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Polyglass MTS PLUS Polyglass TU PLUS ICP foam

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FL5259-R33 Application Type Revision Code Version 2020 **Application Status** Approved

Comments

Archived

Product Manufacturer POLYGLASS USA

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Category Roofing Subcategory Underlayments

Compliance Method Evaluation Report from a Florida Registered Architect or a Licensed Florida

Professional Engineer

Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed the Robert Nieminen

Evaluation Report

Florida License PE-59166 **UL LLC** Quality Assurance Entity Quality Assurance Contract Expiration Date 12/23/2023

Validated By John W. Knezevich, PE

Validation Checklist - Hardcopy Received

FL5259 R33 COI 2021 01 COI NIEMINEN.pdf Certificate of Independence

Referenced Standard and Year (of Standard) **Standard** <u>Year</u> **ASTM D1970** 2015 ASTM D226 2009 **ASTM D4798** 2011 **ASTM D6163** 2015

> **ASTM D6164** 2011 ASTM D6222 2011 **ASTM D6509** 2015

FM 4474	2011
FRSA/TRI, Sixth Edition	2018
TAS 103	2020
UL 1897	2015

Equivalence of Product Standards Certified By

Sections from the Code

Product Approval Method 1 Option D

 Date Submitted
 04/07/2021

 Date Validated
 04/12/2021

 Date Pending FBC Approval
 04/14/2021

 Date Approved
 06/08/2021

 Date Revised
 10/15/2021

Summary of Products

of use.

	I			
FL # Model, Number or Name		Description		
5259.1 Polyglass Roof Underlayments (HVHZ)		Polyglass roof underlayments for use in FBC HVHZ jurisdictions.		
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: No Impact Resistant: N/A Design Pressure: N/A Other: Refer to ER Section 5 for Limits of Use.		Installation Instructions FL5259 R33 II 2021 04 07 FINAL ER PLYG UNDERLAYMENTS FL5259-R33 (HVHZ).pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes Evaluation Reports FL5259 R33 AE 2021 04 07 FINAL ER PLYG UNDERLAYMENTS FL5259-R33 (HVHZ).pdf Created by Independent Third Party: Yes		

Limits of U	lse		Installation Instructions
5259.2		Polyglass Roof Underlayments (non-HVHZ)	Polyglass roof underlayments

Polyglass roof underlayments, for use in FBC non-HVHZ jurisdictions.

Limits of Use
Approved for use in HVHZ: No
Approved for use outside HVHZ: Yes
Impact Resistant: N/A

Design Pressure: +N/A/-622.5 **Other:** 1.) The design pressure in this application relates to one particular underlayment system for use in tile roof systems. Refer to ER Section 5.8.3 for other systems and associated maximum design pressures. 2.) Refer to ER Section 5 for other limits

FL5259 R33 II 2021 04 07 FINAL ER PLYG UNDERLAYMENTS FL5259-R33 (NON-HVHZ).pdf
Verified By: Robert Nieminen PE-59166

Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes **Evaluation Reports**

FL5259 R33 AE 2021 04 07 FINAL ER PLYG UNDERLAYMENTS FL5259-R33 (NON-HVHZ).pdf

Created by Independent Third Party: Yes

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Product Approval Accepts:







Nemo etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER EVALUATE TEST CONSULT

EVALUATION REPORT

Polyglass USA, Inc. 1111 West Newport Center Drive Deerfield Beach, FL 33442 (954) 233-1330 Evaluation Report P12060.02.09-R29

FL5259-R33 (NON-HVHZ)

Date of Issuance: 02/24/2009 Revision 29: 04/07/2021

SCOPE:

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **7**th **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|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

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

This Evaluation Report consists of pages 1 through 18.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983

OF STATE OF

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 04/07/2021. This does not serve as an electronically signed document.

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.

