



**NEMO|etc.**

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ENGINEER

EVALUATE

TEST

CONSULT

**EVALUATION REPORT BY FLORIDA P.E.**

**Polyglass USA, Inc.**

1111 West Newport Center Drive  
Deerfield Beach, FL 33442  
**(954) 233-1330**

**Evaluation Report P12060.02.09-R34**

**FL5259-R38 (NON-HVHZ)**

**Date of Issuance: 02/24/2009**

**Revision 34: 02/13/2023**

**SCOPE:**  
This Evaluation Report 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 **7<sup>th</sup> Edition (2020) Florida Building Code sections noted herein.**

**DESCRIPTION: Polyglass Roof Underlayments, for use in FBC non-HVHZ jurisdictions**

**LABELING:** Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein and [FBC 1507.1.1.](#)

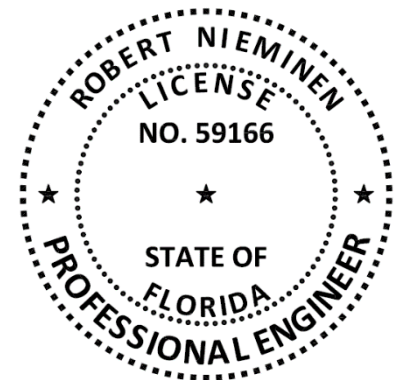
**CONTINUED COMPLIANCE:** This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our Evaluation Reports by the named client constitutes 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 Evaluation Report 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 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 16.

**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 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, 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.

**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:** Roof Underlayments, as produced by Polyglass USA, Inc., have demonstrated compliance with the following sections of the 7<sup>th</sup> Edition (2020) 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	STANDARD	YEAR
1504.3.1	Wind resistance	FM 4474	2011
1504.3.1	Wind resistance	UL 1897	2015
1504.7	Impact resistance	ASTM D3746	2015
1507.1.1 / R905.1.1	Material standard	ASTM D226	2009
1507.1.1, 1507.2.4, 1507.2.9.2 / R905.1.1, R905.2.8.2	Material standard	ASTM D1970	2015
1507.3.3 / R905.3.3	Material standard	FRSA/TRI, Sixth Edition	2018
1507.11.2 / R905.11.2	Material standard	ASTM D6163	2015
1507.11.2 / R905.11.2	Material standard	ASTM D6164	2011
1507.11.2 / R905.11.2	Material standard	ASTM D6222	2011
1507.11.2 / R905.11.2	Material standard	ASTM D6509	2015
TAS 110	Accelerated Weathering	ASTM D4798	2011

