



NEMO|etc.

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ENGINEER

TEST

CONSULT

P.E. EVALUATION REPORT (PEER)

GAF

1 Campus Drive
Parsippany, NJ 07054
(800) 766-3411

PEER-GAF-013.A-R3

FL46590-R3 (NON-HVHZ)

Date of Issuance: 02/29/2024

Revision 3: 10/20/2025

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 compliance with the **8th Edition (2023) Florida Building Code** [sections referenced herein](#).

DESCRIPTION: TimberSteel™ Metal Roof Shingles (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and **FBC 1504.3.3 / R905.4.4.1**.

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: "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be in its entirety.

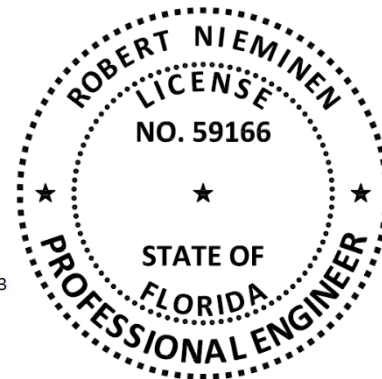
INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 5.

Prepared by:

Digitally signed by
Robert Nieminen
Date: 2025.10.20
'15:36:59 -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 SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing

Sub-Category: Non-Structural Metal Roofing

Compliance Statement: TimberSteel™ Metal Roof Shingles, as produced by GAF, 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
1504.3.3, R905.4.4.1	Wind resistance (uplift)	UL 1897
1504.3.3, R905.4.4.1	Wind resistance (fan-induced)	ASTM D3161
1507.5.5, R905.4.4	Material standard	ASTM A653, A792
1523.6.5.2.4.1, TAS 110	Wind resistance (uplift)	TAS 125

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
ITS (TST1558)	TAS 125	S9186.01-109-18	10/06/2025
PRI (TST5878)	UL 1897	376T0585	10/29/2024
PRI (TST5878)	TAS 125	376T0608	03/10/2025
UL (TST 1740)	ASTM D3161	4790046351	07/13/2022
UL (TST 1740)	ASTM D3161	Clarification Letter	01/07/2025
Metal suppliers	ASTM A653	Mill Certs	07/01/2019
Metal suppliers	ASTM A792	Mill Certs	11/29/2024
Metal suppliers	ASTM A792	Mill Certs	01/02/2025
UL (QUA 9625)	Quality Assurance	Service Confirmation	01/16/2024

4. PRODUCT DESCRIPTION:

TimberSteel™ Metal Roof Shingles are 24 ga. or 26 ga., 60-ksi yield, pressure-formed, coated Galvalume® sheet-steel shingles with factory-formed interlocking upper-to-lower edges and a textured top-surface, which are mechanically attached over approved roof decks. The 24 ga. and 26 ga. shingles differ only in the upper-to-lower locking mechanism. The right edge includes a factory-applied butyl adhesive strip. Full shingles measure nominal 10.8 x 40-inches and half-shingles measure nominal 10.8 x 21-inches.

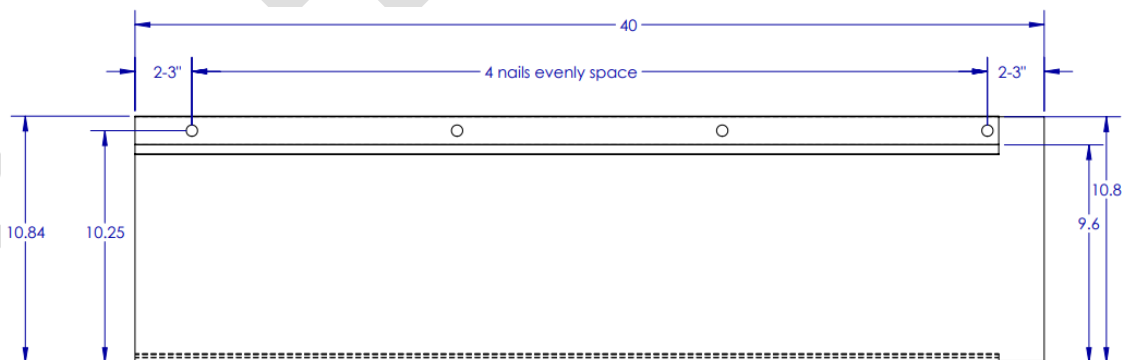


Figure 1: View of TimberSteel™ Metal Roof Shingle (full-shingle)