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ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment

Compliance Statement: Roof Underlayments, as produced by Polyglass USA, Inc., have demonstrated compliance with the following sections of the 7th Edition (2020) Florida Building Code through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2.	STANDARDS:			
	<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
	1504.3.1	Wind resistance	FM 4474	2011
	1504.3.1	Wind resistance	UL 1897	2015
	1507.1.1 / R905.1.1	Material standard	ASTM D226	2009
	1507.1.1, 1507.2.4, 1507.2.9.2 /	Material standard	ASTM D1970	2015
	R905.1.1, R905.2.8.2			
	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:							
<u>Entity</u>	<u>Examination</u>	Reference	<u>Date</u>	<u>Entity</u>	<u>Examination</u>	Reference	<u>Date</u>
ERD (TST 6049)	Wind Uplift	11757.04.01-1-R1	4/25/2001	ERD (TST 6049)	FRSA/TRI (tile slippage)	PLYG-SC13040.12.16	12/27/2016
ERD (TST 6049)	Wind Uplift	11757.08.01-1	8/13/2001	ERD (TST 6049)	FRSA/TRI (tile slippage)	PLYG-SC12115.08.17	8/8/2017
ERD (TST 6049)	Wind Uplift	11776.06.02	1/16/2003	ERD (TST 6049)	FRSA/TRI	PLYG-SC13035.08.17	10/31/2017
ERD (TST 6049)	Wind Uplift	P1740.01.07	1/4/2007	FM (TST 1867)	Wind Uplift	FM 3004091	1/12/2000
ERD (TST 6049)	Wind Uplift	P1738.02.07-R2	2/5/2007	NEMO (TST 6049)	ASTM D1970	4-PLYG-18-004.03.18	3/29/2018
ERD (TST 6049)	Wind Uplift	P9260.03.08	3/21/2008	NEMO (TST 6049)	ASTM D1623, TAS 103	4S-ICP-18-001.07.18-R1	7/23/2018
ERD (TST 6049)	Wind Uplift	P30540.11.09-R1	11/23/2009	NEMO (TST 6049)	Wind Uplift	4L-PLYG-18-003.01.19	1/11/2019
ERD (TST 6049)	ASTM D1623, TAS 103	P11030.11.09-1	11/30/2009	NEMO (TST 6049)	ASTM D6163	4S-PLYG-18-002.01.19-A	1/24/2019
ERD (TST 6049)	TAS 117(B), TAS 114(C)	P11030.11.09-2	11/30/2009	NEMO (TST 6049)	ASTM D6222	4S-PLYG-18-002.05.19-C	5/20/2019
ERD (TST 6049)	ASTM D4977	P11030.11.09-3	11/30/2009	NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-G	10/8/2019
ERD (TST 6049)	ASTM D1970	P33360.06.10	6/25/2010	NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-I	10/8/2019
ERD (TST 6049)	FRSA/TRI	P33370.03.11	3/2/2011	NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.10.19-L	10/9/2019
ERD (TST 6049)	ASTM D1623, TAS 103	P33370.04.11	4/26/2011	NEMO (TST 6049)	FRSA/TRI	4S-PLYG-18-004.12.19-F	12/18/2019
ERD (TST 6049)	ASTM D1970, D4798	P37300.10.11	10/19/2011	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-19-SSUDL-02.A	1/2/2020
ERD (TST 6049)	FRSA/TRI	P40390.08.12-1	8/6/2012	NEMO (TST 6049)	ASTM D6222	4S-PLYG-18-002.12.19-K-R1	1/7/2020
ERD (TST 6049)	ASTM D1623, TAS 103	P40390.08.12-2	8/7/2012	NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.01.20.H	1/14/2020
ERD (TST 6049)	ASTM D1623, TAS 103	C41420.09.12-3	9/11/2012	NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.01.20.K	1/14/2020
ERD (TST 6049)	ASTM D6509	P37590.03.13-1-R1	2/5/2013	NEMO (TST 6049)	FRSA/TRI (tile slippage)	4S-PLYG-18-004.01.20.A	1/16/2020
ERD (TST 6049)	TAS 114(J)	P39680.03.13	3/4/2013	NEMO (TST 6049)	ASTM D6164	4S-PLYG-18-004.01.20.B	1/16/2020
ERD (TST 6049)	ASTM D6164	P37590.03.13-3A	3/6/2013	NEMO (TST 6049)	FRSA/TRI	PLYG-SC15855.05.20.A	5/29/2020
ERD (TST 6049)	ASTM D6164	P37590.07.13-1	7/2/2013	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-01	7/6/2020
ERD (TST 6049)	Wind Uplift	P41630.08.13	8/6/2013	NEMO (TST 6049)	ASTM D6222	4q-PLYG-19-SSMBB-05.A	7/23/2020
ERD (TST 6049)	ASTM D4601	P45940.09.13	9/4/2013	NEMO (TST 6049)	ASTM D4798, D1623	4j-PLYG-19-SSUDL-05.A	9/10/2020
ERD (TST 6049)	ASTM D4601	P45940.09.13	9/4/2013	NEMO (TST 6049)	ASTM D1970	4j-PLYG-20-SSUDL-05.A	9/30/2020
ERD (TST 6049)	ASTM D1970 (adhesion)	P45370.09.13	9/18/2013	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-05.C	9/30/2020
ERD (TST 6049)	Wind Uplift	P11751.05.03-R1	11/26/2013	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-20-SSUDL-11.A	10/21/2020
ERD (TST 6049)	Wind Uplift	P11781.11.03-R1	11/26/2013	NEMO (TST 6049)	ASTM D1970, D4798	4S-PLYG-18-004.12.19.D	10/27/2020
ERD (TST 6049)	ASTM D1623, TAS 103	P45270.05.14	5/12/2014	NEMO (TST 6049)	FRSA/TRI	4j-PLYG-19-SSUDL-01.A	11/18/2020
ERD (TST 6049)	ASTM D1623, TAS 103	6020.09.14-5	9/8/2014	NEMO (TST 6049)	ASTM D1623, TAS 103	4p-ICP-20-SSLAP-01.A	12/15/2020
ERD (TST 6049)	ASTM D1623, TAS 103	6020.09.14-6	9/8/2014	NEMO (TST 6049)	ASTM D4798, D1623	4j-PLYG-20-SSUDL-13.A	03/02/2021
ERD (TST 6049)	ASTM D1623	P46520.10.14	10/3/2014	NEMO (TST 6049)	ASTM D1623, TAS 103	4p-ICP-20-SSUDL-03.A	03/04/2021
ERD (TST 6049)	FRSA/TRI	P44360.10.14-R1	10/7/2014	NEMO (TST 6049)	ASTM D1623, TAS 103	4j-PLYG-20-SSUDL-07.A	04/07/2021



