



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)

The Garland Company, Inc.

3800 East 91st Street
Cleveland, OH 44105
(216) 430-3516

PEER-GRL-003.A.R10

FL3671-R10 (NON-HVHZ)

Date of Issuance: 11/16/2004

Revision 10: 10/07/2026

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 compliance with the **9th Edition (2026) Florida Building Code** sections noted herein.

DESCRIPTION: R-Mer® Non-Structural Metal Roof Systems (NON-HVHZ)

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

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. Reference is made to the NEMO|etc. [Directory of P.E. Evaluations](#) to ascertain the status and/or current version of this PEER. If the PEER is not listed at the Nemo Directory, then it is no longer valid.

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 4, plus 3-pages of Appendix.

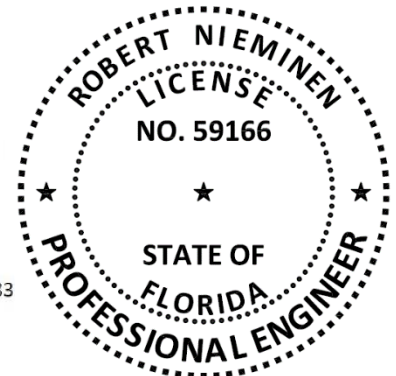
Prepared by:

Digitally signed by
Robert Nieminen
Date: 2026.10.07
'16:50:49 -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.

©2019 NEMO ETC, LLC

ROOFING SYSTEM EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Non-Structural Metal Roofing
Product Approval Method: Method 1, Option D: Codified Material, Evaluation by Engineer
Compliance Statement: R-Mer® Non-Structural Metal Roof Systems, as produced by The Garland Company, Inc., have demonstrated compliance with the following sections of the 9th Edition (2026) 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
1504.3.1	Wind resistance	FM 4474
1504.3.1, 1504.3.2	Wind resistance	UL 580
1504.3.1	Wind resistance	UL 1897
1504.7	Impact resistance	FM 4470
1507.4.3, R905.10.3	Material standards	ASTM A653, ASTM A792 or ASTM B209
1515.1.1	Wind resistance	FM 4471

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
FM Approvals (TST1867)	FM 4471	3063265	07/29/2019
FM Approvals (CER1840)	Wind Uplift Check	Certification, RoofNav	Current
UL LLC (TST9628)	UL 580	Certification, TJPV.R18494	11/20/1997
UL LLC (TST9628)	UL 1897	05NK08744	06/20/2005
UL LLC (CER9626)	Wind Uplift Check	Certification, TGK.R8384	Current
UL LLC (QUA9625)	Quality Control	Service Confirmation	01/28/2019
UL LLC (QUA9625)	Quality Control	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

The following non-structural metal roof panels are mechanically attached to Approved substrate, as outlined in the [Limitations of Use](#) herein.

