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ENGINEER

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CONSULT

P.E. EVALUATION REPORT (PEER)

Polyglass USA, Inc.

1111 West Newport Center Drive
Deerfield Beach, FL 33442
(866) 794-9659

PEER-PLYG-005.F

FL47534 (HVHZ)

Date of Issuance: 12/07/2025

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 **8th Edition (2023) Florida Building Code, High Velocity Hurricane Zone (HVHZ)** [sections noted herein](#).

DESCRIPTION: Polyglass Hot-Rubber and Modified Bitumen Waterproofing Systems (HVHZ)

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

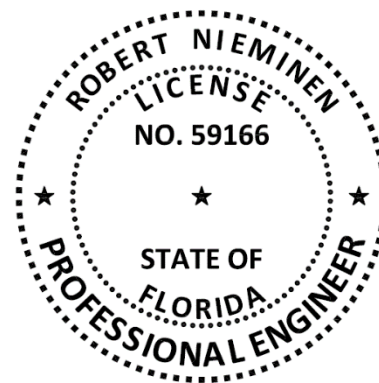
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO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

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, plus 3-pages of Appendix.

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 SYSTEMS EVALUATION:
1. SCOPE:

Product Category: Roofing
Sub-Category: Waterproofing
Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer
Compliance Statement: Polyglass Hot-Rubber and Modified Bitumen Waterproofing Systems, as produced by Polyglass USA, Inc., have demonstrated compliance with the following sections of the **8th Edition (2023) Florida Building Code, High Velocity Hurricane Zone** 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
TAS 110	Wind resistance	TAS 114, Appendix D
TAS 110	Material standard	ASTM D6162, D6163, D6164, D6222
TAS 110	Material standard	CGSB 37.50-M89

3. REFERENCES:

Entity	Examination	Reference	Date
NEMO (TST6049)	Physical Properties	4y-PLYG-23-SSWTP-02.A	08/13/2024
NEMO (TST6049)	Physical Properties	PEER-PLYG-001.A	07/25/2025
PRI (TST5878)	CGSB 37.50-M89	34551-PLG	09/10/2025
PRI (TST5878)	CGSB 37.50-M89	CRAF 63-02-01	11/09/2025
FM (TST1867)	FM 4470/4474	3004091	01/12/2000
FM (TST1867)	FM 4470/4474	3057029	02/02/2017
FM (TST1867)	Criticality	PR454230 (DATA)	01/26/2022
NEMO (TST6049)	Criticality	4i-PLYG-20-SSCRT-02.A	10/11/2021
NEMO (TST6049)	TAS 114(D)	4a-PLYG-23-LSWUS-03.A	06/20/2024
NEMO (TST6049)	Criticality	4i-PLYG-SSCRT-001.A	10/16/2024
NEMO (TST6049)	Criticality	4i-PLYG-SSCRT-006.A	10/07/2025
NEMO (TST6049)	TAS 114(D)	4a-PLYG-LSWUS-006.A	12/07/2025
UL LLC (QUA9625)	Quality Control	Service Confirm (CA)	09/22/2023
UL LLC (QUA9625)	Quality Control	Service Confirm (FL, PA, TX)	05/29/2025
UL LLC (QUA9625)	Quality Control	Service Confirm (PA)	11/19/2025
UL LLC (QUA9625)	Quality Control	Service Contract (TN)	11/21/2025

4. PRODUCT DESCRIPTION:

- 4.1 This PEER covers **Polyglass Hot-Rubber and Modified Bitumen Waterproofing Systems** applied to Approved substrates as outlined in the [Limitations of Use](#) herein. The following products make up the subject systems.

