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)

Petersen Aluminum Corp.
102 Northpoint Parkway, Building 106
Acworth, GA 30102
(800) 272-4482

PEER-CCM-001.A
FL47182
Date of Issuance: 12/16/2024

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 product described herein has been evaluated for compliance with the **8th Edition (2023) Florida Building Code** sections noted herein.

DESCRIPTION: Petersen Insulated Metal Wall Panel Systems

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and FBC 1703.5.

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.

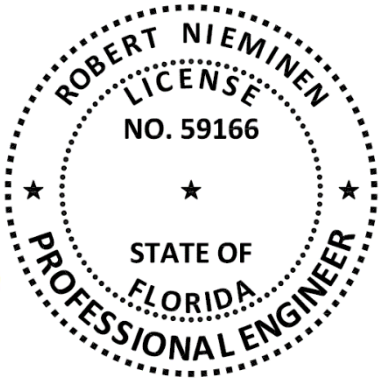
INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 5.

Prepared by:

Digitally signed by Robert Nieminen
Date: 2024.12.16 '11:36:04 -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.

STRUCTURAL COMPONENTS – STRUCTURAL WALL EVALUATION:

1. SCOPE:

Product Category: Structural Components
Sub-Category: Structural Wall
Product Approval Method: Method 1, Option D: Codified Material, Evaluation by Engineer
Compliance Statement: **Petersen Insulated Metal Wall Panel Systems**, as produced by **Petersen Aluminum Corp.**, have demonstrated compliance with the following sections of the referenced Codes through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.

2. STANDARDS:

CODE	SECTION	PROPERTY	STANDARD
2023 Florida Building Code	1403.3, 1407.4, 1504.3.2, 1709.2	Wind resistance	ASTM E1592
	1407.9, 1407.10.1, 2603.3	Surface-burning characteristics	ASTM E84[1]

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
ITS (TST1585)	ASTM E84	100595219SAT-006D	01/18/2012
FORCE E&T (TST5328)	ASTM E1592	438-0046T-12A,B	03/08/2012
FORCE E&T (TST5328)	ASTM E1592	438-0046T-12C,D	04/24/2012
FM (TST1867)	FM 4480	3044381	11/21/2012
ECON TECH (IAS TL-327)	ASTM E1592	C2301-1	12/17/2019
NEMO	Traceability	FBC PCL	11/19/2024
FM (QUA1860)	Quality Assurance	PR470420	12/11/2024