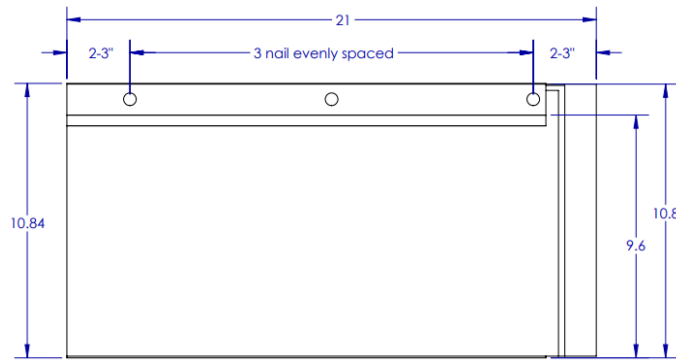


Figure 2: View of TimberSteel™ Metal Roof Shingle (half-shingle)

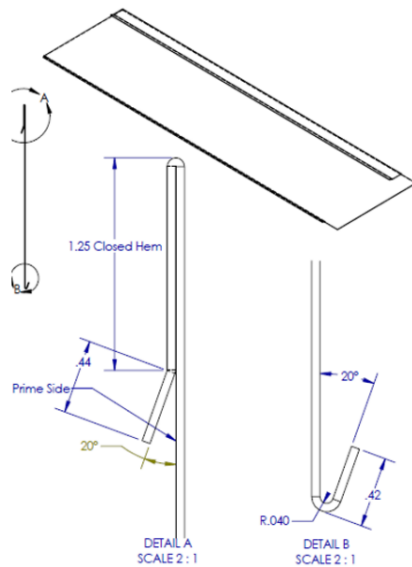


Figure 3A: View of 24 ga. Locking Mechanism

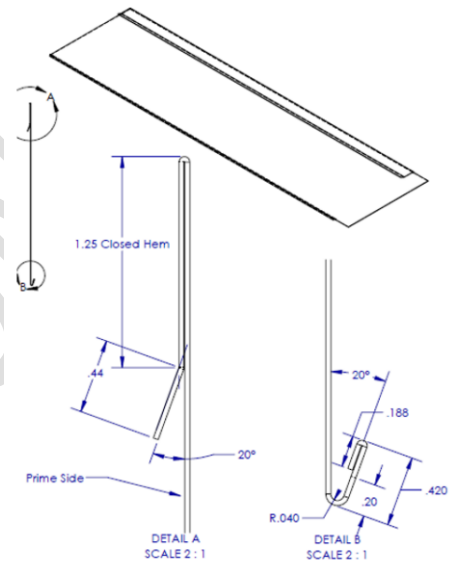


Figure 3B: View of 26 ga. Locking Mechanism

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** or **R902** 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 This PEER does not include evaluation of roof edge termination.

