NEMO|etc.
Certificate of Authorization #32455
353 Christian Street, Unit #13
Oxford, CT 06478
(203) 262-9245

ENGINEER | TEST | CONSULT

P.E. EVALUATION REPORT (PEER)

Beacon Sales Acquisitions, Inc.
c/o Owens Corning Roofing and Asphalt, LLC
One Owens Corning Parkway
Toledo, OH 43659
(740) 587-3562

PEER-OCBSA-007.A.R4
FL31963-R4 (NON-HVHZ)
Date of Issuance: 04/07/2020
Revision 4: 12/18/2024

SCOPE:
This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C. 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 **8th Edition (2023) Florida Building Code** sections noted herein.

DESCRIPTION: TRI-BUILT® MAX Synthetic Underlayment (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and **FBC 1507.1.1**.

CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance, or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

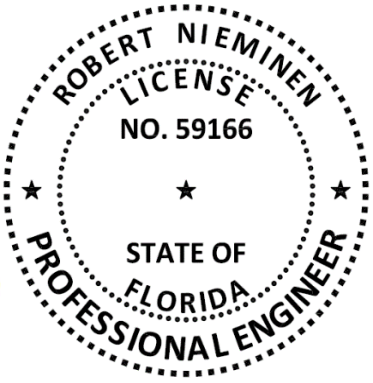
INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 4.

Prepared by:

Digitally signed by Robert Nieminen
Date: 2024.12.18 '14:31:17 -05'00

This item has been digitally signed and sealed by Robert Nieminen, P.E.
Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.
Robert Nieminen, Florida P.E. 59166, FBC ANE1983
NEMO ETC, LLC, Florida CA #32455



CERTIFICATION OF INDEPENDENCE:
1. NEMO ETC, LLC 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. NEMO ETC, LLC 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 PEERs 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 NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, 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
Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer

Compliance Statement: **TRI-BUILT® MAX Synthetic Underlayment**, as produced by **Beacon Sales Acquisitions**, has demonstrated compliance with the following sections of the **8th Edition (2023) Florida Building Code** through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.

2. STANDARDS:

SECTION	PROPERTIES	STANDARD
1507.1.1, R905.1.1	Material standard	ASTM D8257

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
PRI (TST5878)	ASTM D8257	1378T0261	08/19/2022
PRI (QUA9110)	Quality Control	PRI Validation Program	Current

4. PRODUCT DESCRIPTION:

TABLE 1: EVALUATED UNDERLAYMENTS

PRODUCT	SPECIFICATION	PLANT(S)	DESCRIPTION
TRI-BUILT® MAX Synthetic Underlayment	ASTM D8257[1]	Silvassa, India	multi-layered synthetic sheet-type roofing underlayment; unit weight of 3.9 lbs/square

5. LIMITATIONS:

5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.

5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).

5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.

5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.

5.5 **TRI-BUILT® MAX Synthetic Underlayment** 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.

[1] *Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D8257-20, should be established as to slip resistance.*

5.6 **Allowable roof covers:**

TABLE 2: ROOF COVER OPTIONS					
FBC NON-HVHZ:	*1507.2*	*1507.3*	*1507.4 & 1507.5*	*1507.7*	*1507.8 & 1507.9*
UNDERLAYMENT	ASPHALT SHINGLES	ROOF TILE	METAL	SLATE OR SLATE-TYPE SHINGLES	WOOD
TRI-BUILT® MAX Synthetic Underlayment	Yes	No	Yes	Yes	No

5.7 **Exposure Limitations:**

TABLE 3: EXPOSURE LIMITATIONS		
UNDERLAYMENT	PREPARED ROOF COVER INSTALLATION TYPE	MAXIMUM EXPOSURE (DAYS)
TRI-BUILT® MAX Synthetic Underlayment	Mechanically attached	180

6. INSTALLATION:

6.1 **TRI-BUILT® MAX Synthetic Underlayment** shall be installed in accordance with the manufacturer's published installation instructions subject to the Limitations of Use herein and the specifics noted below.

6.2 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.

6.3 Underlayment Assemblies with Prescriptive Minimum Attachment for use in NON-TILE applications:

6.3.1

CODE REFERENCE:	**1507.1.1.1 or R905.1.1.1, Option 2:** Self-adhering strips to deck-joints followed by underlayment mechanically attached to deck
DECK DESCRIPTION:	Code-minimum wood deck to the satisfaction of the Authority Having Jurisdiction
SECONDARY WATER BARRIER:	Min. 3 ¾-inch wide strips of FBC Approved self-adhering joint-strip product over joints of the roof deck prior to installation of subsequent layer(s) in accordance with FBC Section 1507.1.1.1(2) or R905.1.1.1(2). Do not overlap end-joints or T-joints. All end-joints and T-joints shall be butted firmly side by side, flush with each other but not overlapped.
UNDERLAYMENT:	**TRI-BUILT® MAX Synthetic Underlayment** in accordance with FBC Table 1507.1.1.1 or Table R905.1.1.1, with a minimum 4-inch side lap and 6-inch end lap, mechanically fastened to deck
FASTENERS:	Min. 0.083-inch diameter annular ring or deformed shank nails with metal or plastic caps* with a nominal cap diameter of not less than 1-inch and minimum thickness as follows. The nail shall be of sufficient length to penetrate through the roof sheathing, or not less than 0.75-inch into the roof sheathing. *Note: Metal caps are required where the ultimate design wind speed, V_{ult}, equals or exceeds 170 mph. **Cap Type** — **Minimum thickness** Metal cap — 32 ga. sheet metal Power-driven metal cap — 0.010-inch Plastic cap — 0.035-inch (outside edge thickness)
FASTENING:	Grid pattern of 12-inches between the overlaps and 6-inch spacing at the overlaps, in accordance with FBC Table 1507.1.1.1 or Table R905.1.1.1
SURFACING:	FBC Approved asphalt shingles, metal roof panels or metal shingles, slate or slate type shingles, subject to the allowable roof covers in Table 2 herein.

6.3.2	**CODE REFERENCE:**	**1507.1.1.1 or R905.1.1.1, Option 3:** Two-layer underlayment mechanically fastened to deck
	DECK DESCRIPTION:	Code-minimum wood deck to the satisfaction of the Authority Having Jurisdiction
	UNDERLAYMENT:	Two (2) layers of **TRI-BUILT® MAX Synthetic Underlayment** in accordance with FBC Section 1507.1.1.1(3) or R905.1.1.1(3).
	FASTENERS:	Min. 0.083-inch diameter annular ring or deformed shank nails with metal or plastic caps* with a nominal cap diameter of not less than 1-inch and minimum thickness as follows. The nail shall be of sufficient length to penetrate through the roof sheathing, or not less than 0.75-inch into the roof sheathing. *Note: Metal caps are required where the ultimate design wind speed, V_{ult}, equals or exceeds 170 mph. **Cap Type** — **Minimum thickness** Metal cap — 32 ga. sheet metal Plastic cap — 0.035-inch (outside edge thickness)
	FASTENING:	Grid pattern of 12-inches between the overlaps and 6-inch spacing at the overlaps, in accordance with FBC Section 1507.1.1.1(3) or R905.1.1.1(3).
	SURFACING:	FBC Approved asphalt shingles, metal roof panels or metal shingles, slate or slate type shingles, subject to the allowable roof covers in Table 2 herein.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C.** Rule 61G20-3 QA requirements. Refer to Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

PRI Construction Materials Technologies, LLC – QUA9110; (813) 621-5777; chris.moskal@pri-group.com

- END OF PEER -