

Nemo etc.

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ENGINEER EVALUATE TEST CONSULT

P.E. EVALUATION REPORT (PEER)

GAF

1 Campus Drive Parsippany, NJ 07054 (800) 766-3411 PEER-GAF-012.A.R8 FL14822-R8 (NON-HVHZ)

Date of Issuance: 08/26/2011 Revision 8: 10/12/2023

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C.** <u>Rule 61G20-3</u> 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 product described herein has been evaluated for compliance with the **8**th **Edition (2023) Florida Building Code** <u>sections noted herein</u>.

DESCRIPTION: WeatherSide™ Fiber-Cement Shingles (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and the minimum provisions of **FBC 1404.10**.

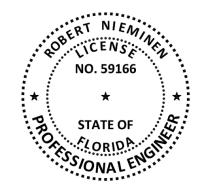
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO 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 3, plus a 6-page Appendix.

Prepared by:



CERTIFICATION OF INDEPENDENCE:

- 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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PANEL WALLS - SIDING EVALUATION:

1. SCOPE:

Product Category: Panel Walls
Sub-Category: Siding

Compliance Statement: WeatherSide™ Fiber-Cement 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
1404.10	Material standard	ASTM C1186
1609.1	Wind resistance	ASTM E330

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
ERD (TST6049)	ASTM C1186	G30200.01.10	01/08/2010
FET (TST1654)	Transverse Load (Wind)	T135-11	02/18/2011
FET (TST1654)	Transverse Load (Wind)	T169-11	04/05/2011
FET (TST1654)	Transverse Load (Wind)	T180-11	04/22/2011
FET (TST1654)	Transverse Load (Wind)	T186-11	04/29/2011
NEMO (TST6049)	ASTM C1186	4v-GAF-22-SSFBR-01	10/10/2023
UL, LLC. (TST	ASTM E136, UL723	Year-Equivalence Declaration	06/30/2023
UL, LLC. (QUA9625)	Quality Control	Service Confirmation	07/12/2022
UL, LLC. (QUA9625)	Quality Control	Florida BCIS	current

4. PRODUCT DESCRIPTION:

This PEER covers **WeatherSide™ Fiber-Cement Shingles**, and is limited to the specific product trade names referenced in this report subject to the Installation Requirements and Limitations of Use herein.

TABLE 1: EVALUATED SIDING PRODUCTS								
PRODUCT	MATERIAL STANDARD	DIMENSIONS (IN)	Surface/Edges					
WeatherSide™ Emphasis™ Shingles	ASTM C1186, Type A, Grade 1	9/32	14-5/8 x 25-5/32	wood-grain surface and thatched edge				
WeatherSide™ Profile Shingles	ASTM C1186, Type A, Grade 1	11/64	9 x 32 12 x 24 14-5/8 x 32	striated surface and straight edge				
WeatherSide™ Purity™ Shingles	ASTM C1186, Type A, Grade 1	11/64	12 x 24	textured surface and Straight, Thatched or Wavy edge				

5. LIMITATIONS:

- 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 does not address fire-resistance-rating performance of the completed wall assemblies.

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5.4 Wind Resistance (Transverse Load):

Limitations relating to design wind pressure resistance are outlined in Appendix 1.

"MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to **FBC 1609** for determination of project-specific design wind pressures. The MDP for the selected installation shall meet or exceed the design wind pressure requirement for the project for each pressure zone.

- 5.5 WeatherSide™ Fiber-Cement Shingles are not intended for racking or shear resistance.
- 5.6 For existing substrates, the Authority Having Jurisdiction may require fasteners be tested in the existing substrate for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system.
- 5.7 All products in the wall assembly shall have quality assurance audit in accordance with F.A.C. Rule 61G20-3.