<u>Entity</u>	Examination	<u>Reference</u>	<u>Date</u>	<u>Entity</u>	Examination	<u>Reference</u>	<u>Date</u>
ERD (TST 6049)	ASTM D1970, D4798	P43290.10.14	10/17/2014	Polyglass USA	P/L Affidavit	Mule-Hide Cross Ltg	03/01/2008
ERD (TST 6049)	FRSA/TRI	PLYG-SC7550.03.15	3/24/2015	Polyglass USA	Materials Affidavit	Polystick Compound	08/18/2011
ERD (TST 6049)	ASTM D1623	P40390.04.15	4/3/2015	Polyglass USA	Materials Affidavit	Polystick Compound	01/13/2021
ERD (TST 6049)	Wind Uplift	PLYG-SC8905.05.16-1	5/17/2016	PRI (TST5878)	UL1897	708T0058-1	01/13/2021
ERD (TST 6049)	ASTM D1970, D4798	PLYG-SC10130.06.16-1	6/27/2016	PRI (TST5878)	UL1897	708T0058-6	02/17/2021
ERD (TST 6049)	ASTM D1623, TAS 103	PLYG-SC10130.06.16-2	6/27/2016	PRI (TST5878)	UL1897	708T0058-7	02/25/2021
ERD (TST 6049)	FRSA/TRI	PLYG-SC10130.06.16-3	6/27/2016	UL (QUA9625)	Quality Control	Service Confirmation (FL)	09/13/2018
ERD (TST 6049)	ASTM D1970, D4798	PLYG-SC8080.07.16	7/16/2016	UL (QUA9625)	Quality Control	Service Confirmation (TX)	11/07/2019
ERD (TST 6049)	UL1897	PLYG-SC12025.10.16	10/12/2016	UL (QUA9625)	Quality Control	Florida BCIS	Current