TABLE 1: EVALUATED MEMBRANES					
TYPE	PRODUCT	MATERIAL STANDARD			PLANT(s)
		REFERENCE	TYPE	GRADE	
HOT RUBBER	Polyglass HRA	CGSB 37.50-M89			PA, TN
REINFORCEMENT	Mapeseal LMR Fabric	Not codified (See 4.2)			CA
APP, SMOOTH-SURFACE MEMBRANES	Polybond	ASTM D6222	I	S	FL
	Polyflex	ASTM D6222	I	S	FL
APP, GRANULE-SURFACE MEMBRANES	Polybond G	ASTM D6222	I	G	FL
	Polyflex G	ASTM D6222	I	G	FL
	Polyflex G FR	ASTM D6222	I	G	FL

TABLE 1: EVALUATED MEMBRANES					
TYPE	PRODUCT	MATERIAL STANDARD			PLANT(S)
		REFERENCE	TYPE	GRADE	
SBS, SMOOTH-SURFACE MEMBRANES	Elastoshield VP HT	ASTM D6162	III	S	FL, PA
	Elastobase V	ASTM D6163	I	S	FL
	Elastoflex V 22	ASTM D6163	I	S	FL
	Elastoflex V	ASTM D6163	I	S	FL
	Elastoflex SA V (2.0mm)	ASTM D6163	I	S	FL, TX
	Elastoflex SA V FR (2.0mm)	ASTM D6163	I	S	FL, TX
	Elastoflex SA V Plus (2.5mm)	ASTM D6163	I	S	FL, TX
	Elastoflex SA V Plus FR (2.5mm)	ASTM D6163	I	S	FL, TX
	Elastobase P	ASTM D6164	I	S	FL, TX
	Elastoflex SA Base	ASTM D6164	I	S	PA, TX
	Elastoflex S6	ASTM D6164	I	S	FL
	Elastoshield TS	ASTM D6164	I	S	PA
	Elastoflex S6 HP	ASTM D6164	II	S	NV
SBS, GRANULE SURFACE MEMBRANES	Elastoshield HT G	ASTM D6162	III	G	FL
	Elastoshield HT G FR	ASTM D6162	III	G	FL
	Elastoflex V G	ASTM D6163	I	G	FL, PA
	Elastoflex V G FR	ASTM D6163	I	G	FL, PA
	Elastoflex S6 G	ASTM D6164	I	G	FL, PA
	Elastoflex S6 G FR	ASTM D6164	I	G	FL
	Elastoshield TS G	ASTM D6164	I	G	FL, TX
	Elastoshield TS G FR	ASTM D6164	I	G	FL, TX
DRAINAGE MEDIA PRODUCTS	Mapedrain HS Plus	N/A			GA
	Mapedrain HSW	N/A			GA

- 4.2 For components which have no codified material standard, the 3rd party verified, physical properties data below is offered as a point-of-reference for use by the Authority Having Jurisdiction at their discretion.

TABLE 1B: TYPICAL NOMINAL PROPERTIES FOR NON-CODIFIED COMPONENTS				
COMPONENT	PROPERTY		TEST STANDARD	RESULT
Mapeseal LMR Fabric	Breaking strength (lbf/in.)	MD	ASTM D5034	16
		XMD		19
	Elongation (%)	MD		17
		XMD		22
	Tear strength (lbf)	MD	ASTM D4533	9
		XMD		7
	Bursting strength, Mullen (psi)		ASTM D751	51

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 exclusively for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under [Testing Application Standard TAS 114, Appendix J](#). Roof decks shall be in accordance with **FBC HVHZ** requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **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.
- 5.5 This PEER does not include evaluation of roof edge termination. Refer to [Roofing Application Standard RAS 111](#) for requirements and limitations regarding edge securement for low-slope roofs.
- 5.6 Refer to **FBC HVHZ 1521** for requirements and limitations regarding recover installations.
- 5.6.1 RESERVED
- 5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with [Testing Application Standard TAS 124](#) shall be conducted on mock-ups of the proposed new roof assembly.
- 5.6.3 RESERVED
- 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 [Testing Application Standard TAS 114](#) has already been applied). Refer to **FBC HVHZ 1620** and [Roofing Application Standard RAS 128](#) for determination of design wind loads.
- 5.7.2 RESERVED
- 5.7.3 For tables and/or assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation shall be applicable to all roof pressure zones. Rational analysis is not permitted.
- 5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the HVHZ [Product Approval](#) or [Miami-Dade NOA](#) of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on [Page 1](#) of this PEER.
- 5.8.1 For proprietary overburden products listed in Appendix 1, which are produced by a Product Manufacturer other than the report holder on Page 1 of this PEER:
 - Neither NEMO ETC, LLC nor Robert Nieminen, P.E. purport to have evaluated said overburden components for Code compliance. The scope of evaluation in Appendix 1 is limited to the as-tested interface between said overburden components and the waterproofing systems referenced therein.
 - Refer to the HVHZ [Product Approval](#) or [Miami-Dade NOA](#) of the component manufacturer to confirm Quality Assurance in accordance with **F.A.C. Rule 61G20-3**.
 - Proprietary exterior elevated flooring systems shall demonstrate compliance with **FBC 3115** to the satisfaction of the Authority Having Jurisdiction.
 - Independent exterior elevated flooring systems are not permitted in HVHZ jurisdictions (reference 3115.4.1).