TABLE 1: EVALUATED R-MER® PANELS

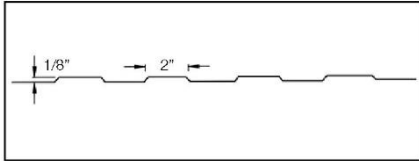
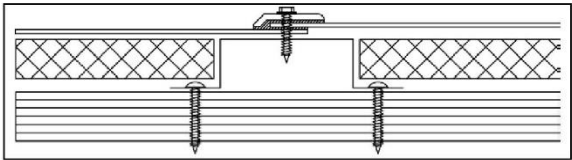
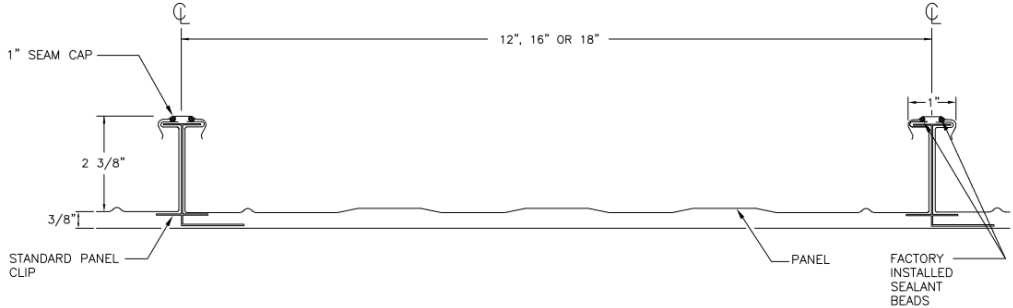
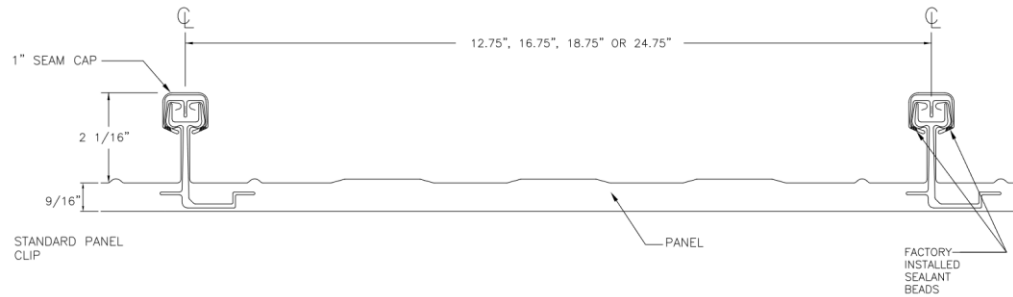
PANEL	DESCRIPTION	EVALUATED MATERIAL(S)
R-Mer Lite® II	lightweight, factory-formed, architectural metal roof system designed for attachment through hat channels using a seam-bar over each field seam	Material: ASTM A792 aluminum-alloy coated steel Thickness: 30 ga. (0.016")
	PANEL PROFILE  SEAM DETAIL 	

TABLE 1: EVALUATED R-MER® PANELS

PANEL	DESCRIPTION	EVALUATED MATERIAL(S)	
R-Mer® Span	factory formed, architectural standing seam metal roof panel with a 2-3/8" high vertical seam	Material: Aluminum 3105-H14 Thickness: min. 0.032" to 0.040" Minimum Yield: 21 KSI	Material: ASTM A653, G-90 Galvanized Steel Thickness: 24 ga. (0.025") and 22 ga. (0.029") Minimum Yield: 55 KSI
			
R-Mer® Shield	factory formed, architectural standing seam metal roof panel with a 2-1/16" high vertical seam	Material: Aluminum 3105-H14 Thickness: min. 0.040"	Material: ASTM A653, G-90 Galvanized Steel Thickness: 24 ga. (0.025") Minimum Yield: 50 KSI
			

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 Refer to Appendix 1 for system attachment requirements for wind load resistance.
- 5.7.1 “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 The maximum clip and/or fastener spacing and associated maximum design pressure for the selected assembly shall meet or exceed those determined in accordance with **FBC 1609** for all pressure zones. Interpolation between clip-spacing by a qualified design professional is permitted. The maximum listed clip and/or fastener spacing shall not be exceeded.
- 5.8 Minimum slope shall not be less than that set forth in **FBC 1507.4.2** and **The Garland Company** minimum requirements.
- 5.9 Coil metal used to produce the panels shall comply with **FBC 1507.4.3** and **R905.10.3**.
- 5.10 Corrosion Resistance – Saltwater Environments:
Fasteners and connectors, if applicable, in areas within 3,000 feet of a saltwater coastline shall demonstrate compliance with FBC 1711 to the satisfaction of the Authority Having Jurisdiction.

6. INSTALLATION:

R-Mer® Non-Structural Metal Roofing Systems shall be installed in accordance with **The Garland Company, Inc.** published installation instructions, subject to the [Limitations of Use](#) noted below.

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:

Norcross, GA

9. QUALITY ASSURANCE ENTITY:

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

Products listed in [Rule 61G20-3.001, F.A.C.](#), shall be manufactured under a quality assurance program audited by an approved quality assurance entity. Refer to the Product Approval of the component manufacturer for components that are produced by a Product Manufacturer other than the report holder on [Page 1](#) of this PEER.

