



NEMO|etc.

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ENGINEER

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CERTIFY

EVALUATION REPORT

Hunter Panels

15 Franklin Street
Portland, ME 04101
(717) 245-7000

Evaluation Report C32980.10.11-R6

FL5968-R10

Date of Issuance: 10/18/2011

Revision 6: 02/05/2019

SCOPE:

This Evaluation Report 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 product described herein has been evaluated for compliance with the **6th Edition (2017) Florida Building Code** sections noted herein.

DESCRIPTION: H-Shield Roof Insulations

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

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

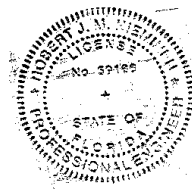
INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 3.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facimile seal appearing was authorized by Robert Nieminen, P.E. on 02/05/2019. This does not serve as an electronically signed document.

CERTIFICATION OF INDEPENDENCE:

1. NEMO|etc. 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. 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 evaluation reports 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. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:
1. SCOPE:

Product Category: Roofing
Sub-Category: Insulation

Compliance Statement: H-Shield Roof Insulations, as produced by Hunter Panels, have demonstrated compliance with the following sections of the 6th Edition (2017) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Property	Standard	Year
2603.3	Flame Spread	ASTM E84 ¹	2013
T1508.2	Physical Properties	ASTM C1289	2013
1520.1	Physical Properties	TAS 110	2000

3. REFERENCES:

Entity	Examination	Reference	Date
ERD (TST6049)	ASTM C1289 & TAS 110	C31640.04.10	04/06/2010
ERD (TST6049)	ASTM C1289 & TAS 110 (FL)	C42950.09.13-1A-R1	03/04/2014
ERD (TST6049)	ASTM C1289 & TAS 110 (PA)	C42950.03.14	03/26/2014
ERD (TST6049)	ASTM C1289 & TAS 110 (FL)	C42950.02.14-1A-R2	04/16/2014
ERD (TST6049)	ASTM C1289 (IL)	C46470.10.14-1A-1	10/03/2014
ERD (TST6049)	ASTM C1289 (IL)	C46470.10.14-1A-2	10/03/2014
ERD (TST6049)	TAS 110 (IL)	C46470.10.14-1A-3A	10/03/2014
ERD (TST6049)	ASTM C1289 (UT)	C46470.01.15-1	01/08/2015
ERD (TST6049)	TAS 110 (UT)	C46470.01.15-2	01/08/2015
FM Approvals (TST1867)	ASTM E84	3018331	08/30/2004
ITS (TST1585)	ASTM E84	100114954SAT-001 B	06/08/2010
ICC-ES (EVL2396)	2015 IBC/IRC Compliance	ESR-3174	12/01/2017
Miami-Dade (CER 1592)	HVHZ Compliance	14-0505.08	11/06/2014
R&D Services (IAS TL-566)	ASTM C1289 (TX)	RD18149	02/26/2018
R&D Services (IAS TL-566)	ASTM C1289 (NY)	RD18229	04/02/2018
UL, LLC (CER 9626)	UL1256	TJBX.R18846	07/03/2013
UL, LLC (QUA9625)	Quality Control	Service Confirmation	02/04/2019
		FL, IL, NY, PA, TX, UT	

4. PRODUCT DESCRIPTION:

The following insulations are mechanically attached or adhered to Approved substrates using fasteners, stress plates and adhesives, as outlined in the Roof System Product Approval.

Product	ASTM C1289			Dimensional Offering		Plants	
	Type	Class	Grade	Thick (in)	Dimensions (ft)	Non-HVHZ (C1289)	HVHZ (TAS 110)
H-Shield F	I	1	2 or 3	1 to 4	4x4 or 4x8	FL, IL, NY, PA, UT	FL, IL, PA, UT
H-Shield	II	1	2 or 3	1 to 4.5	4x4 or 4x8	FL, IL, NY, PA, TX, UT	FL, IL, PA, UT
H-Shield (Tapered)	II	1	2 or 3	0.5 to 4.5	4x4	FL, IL, NY, PA, TX, UT	FL, IL, PA, UT
H-Shield CG	II	2	2 or 3	0.5 to 4.5	4x4 or 4x8	FL, IL, NY, PA, TX, UT	FL, IL, PA, UT

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

TABLE 1: SUMMARY OF HUNTER INSULATION PRODUCTS

Product	ASTM C1289			Dimensional Offering		Plants	
	Type	Class	Grade	Thick (in)	Dimensions (ft)	Non-HVHZ (C1289)	HVHZ (TAS 110)
H-Shield CG (Tapered)	II	2	2 or 3	0.5 to 4.5	4x4	FL, IL, NY, PA, TX, UT	FL, IL, PA, UT
H-Shield Premier	II	2	2 or 3	1	4x8	UT	UT
H-Shield HD or HD90	II	4	1	0.5	4x8	FL, NY, PA, TX, UT	FL, PA
H-Shield HD Composite CG	IV	N/A	2	2 to 4	nominal 4x4 or 4x8	FL, IL, NY, UT	FL, IL, UT
H-Shield WF	IV	N/A	N/A	1.5 to 3.5	nominal 4x4 or 4x8	FL	FL
H-Shield NB (OSB)	V	N/A	N/A	1.5 to 4	nominal 4x8	IL	N/A
H-Shield NB (plywood)	V	N/A	N/A	1.5 to 4	nominal 4x8	IL	IL
Cool-Vent (OSB)	V	N/A	N/A	2.5 to 5	4x8	FL, IL, NY, PA, UT	N/A
Cool-Vent (plywood)	V	N/A	N/A	2.5 to 5	4x8	FL, IL, NY, PA, UT	FL, IL, PA, UT
Cool-Vent II (OSB)	V	N/A	N/A	2.5 to 6	4x8	IL	N/A
Cool-Vent II (plywood)	V	N/A	N/A	2.5 to 6	4x8	IL	IL

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 Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 **H-Shield NB, Cool-Vent and Cool-Vent II with OSB as the top surface** are not for use in **FBC HVHZ** jurisdictions.
- 5.3 Refer to roof system Product Approval (for uplift resistance) and an approved Roofing Materials Directory (for fire ratings; e.g., *UL TJBX.R18846*) for use and installation of **H-Shield Roof Insulation**. If H-Shield Roof Insulation is not listed in the roof system Product Approval, a request may be made to the Authority Having Jurisdiction for local-approval provided that **NFPA 276** or **UL1256** internal fire; **ASTM E108, UL790** or **Testing Application Standard TAS 114, Appendix A** external fire and/or **FM 4474, UL1897** or **Testing Application Standard TAS 114** wind uplift data, as applicable, is provided specifically with the subject roof cover.
- 5.4 All products in the roof assembly shall have quality assurance in accordance with the **F.A.C. Rule 61G20-3**.

6. INSTALLATION:

- 6.1 **H-Shield Roof Insulation** shall be installed in accordance with **Hunter Panels'** published installation instructions, coupled with attachment requirements set forth in the roof system Product Approval documentation and approved Roofing Materials Directory (for fire ratings).
- 6.2 The maximum board size for bonded applications is 4 x 4 ft.

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 Table 1 for products and locations having qualified under **ASTM C1289-13** and **TAS 110**.

9. QUALITY ASSURANCE ENTITY:

UL, LLC– QUA9625; (847) 664-3281

- END OF EVALUATION REPORT -