**3. REFERENCES:**

ENTITY	EXAMINATION	REFERENCE	DATE	ENTITY	EXAMINATION	REFERENCE	DATE
ERD (TST 6049)	ASTM D6509	P37590.03.13-1-R1	02/05/13	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-11.A	10/21/20
ERD (TST 6049)	ASTM D6164	P37590.03.13-3A	03/06/13	NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.12.19.D	10/27/20
ERD (TST 6049)	ASTM D6164	P37590.07.13-1	07/02/13	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-19-SSUDL-01.A	11/18/20
ERD (TST 6049)	ASTM D4601	P45940.09.13	09/04/13	NEMO (TST 6049)	ASTM D1623, TAS 103	4p-ICP-20-SSLAP-01.A	12/15/20
ERD (TST 6049)	ASTM D1970 (adhesion)	P45370.09.13	09/18/13	NEMO (TST 6049)	ASTM D1623, TAS 103	4p-ICP-20-SSLAP-03.A-R1	03/04/21
ERD (TST 6049)	ASTM D1623, TAS 103, TAS 114(C)	P45270.05.14	05/12/14	NEMO (TST 6049)	ASTM D4798, D1623	4j-PLYG-20-SSUDL-13.A	03/15/21
ERD (TST 6049)	ASTM D1623	P46520.10.14	10/03/14	NEMO (TST 6049)	ASTM D1623, TAS 103	4j-PLYG-20-SSUDL-07.A	10/29/21
ERD (TST 6049)	FRSA/TRI	P44360.10.14-R1	10/07/14	NEMO (TST 6049)	ASTM D1623, TAS 103	4j-PLYG-20-SSUDL-09.A	10/29/21
ERD (TST 6049)	FRSA/TRI	PLYG-SC7550.03.15	03/24/15	NEMO (TST 6049)	ASTM D1970, D4798	4j-PLYG-21-SSUDL-03.A	10/29/21
ERD (TST 6049)	ASTM D1623	P40390.04.15	04/03/15	NEMO (TST 6049)	ASTM D1970, D4798	4j-PLYG-21-SSUDL-03.A	04/21/22
ERD (TST 6049)	ASTM D1623, TAS 103	PLYG-SC10130.06.16-2	06/27/16	NEMO (TST 6049)	ASTM D1970	4j-PLYG-22-SSUDL-02.A	09/08/22
ERD (TST 6049)	ASTM D1970, D4798	PLYG-SC10130.06.16-1	06/27/16	NEMO (TST 6049)	ASTM D4798, D3746	4j-PLYG-22-SSUDL-06	02/13/23
ERD (TST 6049)	FRSA/TRI	PLYG-SC10130.06.16-3	06/27/16	PRI (TST5878)	ASTM D1623, TAS 103	DAPF-002-01	03/08/18
ERD (TST 6049)	FRSA/TRI (tile slippage)	PLYG-SC13040.12.16	12/27/16	ERD (TST 6049)	Wind Uplift	11757.04.01-1-R1	04/25/01
ERD (TST 6049)	FRSA/TRI (tile slippage)	PLYG-SC12115.08.17	08/08/17	ERD (TST 6049)	Wind Uplift	11757.08.01-1	08/13/01
ERD (TST 6049)	FRSA/TRI	PLYG-SC13035.08.17	10/31/17	ERD (TST 6049)	Wind Uplift	11776.06.02	01/16/03
NEMO (TST 6049)	ASTM D1970	4-PLYG-18-004.03.18	03/29/18	ERD (TST 6049)	Wind Uplift	P1740.01.07	01/04/07
NEMO (TST 6049)	ASTM D1623, TAS 103	4S-ICP-18-001.07.18-R1	07/23/18	ERD (TST 6049)	Wind Uplift	P1738.02.07-R2	02/05/07
NEMO (TST 6049)	ASTM D6163	4S-PLYG-18-002.01.19-A	01/24/19	ERD (TST 6049)	Wind Uplift	P9260.03.08	03/21/08
NEMO (TST 6049)	ASTM D6222	4S-PLYG-18-002.05.19-C	05/20/19	ERD (TST 6049)	Wind Uplift	P30540.11.09-R1	11/23/09
NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-G	10/08/19	ERD (TST 6049)	TAS 117(B), TAS 114(C)	P11030.11.09-2	11/30/09
NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-I	10/08/19	ERD (TST 6049)	TAS 114(J)	P39680.03.13	03/04/13
NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-L	10/09/19	ERD (TST 6049)	Wind Uplift	P41630.08.13	08/06/13
NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.12.19-F	12/18/19	ERD (TST 6049)	Wind Uplift	P11751.05.03-R1	11/26/13
NEMO (TST 6049)	FRSA/TRI	4j-PLYG-19-SSUDL-02.A	01/02/20	ERD (TST 6049)	Wind Uplift	P11781.11.03-R1	11/26/13
NEMO (TST 6049)	ASTM D6222	4S-PLYG-18-002.12.19-K-R1	01/07/20	ERD (TST 6049)	Wind Uplift	PLYG-SC8905.05.16-1	05/17/16
NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.01.20.H	01/14/20	ERD (TST 6049)	UL1897	PLYG-SC12025.10.16	10/12/16
NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.01.20.K	01/14/20	FM (TST 1867)	Wind Uplift	FM 3004091	01/12/00
NEMO (TST 6049)	ASTM D6164	4S-PLYG-18-004.01.20.B	01/16/20	FM (TST1867)	FM 4470/4474	PR454230 (DATA)	01/26/22

**NEMO ETC, LLC.**
*Certificate of Authorization #32455*
**7<sup>TH</sup> EDITION (2020) FBC NON-HVHZ EVALUATION (Method 1D)**
**Polyglass Roof Underlayments**
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ENTITY	EXAMINATION	REFERENCE	DATE	ENTITY	EXAMINATION	REFERENCE	DATE
NEMO (TST 6049)	FRSA/TRI (tile slippage)	4S-PLYG-18-004.01.20.A	01/16/20	NEMO (TST 6049)	Wind Uplift	4L-PLYG-18-003.01.19	01/11/19
NEMO (TST 6049)	ASTM D1623, TAS 103	4p-DOW-19-SSLAP-01.A-R2	02/10/20	Polyglass USA	Materials Affidavit	Polystick Compound	08/18/11
NEMO (TST 6049)	FRSA/TRI	PLYG-SC15855.05.20.A	05/29/20	Polyglass USA	Materials Affidavit	Polystick Compound	01/13/21
NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-01	07/06/20	PRI (TST5878)	UL1897	708T0058-1	01/13/21
NEMO (TST 6049)	ASTM D6222	4q-PLYG-19-SSMBB-05.A	07/23/20	PRI (TST5878)	UL1897	708T0058-6	02/17/21
NEMO (TST 6049)	ASTM D4798, D1623	4j-PLYG-19-SSUDL-05.A	09/10/20	PRI (TST5878)	UL1897	708T0058-7	02/25/21
NEMO (TST 6049)	ASTM D1970	4j-PLYG-20-SSUDL-05.A	09/30/20	UL (QUA9625)	Quality Control	Service Confirmation (FL)	09/13/18
NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-05.C	09/30/20	UL (QUA9625)	Quality Control	Service Confirmation (TX)	11/07/19
				UL (QUA9625)	Quality Control	Florida BCIS	Current