6. Installation:

- 6.1 **WeatherSide™ Fiber-Cement Shingles** shall be installed in accordance with **GAF** published installation instructions, subject to the <u>Limitations of Use</u> noted herein.
- 6.2 All **WeatherSide™ Fiber-Cement Shingles** products shall be installed using white, 12 ga. x 1¾-inch long, hot-dip galvanized, ring-shank nails. Nails are supplied by **GAF** as an accessory product.
- 6.3 The underlying wall substrate shall include a water-resistive barrier in accordance with FBC 1403.2.
- 6.4 Minimum system attachment requirements set forth in Appendix 1 shall not be exceeded.

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:

Wind Gap, PA

9. QUALITY ASSURANCE ENTITY:

UL (QUA9625): (360) 817-5512; bsai.inspections@ul.com

- THE SIX (6)-PAGES THAT FOLLOW FORM PART OF THIS PEER -

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The following notes apply to the systems outlined herein:

- 1. The evaluation herein pertains to wall-cladding components. Framing and sheathing shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 2. Fasteners shall be corrosion resistant. Fastener lengths noted are minimum lengths, and shall be adjusted as necessary for minimum 1-inch embedment into wood studs (Reference: FBC 1405.16).
- 3. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind loads. The MDP for the selected installation shall meet or exceed the design wind pressure requirement for the project for each pressure zone.

	TABLE 1: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™							
System No.	Siding			MDP (psf)				
1.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Profile 9, Profile 12 or Purity™	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. three (3) nails per shingle, per Figure 1A, 1B, 1C, 1D or 1E.	-41.6		

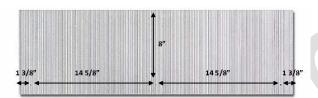


Figure 1A: Profile 9, 3-nails/shingle

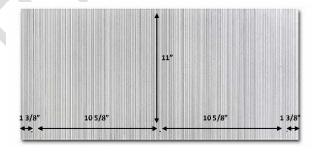


Figure 1B: Profile 12, 3-nails/shingle

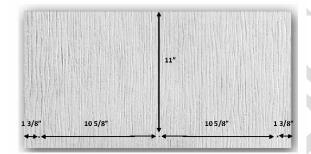


Figure 1C: Purity™ Straight, 3-nails/shingle

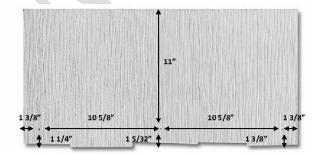


Figure 1D: Purity™ Thatched, 3-nails/shingle

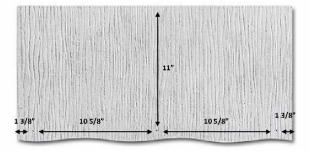


Figure 1E: Purity™ Wavy, 3-nails/shingle



TABLE 2: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™								
System	system Framing Sheathing Cultura Attachment					MDD (nef)		
No.	(Note 1) (Note 1)	(Note 1)	Siding	Fasteners	Spacing / Placement	MDP (psf)		
2.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Profile 9, Profile 12 or Purity™	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. five (5) nails per shingle, per Figure 2A, 2B, 2C, 2D or 2E.	-66.3		

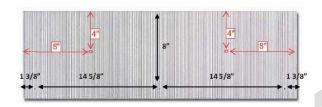


Figure 2A: Profile 9, 5-nails/shingle

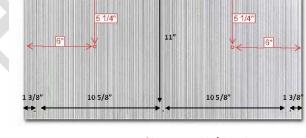


Figure 2B: Profile 12, 5-nails/shingle

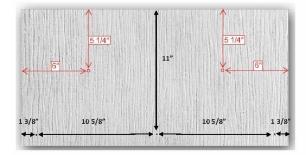


Figure 2C: Purity™ Straight, 5-nails/shingle

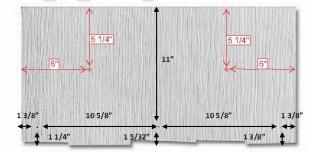


Figure 2D: Purity™ Thatched, 5-nails/shingle

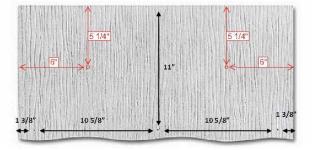


Figure 2E: Purity™ Wavy, 5-nails/shingle



	TABLE 3: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™							
System No.	Siding				MDP (psf)			
3.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Profile 14	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. three (3) nails per shingle per Figure 3.	-25.6		