- THE 3-PAGES THAT FOLLOW FORM PART OF THIS PEER -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

TABLE	DECK	APPLICATION	DESCRIPTION	PAGE
1A	Wood	New, Reroof or Recover	R-Mer Span Standing Seam	2
2A	Steel	New, Reroof or Recover	R-Mer Lite II	2
2B	Steel	New, Reroof or Recover	R-Mer Span Standing Seam	3
2C	Steel	New, Reroof or Recover	R-Mer Shield Standing Seam	3

The following notes apply to the systems outlined herein:

1. This Evaluation Report 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.
2. This Evaluation Report 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.
 - ✓ Unless otherwise noted, insulation or thermal/fire barrier may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
 - ✓ Unless otherwise noted, underlayment shall be any that meets The Garland Company minimum requirements, and holds current Florida Statewide or Local Product Approval; listed as allowable for use under Metal Roof Panels (FBC 1507.4). The underlayment shall be installed in accordance with the Florida Statewide or Local Product Approval.
3. This Evaluation Report does not include evaluation of roof edge termination.
4. Refer to **FBC 1511** for requirements and limitations regarding recover installations.
 - ✓ 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. Refer the tables herein for system attachment requirements for wind load resistance.
 - ✓ “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 pressures.
 - ✓ The MDP for the selected assembly shall meet or exceed the design wind pressure requirements for the project for each pressure zone of the roof. Interpolation between clip-spacing by a qualified design professional is permitted. The maximum listed clip and/or fastener spacing shall not be exceeded.
6. Fasteners shall be corrosion resistant and shall be of sufficient length for minimum ¾-inch penetration through the roof deck. For steel deck installations, fasteners shall engage the top flange of the steel deck.
7. As an alternate to bearing plates between clips and insulation board, 15/32-inch thick plywood may be used to cover the entire deck.
8. For R-Mer Lite II installations, all exposed fastener heads are coated with corrosion inhibiting coating in accordance with Garland published instructions. The lap seams are sealed with R-Mer Lite Butyl Seam Tape; sandwiched between panels at the lap or, to include the blind seam area – applied directly over the hat channel prior to fastening.

TABLE 1A: WOOD DECKS - NEW CONSTRUCTION, REROOF OR RECOVER
R-MER SPAN STANDING SEAM

System No.	Deck (Note 1)	Insulation / Fire Barrier	Underlay	Roof Cover						MDP (psf)
				Panel Type	Max. Panel Width (inch)	Clips	Fasteners (Note 6)	Max. Spacing (inch o.c.)	Seam Cap	
W-1.	Min. 19/32-inch, exposure 1, APA rated (42/20) sheathing at max. 24-inch spans	None	(Optional) Note 2	R-Mer Span 0.032 or 0.040-inch aluminum	18	16 ga. coated or stainless steel clips measuring 5-3/8-inch long x 2-5/8-inch high	Two (2) No. 14 x 1-inch long, type A point screws per clip	24	Continuous 0.030 or 0.040-inch aluminum seam cap	-52.5
W-2.	Min. 19/32-inch, exposure 1, APA rated (42/20) sheathing at max. 24-inch spans	None	(Optional) Note 2	R-Mer Span 24 or 22 ga steel	18	16 ga. coated or stainless steel clips measuring 5-3/8-inch long x 2-5/8-inch high	Two (2) No. 14 x 1-inch long, type A point screws per clip	24	Continuous 24 or 22 ga. steel seam cap	-52.5