#### 4. PRODUCT DESCRIPTION:

**TABLE 1: EVALUATED UNDERLAYMENTS**

PRODUCT	MATERIAL STANDARD	PLANT(S)	DESCRIPTION
Elastobase V	ASTM D6163	FL	Fiberglass-reinforced, SBS modified bitumen base sheet
Elastobase P	ASTM D6164	FL	Polyester-reinforced, SBS modified bitumen base sheet
Elastoflex S6 G	ASTM D6164 FRSA/TRI 09-18	FL, PA	Polyester-reinforced, SBS modified bitumen cap sheet
Elastoflex S6 G FR	ASTM D6164 FRSA/TRI 09-18	FL	Polyester-reinforced, SBS modified bitumen cap sheet
HydraGuard Dual Pro	ASTM D1970	FL	Nominal 60-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polyester fabric surface
HydraGuard Tile Pro	ASTM D1970 FRSA/TRI 09-18	FL	Nominal 60-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polyester fabric surface
Polyflex G	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet
Polyflex G FR	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet
Polyflex SA P	ASTM D6222 FRSA/TRI 09-18	FL, TX	Polyester-reinforced, APP modified bitumen cap sheet
Polyflex SA P FR	ASTM D6222 FRSA/TRI 09-18	FL, TX	Polyester-reinforced, APP modified bitumen cap sheet
Polybase V	ASTM D6509	FL	Fiberglass-reinforced, APP modified bitumen base sheet
Polyglass G2 Base Sheet	ASTM D4601	AL	Fiberglass-reinforced, asphaltic base sheet
Polystick IR-Xe	ASTM D1970	FL, PA, TX	Nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, with an aggregate surface
Polystick MTS Plus	ASTM D1970 FRSA/TRI 09-18	FL, NV, PA, TX	Nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, surfaced with polyolefinic film surface
Polystick TU Max	ASTM D1970 FRSA/TRI 09-18	FL, PA, TX	Nominal 60-mil thick rubberized asphalt waterproofing membrane with a 190 g/m <sup>2</sup> polyester fabric surface
Polystick TU P	FRSA/TRI 09-18	FL, PA, TX	Nominal 130-mil thick rubberized asphalt waterproofing membrane, glass-fiber/polyester reinforced, with a granular surface
Polystick TU Plus	ASTM D1970 FRSA/TRI 09-18	FL, PA, TX	Nominal 80-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, with a polyester fabric surface
Polystick XFR	ASTM D1970 FRSA/TRI 09-18	NV, TX	Nominal 80-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, surfaced with a textured film surface

**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 This Evaluation Report is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (i.e., Broward and Miami-Dade Counties).
- 5.3 This Evaluation Report 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 Evaluation Report 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 **Polyglass 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.
- 5.6 Allowable Roof Covers:

TABLE 2: ROOF COVER OPTIONS						
FBC NON-HVHZ:	<a href="#">1507.2</a>	<a href="#">1507.3</a>		<a href="#">1507.4 &amp; 1507.5</a>	<a href="#">1507.7</a>	<a href="#">1507.8 &amp; 1507.9</a>
UNDERLAYMENT	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL	SLATE OR SLATE-TYPE SHINGLES	WOOD
		MECHANICAL ATTACH	ADHESIVE-SET			
Elastobase V	Yes (Alternate to D226, Type II)	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (Alternate to D226, Type II)	Yes (Alternate to D226, Type II)	Yes (Alternate to D226, Type II)
Elastobase P	Yes (Alternate to D226, Type II)	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (Alternate to D226, Type II)	Yes (Alternate to D226, Type II)	Yes (Alternate to D226, Type II)
Polybase V	No	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	No	No	No
Polyglass G2 Base	No	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	Yes (as Base Sheet, See <a href="#">Table 4B</a> )	No	No	No
Elastoflex S6 G	No	Yes	Yes ( <a href="#">Table 2A</a> )	No	No	No
Elastoflex S6 G FR	No	Yes	No	No	No	No
HydraGuard Dual Pro	Yes	No	No	Yes	Yes	Yes <sup>1</sup>
HydraGuard Tile Pro	Yes	Yes	Yes ( <a href="#">Table 2A</a> )	Yes	Yes	Yes <sup>1</sup>
Polyflex G	No	Yes	Yes ( <a href="#">Table 2A</a> )	No	No	No
Polyflex G FR	No	Yes	No	No	No	No
Polyflex SA P	No	Yes	Yes ( <a href="#">Table 2A</a> )	No	No	No
Polyflex SA P FR	No	Yes	Yes ( <a href="#">Table 2A</a> )	No	No	No
Polystick IR-Xe	Yes	No	No	No	Yes	Yes <sup>1</sup>
Polystick MTS Plus	Yes	Yes	No	Yes	Yes	Yes <sup>1</sup>
Polystick TU Max	No	Yes	Yes ( <a href="#">Table 2A</a> )	Yes	No	Yes <sup>1</sup>