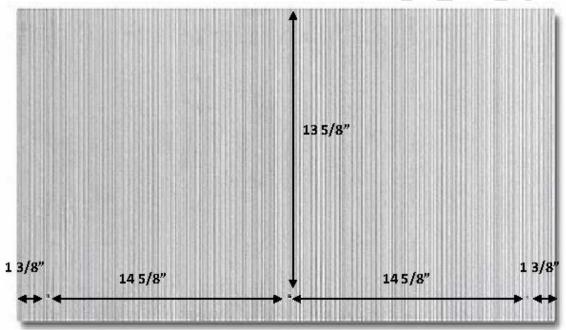


Figure 3: Profile 14, 3-nails/shingle



	TABLE 4: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™						
System No.	Framing (Note 1)	Sheathing (Note 1)	Siding				
4.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Profile 14	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. five (5) nails per shingle per Figure 4.	-42.7	

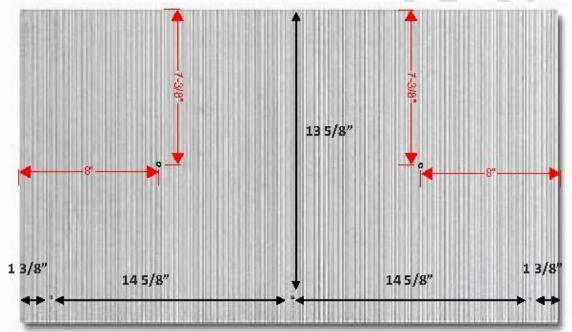


Figure 4: Profile 14, 5-nails/shingle



	TABLE 5: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™							
System No.	Framing (Note 1)	Siding				MDP (psf)		
5.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Emphasis™	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. three (3) nails per shingle per Figure 5.	-32.6		

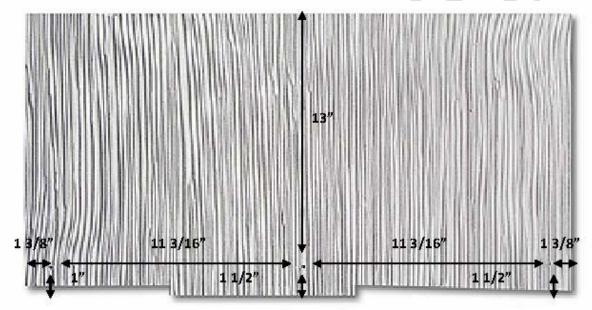


Figure 5: Emphasis™, 3-nails/shingle



	TABLE 6: SYSTEM DESCRIPTION & ALLOWABLE DESIGN PRESSURES WEATHERSIDE™							
System No.	Framing (Note 1)	Sheathing (Note 1)	Siding	Attachment Fasteners Spacing / Placement				
6.	Min. nominal 2x4 #2 SPF at max. 16-inch o.c.	Min. 19/32" plywood	Emphasis™	Min. 12 ga. x min. 1.75-inch long ring shank nails	Min. five (5) nails per shingle per Figure 6.	-54.3		

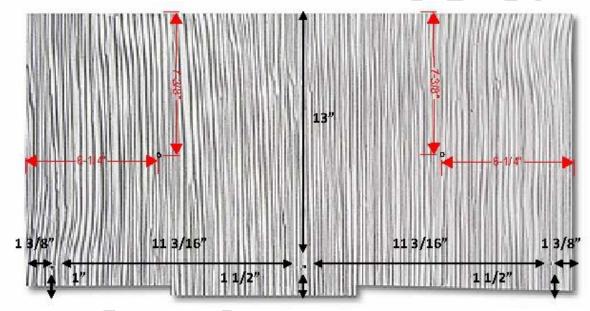


Figure 6: Emphasis™, 5-nails/shingle