4.	PRODUCT DESCRIPTION:			
	Product	Material Standard	Plant(s)	Description
4.1	Elastobase	ASTM D6163	FL	Fiberglass-reinforced, SBS modified bitumen base sheet
4.2	Elastobase P	ASTM D6164	FL	Polyester-reinforced, SBS modified bitumen base sheet
4.3	Elastoflex S6 G	ASTM D6164 FRSA/TRI 09-18	FL, PA	Polyester-reinforced, SBS modified bitumen cap sheet
4.4	Elastoflex S6 G FR	ASTM D6164 FRSA/TRI 09-18	FL	Polyester-reinforced, SBS modified bitumen cap sheet
4.5	HydraGuard Dual Pro	ASTM D1970	FL	Nominal 60-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polyester fabric surface
4.6	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
4.7	Mule-Hide SA-APP Cap Sheet	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet
4.8	Mule-Hide SA-APP Cap Sheet (FR)	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet
4.9	Polyflex G	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet for use as an alternate to Heat Applied "Cap Sheet" in the "Two Ply System" from FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition beneath mechanically fastened or adhered tile roof systems
4.10	Polyflex G FR	ASTM D6222 FRSA/TRI 09-18	FL	Polyester-reinforced, APP modified bitumen cap sheet for use as an alternate to Heat Applied "Cap Sheet" in the "Two Ply System" from FRSA/TRI Florida High Wind Concrete and Clay Roof Tile Installation Manual, Sixth Edition beneath mechanically fastened tile roof systems
4.11	Polyflex SA P	ASTM D6222 FRSA/TRI 09-18	FL, TX	Polyester-reinforced, APP modified bitumen cap sheet
4.12	Polyflex SA P FR	ASTM D6222 FRSA/TRI 09-18	FL, TX	Polyester-reinforced, APP modified bitumen cap sheet
4.13	Polyglass Base	ASTM D6509	FL	Fiberglass-reinforced, APP modified bitumen base sheet
4.14	Polyglass G2 Base Sheet	ASTM D4601	AL	Fiberglass-reinforced, asphaltic base sheet



4.	PRODUCT DESCRIPTION:			
	Product	Material Standard	Plant(s)	Description
4.15	Polystick IR-Xe	ASTM D1970	FL, PA, TX	Nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, with an aggregate surface
4.16	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
4.17	Polystick MU-X	ASTM D1970 ¹	FL, NV, PA	Nominal 54-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polypropylene film surface
4.18	Polystick TU Max	ASTM D1970 FRSA/TRI 09-18	FL, PA, TX	Nominal 60-mil thick rubberized asphalt waterproofing membrane with a 190 g/m² polyester fabric surface
4.19	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
4.20	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
4.21	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:

Certificate of Authorization #32455

- 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 (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.
- 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.
- 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.

¹ **Polystick MU-X** has been found through comparative testing to have a lesser coefficient of friction than ASTM D226 roofing felt in a dry condition, tested at standard laboratory conditions. Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D1970-15, should be established as to slip resistance.

NEMO ETC, LLC.