<sup>1</sup> Used as min. 4-inch wide joint-strips per FBC 1507.1.1.3 / FBC R905.1.1.3 or installed in full-coverage atop ASTM D226, Type II felt, Elastobase V or Elastobase P mechanically attached in accordance with FBC Table 1507.1.1.1 or FBC Residential Table R905.1.1.1.

TABLE 2: ROOF COVER OPTIONS						
FBC NON-HVHZ:	<a href="#">1507.2</a>	<a href="#">1507.3</a>		<a href="#">1507.4 &amp; 1507.5</a>	<a href="#">1507.7</a>	<a href="#">1507.8 &amp; 1507.9</a>
UNDERLAYMENT	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL	SLATE OR SLATE-TYPE SHINGLES	WOOD
		MECHANICAL ATTACH	ADHESIVE-SET			
Polystick TU P	No	Yes	Yes ( <a href="#">Table 2A</a> )	No	No	Yes <sup>1</sup>
Polystick TU Plus	Yes	Yes	Yes ( <a href="#">Table 2A</a> )	Yes	Yes	Yes <sup>1</sup>
Polystick XFR	Yes	Yes	No	Yes	Yes	Yes <sup>1</sup>

5.6.1 Adhesive-set tile is limited to use of the following underlayment / tile-adhesive combinations.

TABLE 2A: ALLOWABLE UNDERLAYMENT / TILE-ADHESIVE COMBINATIONS <sup>2</sup>					
UNDERLAYMENT	DAP GLOBAL		DUPONT DE NEMOURS	ICP CONSTRUCTION	
	STORMBOND	STORMBOND 2	TILE BOND	POLYSET AH-160	POLYSET RTA-1
	<a href="#">FL14506</a>	<a href="#">FL14506</a>	<a href="#">FL22525</a>	<a href="#">FL6332</a>	<a href="#">FL6276</a>
Elastoflex S6 G	No	No	No	Yes	Yes
Polyflex G	No	No	No	No	Yes
Polyflex SA P	No	No	No	Yes	Yes
Polyflex SA P FR	No	No	No	No	Yes
Polystick TU Max	No	Yes	Yes	Yes	Yes
Polystick TU P	Yes	Yes	No	Yes	Yes
Polystick TU Plus, HydraGuard Tile Pro	No	Yes	Yes	Yes	Yes

5.7 Allowable Substrates:

TABLE 3: SUBSTRATE OPTIONS FOR ADHERED UNDERLAYMENTS				
UNDERLAYMENT	APPLICATION	SUBSTRATES (DESIGNED TO MEET WIND LOADS FOR PROJECT)		
		TYPE	PRIMER	MATERIAL(S)
HydraGuard Dual Pro, HydraGuard Tile Pro, Polystick IR-Xe, Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus, Polystick XFR, Polyflex SA P or Polyflex SA P FR	self-adhering	Deck / sheathing	(Optional) ASTM D41	plywood, OSB, Southern Yellow Pine or Huber Engineered Woods "ZIP System" Panels
			ASTM D41	structural concrete
		Insulation	(Optional) ASTM D41 or WB-3000	ASTM C1289 Type II Class 1 polyisocyanurate, ASTM C1289 Type V polyisocyanurate-composite, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board
		Base Sheet	N/A	ASTM D226, Type II felt, Elastobase V or Elastobase P
Elastoflex S6 G or Elastoflex S6 G FR	hot asphalt	Deck	ASTM D41	structural concrete
		Insulation	(Optional) ASTM D41	DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board
		Base Sheet	N/A	ASTM D226, Type II felt, Elastobase V, Elastobase P or Polyglass G2 Base
Polyflex G or Polyflex G FR	torch-applied	Deck	ASTM D41	structural concrete
		Insulation	(Optional) ASTM D41	DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board
		Base Sheet	N/A	Elastobase V, Elastobase P, Polyglass G2 Base or Polybase V

<sup>2</sup> Refer to Tile Manufacturer's or Adhesive Manufacturer's Florida Product Approval for Overturning Moment Resistance Performance.