TABLE 2A: STEEL DECKS - NEW CONSTRUCTION, REROOF OR RECOVER
R-MER LITE II

System No.	Deck (Note 1)	Insulation / Fire Barrier	Hat Channel			Roof Cover		MDP (psf)
			Type	Spacing	Attach (Note 6)	Panel Type	Attachment	
S-1.	Min. 22 ga., Type B, Grade 33 steel	Note 2	22 ga., ¾-inch to 4-inch high with 1-inch wide upper horizontal face and 1-inch wide lower horizontal flanges	10 x 8 ft grid	No. 14-10 truss head, drill point screws spaced 6-inch o.c. alternating on each side of the channel	R-Mer Lite II (Note 8) Min. 30 ga., coated and painted steel	No. 10-12 by ¾-inch long sheet metal screws with a hex washer head spaced max. 2-inch o.c. through R-Mer Lite II compression bar at seams	-30.0
S-2.	Min. 22 ga., Type B, Grade 33 steel	Note 2	22 ga., ¾-inch to 4-inch high with 1-inch wide upper horizontal face and 1-inch wide lower horizontal flanges	10 x 6 ft grid	No. 14-10 truss head, drill point screws spaced 6-inch o.c. alternating on each side of the channel	R-Mer Lite II (Note 8) Min. 30 ga., coated and painted steel	No. 10-12 by ¾-inch long sheet metal screws with a hex washer head spaced max. 2-inch o.c. through R-Mer Lite II compression bar at seams	-45.0
S-3.	Min. 22 ga., Type B, Grade 33 steel	Note 2	22 ga., ¾-inch to 4-inch high with 1-inch wide upper horizontal face and 1-inch wide lower horizontal flanges	10 x 5 ft grid	No. 14-10 truss head, drill point screws spaced 6-inch o.c. alternating on each side of the channel	R-Mer Lite II (Note 8) Min. 30 ga., coated and painted steel	No. 10-12 by ¾-inch long sheet metal screws with a hex washer head spaced max. 2-inch o.c. through R-Mer Lite II compression bar at seams	-52.5

TABLE 2B: STEEL DECKS - NEW CONSTRUCTION, REROOF OR RECOVER
R-MER SPAN STANDING SEAM

Note: 22 ga., 6 x 6 inch steel bearing plates shall be used at each clip location atop insulation.

System No.	Deck (Note 1)	Insulation / Fire Barrier	Underlay	Roof Cover						MDP (psf)
				Panel Type	Max. Panel Width (inch)	Clips	Fasteners (Note 6)	Max. Spacing (inch o.c.)	Seam Cap	
S-4.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Note 2	(Optional) Note 2	R-Mer Span 0.032 or 0.040-inch aluminum	18	16 ga. coated or stainless steel clips measuring 5-3/8-inch long x 2-5/8-inch high	Two (2) No. 12 self-tapping screws per clip	48	Continuous 0.030 or 0.040-inch aluminum seam cap	-52.5
S-5.	Min. 22 ga., Type B, Grade 33 steel	(Optional) Note 2	(Optional) Note 2	R-Mer Span 24 or 22 ga steel	18	16 ga. coated or stainless steel clips measuring 5-3/8-inch long x 2-5/8-inch high	Two (2) No. 12 self-tapping screws per clip	48	Continuous 24 or 22 ga. steel seam cap	-52.5

TABLE 2c: STEEL DECKS - NEW CONSTRUCTION, REROOF OR RECOVER
R-MER SHIELD STANDING SEAM

Note: 22 ga., 6 x 6 inch steel bearing plates shall be used at each clip location atop insulation.

Panel joints are capped with a continuous seam cap of the same material type and thickness as the panel itself

System No.	Deck (Note 1)	Insulation / Fire Barrier	Underlay	Roof Cover						MDP (psf)
				Panel Type	Panel Width (inch)	Clips	Fasteners (Note 6)	Max. Spacing (inch o.c.)	Top Rail	
ALUMINUM, 0.040-INCH:										
S-6.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 0.040-inch aluminum	18.75	Standard (4-inch)	Three (3) Trufast #14 HD screws per clip	48	Standard Top Rail (6-inch)	-45.0
S-7.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 0.040-inch aluminum	18.75	Standard (4-inch)	Three (3) Trufast #14 HD screws per clip	24	Standard Top Rail (6-inch)	-60.0
S-8.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 0.040-inch aluminum	16.75	Standard (4-inch)	Three (3) Trufast #14 HD screws per clip	24	Standard Top Rail (6-inch)	-52.5
STEEL, 24 GA:										
S-9.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 24 ga. steel	18.75	Standard (4-inch)	Three (3) OMG XHD screws per clip	48	Standard Top Rail (6-inch)	-30.0
S-10.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 24 ga. steel	18.75	Standard (4-inch)	Three (3) Trufast #14 HD screws per clip	24	Standard Top Rail (6-inch)	-52.5
S-11.	Min. 22 ga., Type B, Grade 33 steel	Min. 1.5-inch AC Foam II or H-Shield	R-Mer Seal, self-adhering	R-Mer Shield 24 ga. steel	16.75	Standard (4-inch)	Three (3) Trufast #14 HD screws per clip	24	Standard Top Rail (6-inch)	-60.0