4. PRODUCT DESCRIPTION:

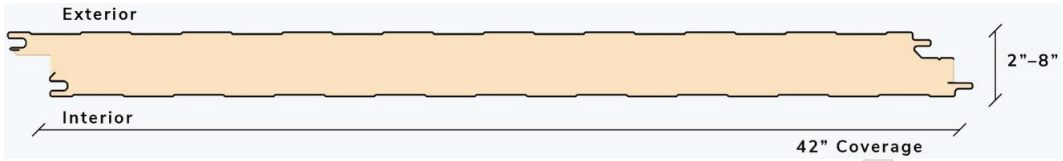
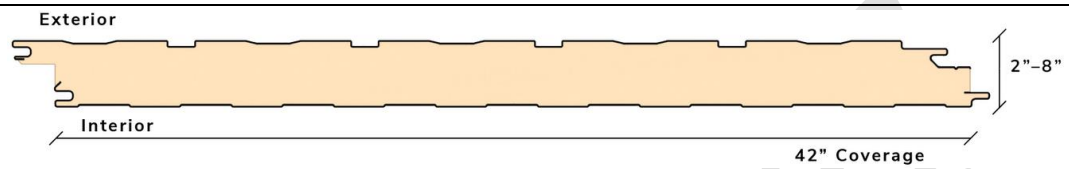
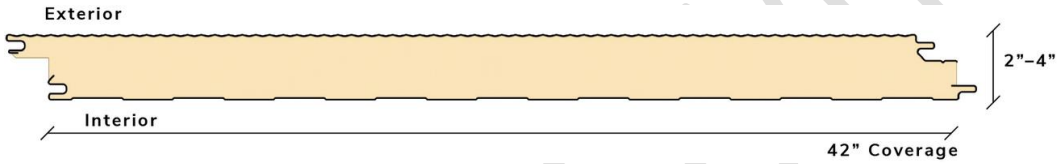
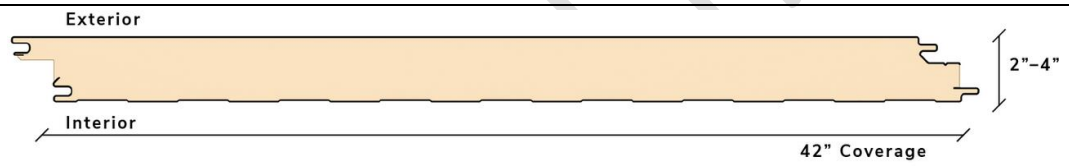
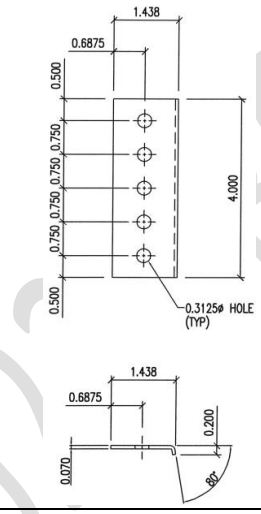
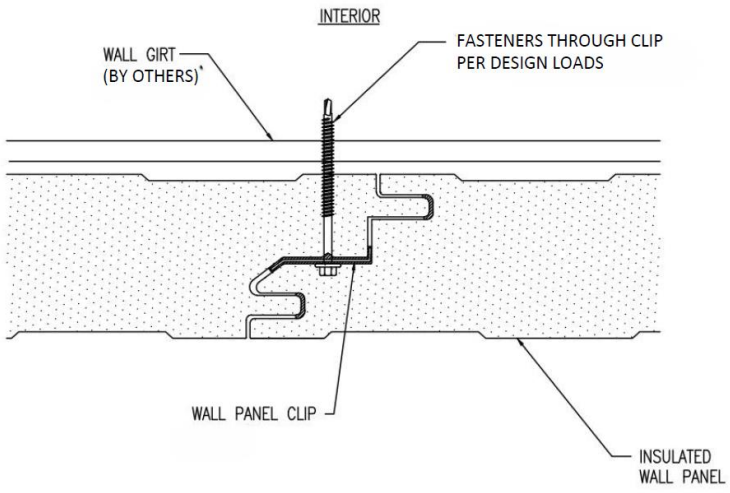
Petersen Insulated Metal Wall Panel Systems are insulated wall panels consisting of interior and exterior steel 'skins' sandwiching a nominal 2.5 pcf density polyisocyanurate foam core. The steel 'skins' are roll-formed to create various profiles. The panels are mechanically attached to supports using proprietary concealed clips at the interlocking joints.

TABLE 1A: INSULATED METAL PANELS

PROFILE	THICKNESS (IN.)	COVERAGE WIDTH (IN.)	MATERIALS		
			STEEL 'SKINS'	INSULATION CORE	CONCEALED CLIPS
Mesa-Lok Insulated Metal Panel	2 to 8	Max. 42	Min. 26 ga., min. 50 ksi ASTM A792 coated or A653 G90 galvanized steel with a smooth or embossed finish	Nominal 2.5 pcf polyisocyanurate FSI: 20 SDI: 400	14 ga. x 1-7/16" x 4", 8" or 12" galvanized steel with pre-punched fastening holes
Shadow-Lok Insulated Metal Panel					
Corr-Lok Insulated Metal Panel	2 to 4				
Design-Lok Insulated Metal Panel					