**5.8 Attachment Limitations:**

5.8.1 For use under mechanically attached NON-TILE prepared roof coverings, attachment shall be in accordance with the manufacturer’s installation instructions subject to the following limitations:

- For mechanically attached underlayments or base sheets over wood sheathing, attachment shall be not less than **FBC 1507.1.1** or **R905.1.1**.
- For mechanically attached underlayments or base sheets over insulated steel deck, fasteners shall consist of FBC Approved steel-deck roofing screws fitted with stress plates (Category: Roofing; Subcategory: Roofing Fasteners), spaced as noted in **1507.1.1** or **R905.1.1**. Screws and stress plates shall come from the same Product Manufacturer.

5.8.2 For use under tile roof systems, attachment shall be in accordance with the manufacturer’s installation instructions, but – for mechanically attached base sheets - not less than:

- **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition, Appendix A, Table 1 (for Two-Ply Asphalt Applied Hot Mop Underlayment)
- or
- [Table 4A](#) or [Table 4B](#) (for other underlayment systems).

5.8.3 Wind Resistance for Underlayment Systems in Tile Roof Applications:

The following wind uplift limitations apply to underlayment systems that are not prescriptive in the **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition. The 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 **FBC 1504.9** has already been applied).

5.8.3.1 Direct-to-Deck:

The maximum design pressure for the selected assembly shall meet or exceed that required under **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition, Appendix A, Table 1A or the critical (highest) design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**.

TABLE 4A: ALLOWABLE DESIGN PRESSURES, DIRECT-TO-DECK UNDERLAYMENT IN TILE ROOF APPLICATIONS						
SYSTEM No.	DECK	PRIMER	JOINT TREATMENT	BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
UDL-1.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	None	Min. 4-inch wide strips of Elastoflex SA-V over all OSB joints	Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass’ installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass’ installation instructions, max. 12-inch o.c.	-52.5
UDL-2.	Min. 15/32-inch plywood	None	None	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass’ installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass’ installation instructions, max. 12-inch o.c.	-90.0
UDL-3.	Min. 15/32-inch plywood	PG100 or ASTM D41	None	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass’ installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 1¼” ring shank nails through 32 ga., 1-5/8” diameter tin caps spaced 12-inch o.c.	-97.5





**TABLE 4A: ALLOWABLE DESIGN PRESSURES,  
DIRECT-TO-DECK UNDERLAYMENT IN TILE ROOF APPLICATIONS**

SYSTEM No.	DECK	PRIMER	JOINT TREATMENT	BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
UDL-4.	Min. 15/32-inch plywood	WB-3000	None	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed within the seldge-edge side laps using 12 ga. x 1 1/4" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.	-105.0
UDL-5.	Min. 15/32-inch plywood	(Optional) PG100 or ASTM D41	Min. 4-inch wide strips of Elastoflex SA-V over all plywood joints	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-135.0
UDL-6.	APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category	None	None	None	Polystick TU Max, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed within the seldge-edge side laps using 12 ga. x 1 1/4" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.	-165.0
UDL-7.	APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category	(Optional) PG100 at 0.5 gal/sq.	None	Polystick MTS Plus, self-adhered and back-nailed within the seldge-edge side laps using 12 ga. x 1 1/4" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.	Polystick TU Max, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed within the seldge-edge side laps using 12 ga. x 1 1/4" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.	-202.5
UDL-8.	APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category	PG100 at 0.5 gal/sq.	None	None	Polystick TU Max, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed within the seldge-edge side laps using 12 ga. x 1 1/4" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.	-255.0
UDL-9.	Structural concrete	PG100 or ASTM D41	None	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	HydraGuard Tile Pro, Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-202.5
UDL-10.	Structural concrete	PG100 or ASTM D41	None	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-622.5

**5.8.3.2 Mechanically-Attached Base Sheet:**

The maximum design pressure for the selected assembly shall meet or exceed that required under **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition, Appendix A, Table 1A or the critical (highest) design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**.

Alternatively, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117 and Roofing Application Standard RAS 137. Assemblies marked with an asterisk\* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (February 2020) for enhancements.