Evaluation Report P12060.02.09-R29



5.6 <u>Allowable Roof Covers:</u>

			COVER OPTIONS		1	
FBC Section:	1507.2	1507		1507.4 and 1507.5	1507.7	1507.8 and 1507.9
Underlayment	Asphalt Clay and Con		ncrete Tile	Metal	Slate or Slate-	Wood
Olideriayillerit	Shingles	Mechanical Attach	Adhesive-Set	ivietai	Type Shingles	vvoou
	Yes	Yes	Yes	Yes	Yes	Yes
Elastobase	(Alternate to	(as Base Sheet,	(as Base Sheet,	(Alternate to	(Alternate to	(Alternate to
	D226, Type II)	See 5.8.3)	See 5.8.3)	D226, Type II)	D226, Type II)	D226, Type II)
Elastobase P	Yes	Yes	Yes (as Base Sheet,	Yes (Alternate to	Yes	Yes
Liastobase F	(Alternate to D226, Type II)	(as Base Sheet, See 5.8.3)	(as Base Sneet, See 5.8.3)	D226, Type II)	(Alternate to D226, Type II)	(Alternate to D226, Type II)
	-, ,,- ,	Yes	Yes	====, :, ; ; ; ; ; ;	====, :,,;==::,	====, :,;;= ::,
Polyglass Base	No	(as Base Sheet,	(as Base Sheet,	No	No	No
		See 5.8.3)	See 5.8.3)			
D. I		Yes	Yes			
Polyglass G2 Base	No	(as Base Sheet,	(as Base Sheet,	No	No	No
		See 5.8.3)	See 5.8.3) Yes			
Elastoflex S6 G	No	Yes	(See 5.6.1)	No	No	No
Elastoflex S6 G FR	No	Yes	No	No	No	No
						Yes
HydraGuard Dual Pro	Yes	No	No	Yes	Yes	(joint strips, 1507.1.1. / R905.1.1.3)
HydraGuard Tile Pro	Yes	Yes	Yes (See 5.6.1)	Yes	Yes	Yes (joint strips, 1507.1.1.
						/ R905.1.1.3)
Mule-Hide SA-APP Cap Sheet	No	Yes	Yes (See 5.6.1)	No	No	No
Mule-Hide SA-APP Cap Sheet (FR)	No	Yes	Yes (See 5.6.1)	No	No	No
Polyflex G	No	Yes	Yes (See 5.6.1)	No	No	No
Polyflex G FR	No	Yes	No	No	No	No
Polyflex SA P	No	Yes	Yes (See 5.6.1)	No	No	No
Polyflex SA P FR	No	Yes	Yes (See 5.6.1)	No	No	No
						Yes
Polystick IR-Xe	Yes	No	No	No	Yes	(joint strips, 1507.1.1. / R905.1.1.3)
Polystick MTS Plus	Yes	Yes	No	Yes	Yes	Yes (joint strips, 1507.1.1. / R905.1.1.3)
Polystick MU-X	Yes	No	No	Yes	Yes	Yes (joint strips, 1507.1.1. / R905.1.1.3)
Polystick TU Max	No	Yes	Yes (See 5.6.1)	Yes	No	Yes (joint strips, 1507.1.1. / R905.1.1.3)
Polystick TU P	No	Yes	Yes (See 5.6.1)	No	No	Yes (joint strips, 1507.1.1. / R905.1.1.3)
Polystick TU Plus	Yes	Yes	Yes (See 5.6.1)	Yes	Yes	Yes (joint strips, 1507.1.1. / R905.1.1.3)
Polystick XFR	Yes	Yes	No	Yes	Yes	Yes (joint strips, 1507.1.1. / R905.1.1.3)



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

TABLE 1A: ALLOWABLE UNDERLAYMENT / TILE-ADHESIVE COMBINATIONS ²					
Underlayment	Adhesive	Florida Product Approval			
Polystick TU Max, Polystick TU P or Polystick TU Plus	DAP Foam "Touch 'n Seal StormBond Roof Tile Adhesive"	FL14506			
Polystick TU P	DAP Foam "Touch 'n Seal StormBond 2 Roof Tile Adhesive"	FL21374			
HydraGuard Tile Pro, Polyflex SA P, Polystick TU Max, Polystick TU P or Polystick TU Plus	Dupont "Tile Bond™ Roof Tile Adhesive"	FL22525			
Elastoflex S6 G, HydraGuard Tile Pro, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex G, Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P or Polystick TU Plus	ICP Adhesives and Sealants "Polyset® AH-160"	FL6332			
Elastoflex S6 G, HydraGuard Tile Pro, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex G, Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick TU P or Polystick TU Plus	ICP Adhesives and Sealants "Polyset® RTA-1"	FL6276			

