®			NEMO etc. Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245
ENGINEER	EVALUATE	TEST	CONSULT
	P.E. EVALUATION	REPORT (PEER)	
Owens Corning Roofing and Asphalt, LLC		PEER-OC-003.A.R14	
One Owens Corning Parkway			FL15216-R13
Toledo, OH 43659			Date of Issuance: 02/17/2012
(740) 321-6345			Revision 14: 10/23/2023

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 **8th Edition (2023) Florida Building Code** <u>sections noted herein</u>.

DESCRIPTION: RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and <u>FBC 1507.1.1</u> and <u>FBC HVHZ 1518.2</u>.

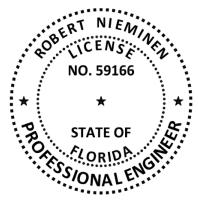
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO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



ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category:

Sub-Category:

Roofing Underlayment

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

Compliance Statement: RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments, as produced by Owens Corning Roofing and Asphalt, LLC, have demonstrated compliance with the following sections of the 8th Edition (2023) Florida Building Code through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations of Use set forth herein.

2. STANDARDS: SECTION PROPERTIES

	SECTION	PROPERTIES		STANDARD
	1507.1.1, R905.1.1, 1518.2	Material standard		ASTM D8257
3.	REFERENCES:			
	<u>ENTITY</u>	EXAMINATION	REFERENCE	<u>Date</u>
	PRI (TST5878)	ASTM D8257-20	1378T0138	02/25/2021
	PRI (TST5878)	ASTM D8257-20	1378T0139	03/23/2021
	PRI (TST5878)	ASTM D8257-20	1378T0141	05/18/2021
	PRI (TST5878)	ASTM D8257-20	1378T0273	10/25/2022
	ITS (QUA1673)	ITS Audit Manual	3144566COQ-006A	09/10/2020
	ITS (QUA1673)	Quality Control	Service Confirmation	08/13/2021
	ITS (QUA1673)	Quality Control	Florida BCIS	Current

4. **PRODUCT DESCRIPTION:**

TABLE 1: EVALUATED UNDERLAYMENTS			
Product	Specification	Plant(s)	DESCRIPTION
RhinoRoof U10	ASTM D8257 ⁱ	Qingdao, China Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment
RhinoRoof U20	ASTM D8257 ⁱ	Qingdao, China Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment
ABC Pro Guard 20	ASTM D8257 ⁱ	Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment
SRS TopShield TS20	ASTM D8257 ⁱ	Silvassa, India	Multilayered polymer woven coated synthetic roof underlayment

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 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.
- 5.3 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** or **FBC HVHZ 1516** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.



5.4 **RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 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 evaluation combined with supporting data for the prepared roof covering.

5.5 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
<u>FBC HVHZ</u> :	RAS 115, 1518.2.1	RAS 118, 119 & 120	RAS 133, 1518.2.1	1518.2.1	RAS 130, 1518.10
Underlayment	ASPHALT SHINGLES	ROOF TILE	METAL	SLATE OR SLATE-TYPE Shingles	Wood
RhinoRoof U10	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes
RhinoRoof U20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes
ABC Pro Guard 20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes
SRS TopShield TS20	Yes	No	Yes	No	NON-HVHZ: No HVHZ: Yes

5.6 Exposure Limitations:

TABLE 3: EXPOSURE LIMITATIONS			
UNDERLAYMENT	MAXIMUM EXPOSURE (DAYS)		
RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 or SRS TopShield TS20	90		

6. INSTALLATION:

- 6.1 **RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments** shall be installed in accordance with the manufacturer's published installation instructions subject to the <u>Limitations of Use</u> herein and the specifics noted below.
- 6.2 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.

6.3 RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments:

6.3.1 **NON-HVHZ JURISDICTIONS:**

Shall be installed in compliance with requirements for a synthetic underlayment (ASTM D8257) 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. FBC requirements take precedence over the manufacturer's installation instructions. FBC requirements take precedence over the manufacturer's installation instructions.

P.E. EVALUATION REPORT: 8TH EDITION (2023) FBC RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 Roof Underlayments BACK TO TOP



6.3.2	HVHZ JURISDICTIONS:			
6.3.2.1	DECK TYPE 1:	DECK TYPE 1: Wood, Non-Insulated		
	DECK DESCRIPTION:	Min. 19/32-inch plywood or wood plank		
	System Type E-1:	Underlayment mechanically fastened to deck		
	UNDERLAYMENT:	Two (2) layers of RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 in accordance with FBC HVHZ 1518.2.1(3).		
	Fastening:	Grid pattern of 12-inches between the overlaps, with 6-inch spacing at the overlaps, in accordance with FBC HVHZ 1518.2.1(3).		
	SURFACING:	FBC HVHZ Approved asphalt shingles, metal roof panels or metal shingles, slate or slate type shingles.		
6.3.2.2	DECK ТҮРЕ 1:	Wood, Non-Insulated		
	DECK DESCRIPTION:	Min. 19/32-inch plywood		
	System Type E-1:	Self-adhering strips to plywood joints; underlayment mechanically fastened to deck		
	SECONDARY WATER	Min. 3 ³ /-inch wide strips of FBC HVHZ Approved self-adhering underlayment over joints of		
	BARRIER:	the plywood roof deck prior to installation of subsequent layer(s) in accordance with FBC HVHZ 1518.2.1(2). Do not overlap end-joints or T-joints. All end-joints and T-joints shall be		
		butted firmly side by side, flush with each other but not overlapped.		
	UNDERLAYMENT:	RhinoRoof U10, RhinoRoof U20, ABC Pro Guard 20 and SRS TopShield TS20 in accordance with FBC HVHZ Table 1518.2.1.		
	Fastening:	Grid pattern of 12-inches between the overlaps, with 6-inch spacing at the overlaps, in accordance with FBC HVHZ Table 1518.2.1.		
	SURFACING:	FBC HVHZ Approved metal shingles, slate, slate type shingles, wood shingles or wood shakes.		
7.	BUILDING PERMIT R	REQUIREMENTS:		
	As required by the product.	Building Official or Authority Having Jurisdiction to properly evaluate the installation of this		
8.	MANUFACTURING P	PLANTS:		
	Contact the named QA entity for manufacturing facilities covered by F.A.C. Rule 61G20-3 QA requirements.			
	Refer to <u>Section 4</u> ł	nerein for products and production locations having met codified material standards.		
9.	QUALITY ASSURANCE	CE ENTITY:		
	Intertek Testing Se	<u>rvices NA Inc. – QUA1673</u> ; (312) 906-7779; <u>maura.norlander@intertek.com</u>		
	- END OF PEER -			

¹ Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D8257-20, should be established as to slip resistance.