**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM No.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-11.	Min. 15/32-inch OSB	Elastobase V (poly-film top surface)	11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-30.0*
UDL-12.	Min. 15/32-inch plywood	Elastobase V (poly-film top surface)	11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-37.5*
UDL-13.	Min. 19/32-inch plywood	One (1) layer ASTM D226, Type II felt	11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 4-inch o.c. at the 2-inch wide side laps and 4-inch o.c. at two (2) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0*
UDL-14.	Min. 19/32-inch plywood	Two (2) layers ASTM D226, Type II felt	11 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 9-inch o.c. at the 2-inch wide side laps and 9-inch o.c. at two (2) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0*
UDL-15.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 9-inch o.c. at the 2-inch wide side laps and 18-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0
UDL-16.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	12 ga. annular ring shank nails with 1-5/8" diameter tin caps; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0



**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-17.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	12 ga. annular ring shank nails with 1-5/8" diameter tin caps; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0
UDL-18.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	12 ga. annular ring shank nails with 1-5/8" diameter tin caps; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-45.0
UDL-19.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-52.5
UDL-20.	Min. 15/32-inch plywood	Elastobase V (poly-film top surface)	Simplex Original Cap Nails; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-52.5
UDL-21.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	Simplex Original Cap Nails; 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-52.5
UDL-22.	Min. 19/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	11 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-60.0
UDL-23.	Min. 19/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	OMG #12 Standard Roofgrip with OMG Flat Bottom Metal Plates ( <a href="#">FL699</a> ); 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-60.0
UDL-24.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows. PG100 or ASTM D41 primer applied to stress plates.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-60.0

**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-25.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-60.0
UDL-26.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-60.0
UDL-27.	Min. 15/32-inch plywood	Polyglass G2 Base or Polybase V (requires use of torch-applied underlayment)	12 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or torch-applied or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-67.5
UDL-28.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	TRUFast Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-67.5
UDL-29.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	TRUFast Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-67.5
UDL-30.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	TRUFast Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-67.5
UDL-31.	Min. 15/32-inch plywood	Polyglass G2 Base or Polybase V (requires use of torch-applied underlayment)	Dekfast DF-#14-PH3 with DF-PLT-2-7/8-H ( <a href="#">FL20311</a> ), OMG #14 Heavy Duty with OMG 3" Galvalume Steel Plates or OMG Acutrak Flat Bottom Plates ( <a href="#">FL699</a> ), Trufast HD with Trufast 3-inch Insulation Plates ( <a href="#">FL4500</a> ) or Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 10-inch o.c. at the 4-inch wide side laps and 10-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or torch-applied or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-75.0

**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-32.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-33.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Acutrac Flat Bottom Metal Plates ( <a href="#">FL699</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-34.	Min. 15/32-inch plywood	Elastobase V (sanded top surface)	Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates ( <a href="#">FL4500</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-35.	Min. 15/32-inch plywood	Polyglass G2 Base or Polybase V (requires use of torch-applied underlayment)	Dekfast DF-#14-PH3 with DF-PLT-2-7/8-H ( <a href="#">FL20311</a> ), OMG #14 Heavy Duty with OMG 3" Galvalume Steel Plates or OMG Acutrac Flat Bottom Plates ( <a href="#">FL699</a> ), Trufast HD with Trufast 3-inch Insulation Plates ( <a href="#">FL4500</a> ) or Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or torch-applied or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-36.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	TRUFAST Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows. PG100 or ASTM D41 primer applied to stress plates.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-37.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	TRUFAST Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0

**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-38.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	TRUFAST Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-90.0
UDL-39.	Min. 19/32-inch plywood	Elastobase V (poly-film top surface)	11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 4-inch o.c. at the 4-inch wide side laps and 4-inch o.c. at four (4) equally spaced staggered center rows.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-97.5
UDL-40.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows. PG100 or ASTM D41 primer applied to stress plates.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-97.5
UDL-41.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-97.5
UDL-42.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-97.5
UDL-43.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	Simplex MAXX Cap Fasteners ( <a href="#">NOA 18-1227.05</a> ); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-105.0
UDL-44.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	TRUFAST Versa-Fast Fasteners & Plates ( <a href="#">FL4500</a> ); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows. PG100 or ASTM D41 primer applied to stress plates.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-105.0

**TABLE 4B: ALLOWABLE DESIGN PRESSURES,  
2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS**

SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-45.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	TRUFast Versa-Fast Fasteners & Plates (FL4500); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-105.0
UDL-46.	APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	TRUFast Versa-Fast Fasteners & Plates (FL4500); two (2) screws per plate installed 180° into the holes of the plate, parallel to the width direction of the sheet; 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-105.0
UDL-47.	Min. 19/32-inch plywood	Elastobase V (poly-film top surface)	11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps; 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows. PG100 or ASTM D41 primer at all tin-caps.	Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-112.5
UDL-48.	Min. 15/32-inch plywood	Elastobase V (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)	OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Accutrac Flat Bottom Metal Plates (FL699); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c. or Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-120.0
UDL-49.	Min. 15/32-inch plywood	Elastobase V (sanded top surface)	Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates (FL4500); 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-120.0
UDL-50.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (poly-film top surface)	TRUFast Versa-Fast Fasteners & Plates (FL4500); one (1) screw per plate in the center hole; 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows. PG100 or ASTM D41 primer applied to stress plates.	(Optional) Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick MTS Plus, self-adhered and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-127.5
UDL-51.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V (sand top surface)	TRUFast Versa-Fast Fasteners & Plates (FL4500); one (1) screw per plate in the center hole; 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.	None	Elastoflex S6 G, applied in full mopping of hot asphalt and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-127.5