6. INSTALLATION:

Polyglass Hot-Rubber and Modified Bitumen Waterproofing Systems shall be installed in accordance with **Polyglass USA, Inc.** current, published installation instructions, subject to the [Limitations of Use](#) noted herein. Flashing and detailing shall be in accordance with Polyglass published installation instructions using Polyglass specified materials to establish a watertight condition.

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:

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:

[UL, LLC. – QUA9625](#); (847) 664-1668; bsai.inspections@ul.com

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

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

The following notes apply to the systems outlined herein:

1. The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC HVHZ requirements to the satisfaction of the Authority Having Jurisdiction.
2. For assemblies with all components fully bonded, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.
3. For re-roof (tear off) installation, the existing deck shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance shall be conducted on mock-ups of the proposed new roof assembly. Field uplift testing shall be in accordance with [Testing Application Standard](#) TAS 124.
4. For bonded membrane applications, unless otherwise noted, refer to the following.

MEMBRANE / ADHESIVE COMBINATIONS			
REFERENCE	LAYER	MATERIAL	APPLICATION
SBS-HRA	Protection Course:	Elastoflex V 22 (Sand/Sand) or Elastobase P (Sand/Sand)	Wet-laid into Polyglass HRA
SBS-SA	Base Ply	One or more Elastoflex SA V (2.0mm), Elastoflex SA V FR (2.0mm), Elastoflex SA V Plus (2.5mm), Elastoflex SA V Plus FR (2.5mm) or Elastoflex SA Base	Self-Adhering
APP-TA	Base Ply or Ply:	One or more Polyflex or Polybond	Torch-Applied
	Cap Ply	Polyflex, Polyflex G, Polyflex G FR, Polybond or Polybond G	
SBS-TA	Base Ply or Ply	One or more Elastobase V, Elastoflex V 22, Elastoflex V, Elastoflex S6, Elastoflex S6 HP, Elastoshield VP HT or Elastoshield TS	
	Cap Ply	Elastoshield HT G, Elastoshield HT G FR, Elastoflex V G, Elastoflex V G FR, Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS G or Elastoshield TS G FR	
Note:	Membranes to receive self-adhering membranes shall have a poly-film top surface.		

5. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC (HVHZ) 1620 and [Roofing Application Standard](#) RAS 128 for determination of design wind loads. [\(Note 2\)](#)

6. Overburden of soil and plantings (for 'garden roofs'; root barriers, filter fabric, drainage components, EPS / XPS insulation, etc.) or concrete topping slabs, that are specified by the Designer of Record, acceptable to the Authority Having Jurisdiction and do not form part of the load path to the waterproofing system, are permissible over the assemblies noted herein with no adverse effect on the wind uplift performance of the system. The Authority Having Jurisdiction may require integrity flood testing (ASTM D5957) or Electric Field Vector Mapping tests of all waterproofing systems prior to placement of overburden materials. Testing, if required by the Authority Having Jurisdiction, should be conducted by a qualified testing agency or professional.
- 6.1 For proprietary overburden components referenced herein, produced by a Product Manufacturer other than the report holder on Page 1 of this PEER:
- Neither NEMO ETC, LLC nor Robert Nieminen, P.E. purport to have evaluated said overburden components for Code compliance. The scope of evaluation is limited to the as-tested interface between said overburden components and the waterproofing systems.
 - Refer to the HVHZ [Product Approval](#) or [Miami-Dade NOA](#) of the component manufacturer to confirm Quality Assurance in accordance with F.A.C. [Rule 61G20-3](#).
 - Proprietary exterior elevated flooring systems shall demonstrate compliance with [FBC 3115](#) to the satisfaction of the Authority Having Jurisdiction.
 - Independent exterior elevated flooring systems are not permitted in HVHZ jurisdictions (reference 3115.4.1).

