laps are staggered at least 3-feet apart.

For exposure to high wind velocity areas, fasten 6-inch o.c. 1-inch from the leading lap-edge and 12-inch o.c. in two (2) equally spaced, staggered center rows in the center of the sheet, and apply tape over all fasteners. Consult **Sentry Building Innovations [(843) 735-1773]** for details on when this fastening pattern is required or recommended, and the type of tape to be utilized.

6.7 Double Layer, Slopes between 2:12 and 4:12:

Starting at the eave, lay a half-width starter-strip printed-side up and fasten sufficiently to hold in place.

Continue upslope in a similar manner, with minimum 25.5-inch horizontal and minimum 6-inch wide vertical laps, and fasten at the printed fastening locations on the sheet. Ensure all vertical end-laps are staggered at least 6-feet apart.

For exposure to high wind velocity areas, fasten 6-inch o.c. 1-inch from the leading lap-edge and 12-inch o.c. in two (2) equally spaced, staggered center rows in the center of the sheet, and apply tape over all fasteners. Consult **Sentry Building Innovations [(843) 735-1773]** for details on when this fastening pattern is required or recommended, and the type of tape to be utilized.

6.8 **Roofnado™ Mechanically Attached Synthetic Roofing Underlayments** may not be used in any exposed application, including but not limited to crickets, exposed valleys or exposed roof to wall details.

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:

Contact the named QA agency for information on production location covered by this Evaluation Report under **F.A.C. Rule 61G20-3** Quality Assurance requirements.

9. QUALITY ASSURANCE ENTITY:

Quality Auditing Institute, Ltd. – QUA7628; (604) 527-8378, mlansdowne@gai.org

- END OF EVALUATION REPORT -