5.7 <u>Allowable Substrates</u>:

Table 2: Substrate Options for Adhered Underlayments							
Underlaument	Application		Substrates (designed to meet wind loads for project)				
Underlayment	Application	Туре	Primer	Material(s)			
HydraGuard Dual Pro, HydraGuard Tile Pro, Polystick IR-		Deck /	(Optional) ASTM D41	plywood, OSB, Southern Yellow Pine or Huber Engineered Woods "ZIP System" Panels			
Xe, Polystick MTS Plus, Polystick		sheathing	ASTM D41	structural concrete			
MU-X, Polystick TU Max, Polystick TU P, Polystick TU Plus, Polystick XFR, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P or Polyflex SA P FR	self- adhering	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, Elastobase P or Mule- Hide Nail Base			
	hot asphalt	Deck	ASTM D41	structural concrete			
Elastoflex S6 G or Elastoflex S6 G FR		Insulation	(Optional) ASTM D41	DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board			
TN.		Base Sheet	N/A	ASTM D226, Type II felt, Elastobase, Elastobase P, Mule- Hide Nail Base or Polyglass G2 Base			
		Deck	ASTM D41	structural concrete			
Polyflex G or Polyflex G FR	applied	Insulation	(Optional) ASTM D41	DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board			
, ,		Base Sheet	N/A	Elastobase, Elastobase P, Mule-Hide Nail Base, Polyglass G2 Base or Polyglass Base			

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

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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, but for mechanically attached underlayments or base sheets not less than **FBC 1507.1.1** or **R905.1.1**.
- 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)
 - Section 5.8.3 herein (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.

#1 Maximum Design Pressure = -52.5 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Joints: Min. 4-inch wide strips of Elastoflex SA-V over all OSB joints

Base Ply: Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#2 Maximum Design Pressure = -90 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: None

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#3 Maximum Design Pressure = -97.5 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: PG100 or ASTM D41

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

 $TU\ P\ or\ Polystick\ TU\ Plus,\ self-adhered\ and\ back-nailed\ within\ the\ selvedge-edge\ side\ laps\ using\ 12\ ga.\ x\ 11/4"\ ring\ shank$

nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.

#4 Maximum Design Pressure = -105 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: WB-3000

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 1% ring shank

nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.



#5 Maximum Design Pressure = -135 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: (Optional) PG100 or ASTM D41

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Joints: Min. 4-inch wide strips of Elastoflex SA-V over all plywood joints.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#6 Maximum Design Pressure = -165 psf:

Deck: APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Primer: None

Underlayment: Polystick TU Max or Polystick TU Plus, self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 11/11

ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c..

#7 Maximum Design Pressure = -202.5 psf:

Deck: APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Primer: (Optional) PG100 at 0.5 gal/square

Base Ply: 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.

Underlayment: Polystick TU Max or Polystick TU Plus, self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 11/11

ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c..

#8 Maximum Design Pressure = -255 psf:

Deck: APA Rated Sheathing, 32/16, Exposure 1, PS 1-09, 15/32 Category to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Primer: PG100 at 0.5 gal/square.

Underlayment: Polystick TU Max or Polystick TU Plus, self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 11/11

ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c..

#9 Maximum Design Pressure = -315 psf:

Deck: Structural concrete to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: PG100 or ASTM D41

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: HydraGuard Tile Pro, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR,

Polystick TU Max, Polystick TU P or Polystick TU Plus, self-adhered.

#10 Maximum Design Pressure = -622.5 psf:

Deck: Structural concrete to meet project requirements to satisfaction of Authority Having Jurisdiction.

Primer: PG100 or ASTM D41

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#11 All other direct-deck, adhered underlayment systems beneath tile roof systems carry a Maximum Design Pressure of -45 psf.

