



NEMO|etc.

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ENGINEER

EVALUATE

TEST

CONSULT

P.E. EVALUATION REPORT (PEER)

BLUELINX CORP

4300 Wildwood Parkway
Atlanta, GA 30339
(770) 953-4951

PEER-BLUETAR-001.A.R4

FL16858-R4 (NON-HVHZ)

Date of Issuance: 02/24/2014

Revision 4: 10/03/2023

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') 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 **8th Edition (2023) Florida Building Code** [sections referenced herein](#).

DESCRIPTION: Tough-Guard™ Roof Underlayments (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 PEER s 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.

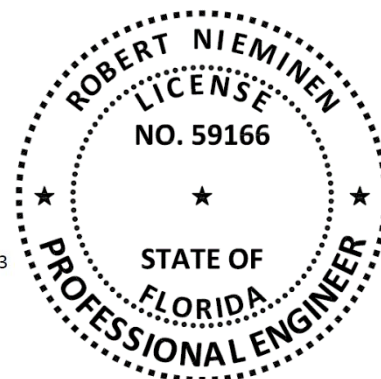
INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 4.

Prepared by:

Digitally signed by
Robert Nieminen
Date: 2023.10.03
'13:22:37 -04'00

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.

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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: Tough-Guard™ Roof Underlayments, as produced by BLUELINX CORP, have demonstrated compliance with the following sections of the 8th Edition (2023) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the [Installation Requirements](#) and [Limitations of Use](#) set forth herein.

2. STANDARDS:

Section	Property	Standard	Year
1507.1.1, 1507.2.9.2 / R905.1.1, R905.2.8.2	Material standard	ASTM D1970	2017

3. REFERENCES:

Entity	Examination	Reference	Date
NEMO	PEER	PEER-TAR-001.A.R18	06/20/2023
NEMO	Traceability	FBC Cross-Listing	02/24/2021
UL, LLC. (QUA9625)	Traceability	ML File No. R25799	09/28/2011
UL, LLC. (QUA9625)	Quality Assurance	Service Confirmation	06/07/2021
UL, LLC. (QUA9625)	Quality Assurance	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

TABLE 1: EVALUATED UNDERLAYMENTS			
PRODUCT	MATERIAL STANDARD	PLANT(S)	DESCRIPTION
Tough-Guard GRANULAR	ASTM D1970	Belton, TX Greencastle, PA	self-adhering, glass mat reinforced, mineral surfaced, SBS modified roof underlayment
Tough-Guard EMBOSSED	ASTM D1970	Greencastle, PA	self-adhering, glass mat reinforced, smooth poly film surfaced, SBS modified roof underlayment

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 **Tough-Guard™ Roof 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 PEER combined with supporting data for the prepared roof covering.

5.6 Allowable Roof Covers:

TABLE 2: ROOF COVER OPTIONS						
<u>FBC NON-HVHZ:</u>	1507.2	1507.3		1507.4 & 1507.5	1507.7	1507.8 & 1507.9
UNDERLAYMENT	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL PANELS OR SHINGLES	SLATE OR SLATE-TYPE SHINGLES	WOOD SHINGLES OR SHAKES
		MECHANICAL ATTACH	ADHESIVE- OR MORTAR-SET			
Tough-Guard GRANULAR	Yes	No	No	No	Yes	Yes ⁱ
Tough-Guard EMBOSSED	Yes	No	No	Yes (No copper or zinc)	Yes	Yes ⁱ

5.7 Allowable Substrates:

TABLE 3: SUBSTRATE OPTIONS FOR ADHERED UNDERLAYMENTS			
UNDERLAYMENT	APPLICATION	SUBSTRATES (DESIGNED TO MEET WIND LOADS FOR PROJECT)	
		PRIMER	MATERIAL(S)
Tough-Guard GRANULAR or Tough-Guard EMBOSSED	self-adhering	(Optional) ASTM D41	plywood; OSB or structural concrete
		none	ASTM D226 Type II felt; ASTM D4869 Type III or IV felt
		ASTM D41	metal (flashing metal, valley metal, etc.)

5.8 Attachment Limitations:

- 5.8.1 For use under mechanically attached NON-TILE prepared roof coverings, attachment shall be in accordance with the manufacturer's installation instructions, but – for mechanically attached underlayments or base sheets - not less than **FBC 1507.1.1** or **R905.1.1**.

5.9 Exposure Limitations:

TABLE 4: EXPOSURE LIMITATIONS		
UNDERLAYMENT	PREPARED ROOF COVER INSTALLATION TYPE	MAXIMUM EXPOSURE (DAYS)
Tough-Guard GRANULAR, Tough-Guard EMBOSSED	Mechanically attached	30

6. INSTALLATION:

- 6.1 **Tough-Guard™ Roof Underlayments** shall be installed in accordance with **BLUELINX CORP** installation instructions subject to the Limitations set forth in [Limitations of Use](#) herein and the specifics noted below.
- 6.1.1 Consult **BLUELINX CORP** requirements for back-nailing at pitch of 2:12 or greater.
- 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, and prime the substrate (if applicable).

6.3 Tough-Guard GRANULAR or Tough-Guard EMBOSSED:

- 6.3.1 Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **FBC Residential R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer's installation instructions.
- When installed over a mechanically attached base sheet of FBC Approved ASTM D226 Type II felt or ASTM D4869, Type III or IV felt, the base sheet shall be fastened in accordance with **FBC 1507.1.1** or **R905.1.1**.

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 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:

[UL LLC – QUA9625](#); (360) 817-5512; bsai.inspections@ul.com

- END OF PEER -

ⁱ Used as min. 3 ¾-inch wide joint-strips per **FBC 1507.1.1.1(2)** / **FBC R905.1.1.1(2)** or installed in full-coverage atop ASTM D226, Type II felt, ASTM D4869 Type III or IV felt mechanically attached in accordance with **FBC Table 1507.1.1.1** or **FBC Residential Table R905.1.1.1**.