**TABLE 1A: CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
HOT RUBBER SYSTEMS
SYSTEM TYPE F: BONDED WATERPROOFING**

System No.	Deck (Note 1)	Waterproofing				Protection Course (Note 4)	Overburden (Note 6)	MDP (psf)
		Primer	Base Coat	Reinforcement	Top Coat			
C-1.	Structural Concrete	PG100	Polyglass HRA, min. 90-wet-mils	Mapeseal LMR Fabric, set into wet base coat	Polyglass HRA, min. 125-wet-mils	SBS-HRA	Optional FBC Approved extruded polystyrene and/or drainage course, followed by structural concrete topping slab	N/A
C-2.	Structural Concrete	PG100	Polyglass HRA, min. 90-wet-mils	Mapeseal LMR Fabric, set into wet base coat	Polyglass HRA, min. 125-wet-mils	SBS-HRA	Concrete pavers, 12x12-inch x nominal 1-inch applied in minimum 2" thick mortar bed. Mortar shall be a 3:1mix, three parts masonry sand to one part cement. Before setting pavers, dampen the back of each one and apply a slurry of mortar to ensure maximum contact with mortar bed. Pavers should then be carefully embedded in the mortar bed and tapped in place to ensure full solid bearing.	-300.0
C-3.	Structural Concrete	PG100	Polyglass HRA, min. 90-wet-mils	Mapeseal LMR Fabric, set into wet base coat	Polyglass HRA, min. 125-wet-mils	SBS-HRA	As specified by the Designer of Record and acceptable to the Authority Having Jurisdiction	-300.0

TABLE 1B: CONCRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF)
MODIFIED BITUMEN SYSTEMS
SYSTEM TYPE F: BONDED WATERPROOFING

System No.	Deck (Note 1)	Waterproofing (Note 4)				Overburden (Note 6)	MDP (psf)
		Primer	Base Ply	Ply	Cap Ply		
MODIFIED BITUMEN, SELF-ADHERING BASE PLY:							
C-4.	Structural Concrete	PG100	SBS-SA	(Optional) SBS-SA, APP-TA or SBS-TA	APP-TA or SBS-TA	Optional FBC Approved extruded polystyrene and/or drainage course, followed by structural concrete topping slab	N/A
C-5.	Structural Concrete	PG100	SBS-SA	(Optional) APP-TA or SBS-TA	APP-TA or SBS-TA	As specified by the Designer of Record and acceptable to the Authority Having Jurisdiction	-315.0
C-6.	Structural Concrete	PG100	SBS-SA	(Optional) SBS-SA	SBS-TA	Exterior grade ceramic plaza deck tile, 12x12-inch x nominal 1/2-inch applied in MAPEI Kerabond Tile Mortar dry-set Portland cement mortar (ANSI A118.1) in accordance with ANSI A108.5.	-424.0
C-7.	Structural Concrete	PG100	SBS-SA	(Optional) SBS-SA	SBS-TA	Exterior grade porcelain tile, 12x12-inch x nominal 3/8-inch applied in MAPEI Ultraflex LFT polymer modified mortar (ANSI A118.15) using a ¼" square notched trowel per ANSI A108.5.	-515.0
MODIFIED BITUMEN, TORCH-APPLIED BASE PLY:							
C-8.	Structural Concrete	PG100	APP-TA or SBS-TA	(Optional) SBS-SA, APP-TA or SBS-TA	APP-TA or SBS-TA	Optional FBC Approved extruded polystyrene and/or drainage course, followed by structural concrete topping slab	N/A
C-9.	Structural concrete	PG100	APP-TA	(Optional) APP-TA	APP-TA	As specified by the Designer of Record and acceptable to the Authority Having Jurisdiction	-256.8
C-10.	Structural concrete	PG100	SBS-TA	(Optional) SBS-TA	SBS-TA	As specified by the Designer of Record and acceptable to the Authority Having Jurisdiction	-495.0