[1] *Numerical ratings as determined by ASTM E84 are not intended to reflect hazards presented by these materials under actual fire conditions.*

TABLE 1B: CROSS-SECTIONAL VIEW OF PROFILES

PROFILE	CROSS-SECTION
Mesa-Lok Insulated Metal Panel	
Shadow-Lok Insulated Metal Panel	
Corr-Lok Insulated Metal Panel	
Design-Lok Insulated Metal Panel	
Attachment Details:	**14 ga. x 4-in. Wall Panel Clip**  **Sidelap Attachment** 

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 structural wall-cladding components. Framing / structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.

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

5.5 **Wind Resistance:**

5.5.1 Limitations relating to design wind pressure resistance are outlined in Table 2.

5.5.2 "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 (P_{asd}) for the project for each pressure zone.

5.5.3 Linear interpolation by a qualified design professional between rated attachments using the same support type and clip-length is permissible.

5.5.4 Racking and shear resistance is outside the scope of this PEER.

TABLE 2: SYSTEM DESCRIPTION AND ALLOWABLE DESIGN PRESSURES
MESA-LOK, SHADOW-LOK, CORR-LOK OR DESIGN-LOK INSULATED METAL PANELS

SYSTEM NO.	SUPPORT TYPE (SEE 5.3)	PANEL			ATTACHMENT			MDP (PSF)
		MATERIAL	THICKNESS (IN.)	WIDTH (IN.)	CLIP LENGTH (IN.)	CLIP SPACING (INCH O.C.)	FASTENERS	
1	Min. 14 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2	Max. 42	4	90	Three (3) corrosion resistant ¼-14 HWH self-drilling screw per clip	-31.2 +54.6
2	Min. 14 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2	Max. 42	4	60	Two (2) corrosion resistant ¼-14 HWH self-drilling screw per clip	-44.2 +98.8
3	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2.5	Max. 42	8	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-22.8
4	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2.5	Max. 42	12	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-23.4
5	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2.5	Max. 42	8	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-47.7
6	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 2.5	Max. 42	12	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-50.9
7	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 4	Max. 42	8	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-25.9
8	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 4	Max. 42	12	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-26.8

TABLE 2: SYSTEM DESCRIPTION AND ALLOWABLE DESIGN PRESSURES
MESA-LOK, SHADOW-LOK, CORR-LOK OR DESIGN-LOK INSULATED METAL PANELS

SYSTEM NO.	SUPPORT TYPE (SEE 5.3)	PANEL			ATTACHMENT			MDP (PSF)
		MATERIAL	THICKNESS (IN.)	WIDTH (IN.)	CLIP LENGTH (IN.)	CLIP SPACING (INCH O.C.)	FASTENERS	
9	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 4	Max. 42	8	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-48.0
10	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 4	Max. 42	12	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-51.3
11	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 6	Max. 42	8	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-23.2
12	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 6	Max. 42	12	144	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-27.9
13	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 6	Max. 42	8	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-43.6
14	Min. 12 ga. steel girts or hat channels	Min. 26 ga. steel	Min. 6	Max. 42	12	72	Two (2) corrosion resistant 5/16-12 HWH self-drilling screw per clip	-51.1

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 QA audit in accordance with the **F.A.C.** Rule 61G20-3.

6. INSTALLATION:

6.1 **Petersen Insulated Metal Wall Panel Systems** shall be installed in accordance with **Petersen Aluminum Corp.** published installation instructions, subject to the Limitations of Use noted herein.

6.2 Refer to FBC 1403.2 and 1403.5 for requirements concerning a water-resistive barrier.

6.3 Minimum system attachment requirements set forth in Table 2 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:

Waller, TX

9. QUALITY ASSURANCE ENTITY:

FM Approvals (QUA1860), (781) 255-4725, Joanna.blaney@fmglobal.com

- END OF PEER -