TABLE 4B: ALLOWABLE DESIGN PRESSURES, 2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS						
SYSTEM NO.	DECK	BASE SHEET		BASE PLY	CAP PLY	MAX. DESIGN PRESSURE (PSF)
		TYPE	ATTACH			
UDL-52.	APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing	Elastobase V or Polybase V	TRUFast Versa-Fast Fasteners & Plates (FL4500); one (1) screw per plate in the center hole; 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.	None	Polyflex G, torch-applied and back-nailed in accordance with Polyglass' installation instructions, max. 12-inch o.c.	-127.5

5.9 Exposure Limitations:

TABLE 5: EXPOSURE LIMITATIONS		
UNDERLAYMENT	PREPARED ROOF COVER INSTALLATION TYPE	MAXIMUM EXPOSURE (DAYS)
Elastobase V, Elastobase P, Polyglass G2 Base or Polybase V	Mechanically attached	30
Polystick IR-Xe	Mechanically attached	90
HydraGuard Dual Pro, Polystick MTS Plus, Polystick TU Max, Polystick TU P or Polystick XFR	Any type (per Table 2)	180
HydraGuard Tile Pro or Polystick TU Plus	Any type (per Table 2)	360
Elastoflex S6 G, Elastoflex S6 G FR, Polyflex G, Polyflex G FR, Polyflex SA P or Polyflex SA P FR	Adhesive-set tile roof system	180
	Mechanically attached	UNLIMITED

5.10 Tile Slippage Limitations: When loading roof tiles on the underlayment in direct-deck tile roof assemblies, the maximum roof slope shall be as follows. These slope limitations can only be exceeded by using battens during loading of the roof tiles.

TABLE 6: TILE SLIPPAGE LIMITATIONS FOR DIRECT-DECK TILE INSTALLATIONS			
UNDERLAYMENT	TILE PROFILE	STAGING METHOD	MAXIMUM STAGING SLOPE
Elastoflex S6 G or S6 G FR	Flat or Lugged	6-tile stack (4 over 2)	Prohibited without battens
HydraGuard Tile Pro	Flat or Lugged	6-tile stack (4 over 2)	7:12
Polyflex G or G FR	Flat or Lugged	6-tile stack (4 over 2)	4:12
Polyflex SA P or SA P FR	Flat or Lugged	6-tile stack (4 over 2)	4:12
Polystick MTS Plus	Flat	6-tile stack (4 over 2)	5:12
	Lugged	6-tile stack (4 over 2)	4:12
Polystick TU Max	Flat	6-tile stack (4 over 2) or 10-tile stack	7:12
	Lugged	6-tile stack (4 over 2)	7:12
	Lugged	10-tile stack	6:12
Polystick TU P	Flat or Lugged	6-tile stack (4 over 2)	7:12
Polystick TU Plus	Flat or Lugged	6-tile stack (4 over 2)	7:12
	Flat or Lugged	10-tile stack	6:12
Polystick XFR	Flat or Lugged	Prohibited without battens	Prohibited without battens



## 6. INSTALLATION:

- 6.1 Polyglass Roof Underlayments shall be installed in accordance with Polyglass published installation instructions subject to the Limitations set forth in Section 5 herein and the specifics noted below.
- 6.1.1 Consult Polyglass requirements for back-nailing at slopes 2:12 or greater.
- 6.1.2 All fabric-surfaced, aggregate-surfaced and granule-surfaced end-laps shall have a 6-inch wide, uniform layer of PG500 or POLYPLUS 50 applied within the end-lap.
- 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, and prime the substrate (if applicable).

### 6.3 Elastobase V or Elastobase P:

#### 6.3.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved mechanically attached underlayment (ASTM D226, Type II) in **FBC Table 1507.1.1.1** or **FBC Residential Table 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.

Elastobase V or Elastobase P may be covered with a layer of Polystick IR-Xe, Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus, Polystick XFR, Polyflex SAP or Polyflex SA P FR, self-adhered, Elastoflex S6 G or Elastoflex S6 G FR in hot asphalt or Polyflex G or Polyflex G FR, torch applied. Roof cover limitations are those associated with the top-layer underlayment, as set forth in [Table 2](#).

