

Nemo etc.

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ENGINEER EVALUATE Test CONSULT

P.E. EVALUATION REPORT (PEER)

Marco Industries, Inc. 4150 S. 100th E. Ave. Tulsa, OK 74146 (800) 800-8590 PEER-ACTMRC-001.A.R2 FL32035-R2 (NON-HVHZ) Date of Issuance: 04/10/2020

Revision 2: 10/02/2023

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

DESCRIPTION: HydraShell™ Roof Underlayments (NON-HVHZ)

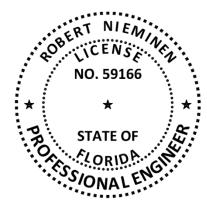
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO 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 4.

Prepared by:



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 COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment

Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer

Compliance Statement: HydraShell Roof Underlayments, as produced by Marco Industries, 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	<u>Standard</u>	<u>YEAR</u>	
1507.1.1, 1507.2.9.2 /	Material standard	ASTM D1970	2017	
R905.1.1, R905.2.8.2				
TAS 110	Accelerated Weathering	ASTM D4798	2011	

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
NEMO	PEER	PEER-ACT-001.A.R4	10/02/2023
NEMO	Traceability	SPE	09/28/2023
ICC NTA (QUA3504)	Quality Assurance	Inspection Report (ML3)	06/12/2023

4. PRODUCT DESCRIPTION:

TABLE 1: EVALUATED UNDERLAYMENTS				
PRODUCT	MATERIAL STANDARD	PLANT(s)i	DESCRIPTION	
HydraShell Supreme SA	ASTM D1970 ⁱⁱ	ML3	Nominal 40-mil, self-adhering, multi-layered roof underlayment composed of a synthetic top facer bonded to a polymer modified bituminous layer and release film	

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** 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 **HydraShell Roof Underlayments** may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this PEER combined with supporting data for the prepared roof covering.

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5.6 Allowable Roof Covers:

TABLE 2: ROOF COVER OPTIONS						
FBC NON-HVHZ:	1507.2	1507.3		1507.4 & 1507.5	1507.7	1507.8 & 1507.9
Underlayment	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL PANELS OR	SLATE OR SLATE-	WOOD SHINGLES
		Месн. Аттасн	ADHESIVE-SET	SHINGLES	Type Shingles	OR SHAKES
HydraShell Supreme SA	Yes	No	No	Yes	Yes	Yes ⁱⁱⁱ

5.6.1 In addition to the codified roof cover options noted above, allowable roof covers include synthetic or composite shingles, slate or shakes holding current <u>Florida Product Approval</u> (statewide or local).

5.7 Allowable Substrates:

TABLE 3: ALLOWABLE SUBSTRATE OPTIONS FOR ADHERED UNDERLAYMENTS				
		SUBSTRATES (DESIGNED TO MEET CODE)		
Underlayment	APPLICATION	Түре	PRIMER	Material(s)
HydraShell	HydraShell	Deck / sheathing	(Optional) ASTM D41	Plywood or OSB
Supreme SA	self-adhering	Base Sheet	None	ASTM D226, Type II felt

5.8 Attachment Limitations:

For use under mechanically attached NON-TILE prepared roof coverings, attachment shall be in accordance with the manufacturer's installation instructions, but – for mechanically attached underlayments or base sheets - not less than **FBC 1507.1.1** or **R905.1.1**.

5.9 **Exposure Limitations:**

TABLE 4: EXPOSURE LIMITATIONS				
Underlayment	PREPARED ROOF COVER INSTALLATION TYPE	MAXIMUM EXPOSURE (DAYS)		
HydraShell Supreme SA	Mechanically attached	90		

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 mentioned herein that are produced by a Product Manufacturer other than the report holder on Page 1 of this PEER.

6. Installation:

- 6.1 **HydraShell Roof Underlayments** shall be installed in accordance with **Marco Industries** installation instructions subject to the Limitations of Use herein and the specifics noted below.
- 6.1.1 Consult Marco Industries requirements for back-nailing at pitch of 2:12 or greater.
- Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application, and prime the substrate (if applicable).

6.3 HydraShell Supreme SA:

6.3.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **FBC Residential R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer's installation instructions.

When installed over a mechanically attached base sheet of FBC Approved ASTM D226 Type II felt or ASTM D4869, Type III or IV felt, the base sheet shall be fastened in accordance with **FBC 1507.1.1** or **R905.1.1**.



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 Section 4 herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

ICC-NTA (QUA3504), (574) 773-7975, vbrown@icc-nta.org

- END OF PEER -

ⁱ Building officials, Designers of Record and other Authorities Having Jurisdiction may contact <u>info@nemoetc.com</u> to obtain manufacturing location information for products evaluated herein.

ii Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D1970-17, should be established as to slip resistance of HydraShell Supreme SA.

iii For wood shakes and shingles, product is used as min. 3 %-inch wide joint-strips per FBC 1507.1.1.1(2) / FBC R905.1.1.1(2) or installed in full-coverage atop ASTM D226, Type II felt or ASTM D4869 Type III or IV felt mechanically attached in accordance with FBC Table 1507.1.1.1 or FBC Residential Table R905.1.1.1.