- 5.6 Refer to **FBC 1511** or **R908** for requirements and limitations regarding recover installations.
- 5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with [ANSI/SPRI FX-1](#) or [Testing Application Standard TAS 105](#).
- 5.7 **Wind Classification:**
- 5.7.1 **Fan-Induced Method:**
- TimberSteel™ Metal Roof Shingles** shall be installed using minimum four (4) corrosion resistant roofing nails per full-shingle and minimum three (3) corrosion resistant roofing nails per half-shingle. When installed in in this manner over plywood sheathing meeting Code requirements, and in accordance with GAF published installation instructions, the shingles are classified to ASTM D3161, Class F, as set forth in **FBC 1504.3.3 / R905.4.4.1**, thereby indicating acceptable use in wind zones up to maximum $V_{asd} = 150$ mph ($V_{ult} = 194$ mph) at maximum 33 ft mean roof height in Exposure B or C conditions.
- For site conditions outside of these parameters, refer to Section 5.7.2. Refer to FBC 1609 or FBCR Chapter 3 for design wind speeds and exposure categories.
- 5.7.2 **Pressure-Differential Method:**
- 5.7.2.1 Table 1 outlines attachment requirements for design based on wind pressure resistance, as determined in accordance with **FBC 1609** or **FBCR Chapter 3**.
- 5.7.2.2 “MDP” = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.
- 5.7.2.3 Unless otherwise noted, underlayment shall be any GAF underlayment holding current Florida Statewide or Local Product Approval, and listed as allowable for use under Metal Roof Panels (**FBC 1507.4**) or Metal Roof Shingles (**FBC 1507.5**). The underlayment shall be installed in accordance with the Florida Statewide or Local Product Approval.

TABLE 1: WIND UPLIFT PERFORMANCE TIMBERSTEEL™ METAL ROOF SHINGLES					
SYSTEM No.	DECK	UNDERLAYMENT	PANEL	PANEL ATTACHMENT	MDP (psf)
1.	Plywood , APA rated sheathing, 32/16, Exposure 1, PS1 , 15/32 category	Any roof underlayment, FBC Approved for use with metal roof systems	TimberSteel™ Metal Roof Shingle (full-shingle)	Six (6) 1.25" x 0.120" corrosion resistant, ring-shank roofing nails per shingle; Two (2) parts positioned 2 to 3-inch from each edge and four (4) parts equally spaced there-between.	-37.5
2.	Plywood , APA rated sheathing, 32/16, Exposure 1, PS1 , 15/32 category, 8d ring shank nails 6" o.c.	Any roof underlayment, FBC Approved for use with metal roof systems	TimberSteel™ Metal Roof Shingle (full-shingle)	Eight (8) 1.25" x 0.120" corrosion resistant, ring-shank roofing nails per shingle; Parts positioned 0.5-inch from the edge of the shingle and continuing 4.75-inch o.c. across the nailing flange. Each course staggered by ½ shingle.	-56.0
3.	Plywood , APA rated sheathing, 32/16, Exposure 1, PS1 , 15/32 category, 8d ring shank nails 6" o.c.	Any roof underlayment, FBC Approved for use with metal roof systems	TimberSteel™ Metal Roof Shingle (full-shingle)	Eight (8) #12 x 1.5-inch corrosion resistant, self-drilling, pan-head screws per shingle; Two (2) parts, positioned 2-inch from each edge, and six (6) parts equally spaced there-between.	-97.3
4.	Plywood , APA rated sheathing, 32/16, Exposure 1, PS1 , 15/32 category, 8d ring shank nails 3" o.c.	Any roof underlayment, FBC Approved for use with metal roof systems	TimberSteel™ Metal Roof Shingle (full-shingle)	Eight (8) #12 x 1.5-inch corrosion resistant, self-drilling, pan-head screws per shingle; Two (2) parts, positioned 2-inch from each edge, and six (6) parts equally spaced there-between.	-116.0

- 5.8 Minimum slope shall not be less than 3:12.
- 5.9 Coil metal used to produce the shingles shall comply with **FBC 1507.5.5** and **R905.4.4**.
- 5.10 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on [Page 1](#) of this PEER.

6. INSTALLATION:

- 6.1 **TimberSteel™ Metal Roof Shingles** shall be installed in accordance with **GAF** published installation instructions, subject to the [Limitations of Use](#) noted herein.
- 6.1.1 Underlayment shall be FBC Approved for use with metal shingles, be acceptable to GAF, and be installed in accordance with the Florida Product Approval of the underlayment manufacturer.

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:

Burgaw, NC

9. QUALITY ASSURANCE ENTITY:

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

- END OF PEER -