#### 6.3.2 Tile Applications:

6.3.2.1 Elastobase V (poly-film top) and Elastobase P (poly-film top) are limited to use as a mechanically attached base sheet in the "TWO-PLY SYSTEM" from **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition, followed by Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus, Polystick XFR, Polyflex SAP or Polyflex SA P FR, self-adhered or Polyflex G or Polyflex G FR, torch-applied. Tile roof installation method is limited by the selected Cap Sheet, as set forth in [Table 2](#). Refer to [Table 4B](#) herein for attachment requirements.

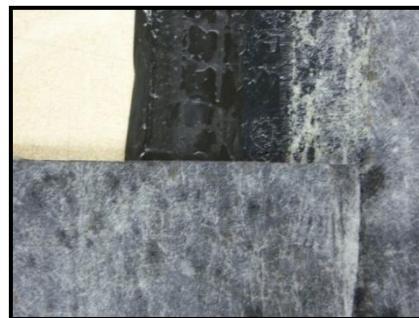
6.3.2.2 Elastobase V (sanded-top) and Elastobase P (sanded-top) are limited to use as a mechanically attached base sheet in the "TWO-PLY SYSTEM" from **FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual**, Sixth Edition, followed by Elastoflex S6 G, Elastoflex S6 G FR or an FBC Approved Mineral Surfaced Cap Sheet (ASTM D6380), asphalt-applied or Polyflex G or Polyflex G FR, torch-applied. Tile roof installation method is limited by the selected Cap Sheet, as set forth in [Table 2](#).

- When Elastobase V (sanded-top) or Elastobase P (sanded-top) is followed by asphalt-applied Elastoflex S6 G, Elastoflex S6 G FR or FBC Approved Mineral Surfaced Cap Sheet (ASTM D6380), refer to **FRSA/TRI**, Sixth Edition, Appendix A, Table 1 or [Table 4B](#) herein for attachment requirements.
- When Elastobase V (sanded-top) or Elastobase P (sanded-top) is followed by torch-applied Polyflex G or Polyflex G FR, refer to [Table 4B](#) herein for attachment requirements.

### 6.4 HydraGuard Dual Pro, HydraGuard Tile Pro, Polyflex SA P, Polyflex SA P FR, Polystick IR-Xe, Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick XFR:

#### 6.4.1 General:

All seal-lap seams (selvage laps) must be firmly rolled with a in accordance with Polyglass requirements to ensure full contact and adhesion. For HydraGuard Dual Pro and HydraGuard Tile Pro, align the edge of the top sheet to the end of the glue pattern (the sheet will overlap the fabric).



View of Overlap Seam of HydraGuard Dual Pro and HydraGuard Tile Pro

**6.4.2** 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 **1507.1.1.3** or **FBC Residential R905.1.1.1** or **R905.1.1.3** 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, Elastobase V or Elastobase P, the base sheet shall be fastened in accordance with **FBC 1507.1.1** or **R905.1.1**.

**6.4.3** Tile Applications (excludes HydraGuard Dual Pro and Polystick IR-Xe):

Shall be installed in compliance with the requirements for Self-Adhered Membrane set forth in FRSA/TRI *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Sixth Edition and the manufacturer’s installation instructions.

Refer to [Section 5.8](#) herein for attachment limitations.

Refer to [Table 6](#) herein for tile staging limitations.

**6.4.4** Multi-Ply Underlayment Systems:

Polystick MTS Plus or Polystick XFR followed by HydraGuard Tile Pro, Polyflex SA P, Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick XFR is allowable for use under mechanically attached prepared roof systems. Limits of use are those associated with the top-layer material. This is not a requirement, but is allowable if a 2-ply underlayment system is desired.

Polystick MTS Plus followed by HydraGuard Tile Pro, Polyflex SA P, Polystick TU Max, Polystick TU P or Polystick TU Plus is allowable for use under adhesive-set tile systems. Limits of use are those associated with the top-layer material. This is not a requirement, but is allowable if a 2-ply underlayment system is desired.

**6.5** **Elastoflex S6 G or Elastoflex S6 G FR:**

**6.5.1** Shall be installed in compliance with requirements as an alternate to the “Hot Asphalt Applied Cap Sheet” in the “Two Ply System” in the FRSA/TRI *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Sixth Edition, and the manufacturer’s installation instructions.

Refer to [Section 5.8](#) herein for attachment limitations.

Refer to [Table 6](#) herein for tile staging limitations.

**6.6** **Polyflex G or Polyflex G FR:**

**6.6.1** Shall be installed in compliance with requirements as an alternate to the “Heat Applied Cap Sheet” in the “Two Ply System” in the FRSA/TRI *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Sixth Edition, and the manufacturer’s installation instructions.

Refer to [Section 5.8](#) herein for attachment limitations.

Refer to [Table 6](#) herein for tile staging limitations.

**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](#): (360) 817-5512; [bsai.inspections@ul.com](mailto:bsai.inspections@ul.com)

**- END OF EVALUATION REPORT -**