5.8.3.2 <u>Mechanically-Attached Base Sheet</u>:

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.



#12 Maximum Design Pressure = -30.0 psf*:

Deck: Min. 15/32-inch OSB to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#13 Maximum Design Pressure = -37.5 psf*:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#14 Maximum Design Pressure = -37.5 psf*:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: One (1) or two (2) layers ASTM D226, Type II felt

Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails

Spacing: 6-inch o.c. at the 3-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#15 Maximum Design Pressure = -45 psf*:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: One (1) layer ASTM D226, Type II felt

Fasteners: 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.

Base Ply: (Optional; for use with self-adhering underlayment only) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#16 Maximum Design Pressure = -45 psf*:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Two (2) layers ASTM D226, Type II felt

Fasteners: 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

Spacing: 9-inch o.c. at the 2-inch wide side laps and 9-inch o.c. at two (2) equally spaced staggered center rows.

Base Ply: (Optional; for use with self-adhering underlayment only) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered or Elastoflex S6 G, applied in full mopping of hot asphalt.

#17 Maximum Design Pressure = -45 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 9-inch o.c. at the 2-inch wide side laps and 18-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#18 Maximum Design Pressure = -45.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)
Fasteners: 12 ga. annular ring shank nails with 1-5/8" diameter tin caps

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

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#18 Maximum Design Pressure = -45.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase (sand top surface)

Fasteners: 12 ga. annular ring shank nails with 1-5/8" diameter tin caps

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#20 Maximum Design Pressure = -45.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Polyglass Base

Fasteners: 12 ga. annular ring shank nails with 1-5/8" diameter tin caps

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#21 Maximum Design Pressure = -52.5 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#22 Maximum Design Pressure = -52.5 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: Simplex Original Cap Nails

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#23 Maximum Design Pressure = -52.5 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: Simplex Original Cap Nails

Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#24 Maximum Design Pressure = -60 psf:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)
Fasteners: 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

Spacing: 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#25 Maximum Design Pressure = -60 psf:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: OMG #12 Standard Roofgrip with OMG Flat Bottom Metal Plates

Spacing: 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.



#26 Maximum Design Pressure = -60.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#27 Maximum Design Pressure = -60.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase (sand top surface)
Fasteners: Simplex MAXX Cap Fasteners

Spacing: 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#28 Maximum Design Pressure = -60.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Polyglass Base Fasteners: Simplex MAXX Cap Fasteners

Spacing: 8-inch o.c. at the 3-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#29 Maximum Design Pressure = -67.5 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Polyglass G2 Base or Polyglass Base (requires use of torch-applied underlayment)

Fasteners: 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

Spacing: 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at four (4) equally spaced staggered center rows. Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

#30 Maximum Design Pressure = -67.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width direction of the sheet.

Spacing: 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Primer: (Optional) PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#31 Maximum Design Pressure = -67.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase (sand top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width direction of the sheet.

Spacing: 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.



#32 Maximum Design Pressure = -67.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Polyglass Base

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width direction of the sheet.

Spacing: 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#33 Maximum Design Pressure = -75 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Polyglass G2 Base or Polyglass Base (requires use of torch-applied underlayment)

Fasteners: Dekfast #14 with Dekfast Hex plates, OMG #14 HD with OMG 3" Galvalume Steel Plates, OMG Roofgrip #14 with OMG Flat

Bottom Plates (AccuTrac), Trufast HD with Trufast 3-inch Insulation Plates or Simplex MAXX Cap Fasteners

Spacing: 10-inch o.c. at the 4-inch wide side laps and 10-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

#34 Maximum Design Pressure = -90 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#35 Maximum Design Pressure = -90 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap)

Fasteners: OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#36 Maximum Design Pressure = -90 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface)

Fasteners: Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#37 <u>Maximum Design Pressure = -90 psf</u>:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Polyglass G2 Base or Polyglass Base (requires use of torch-applied underlayment)

Fasteners: Dekfast #14 with Dekfast Hex plates, OMG #14 HD with OMG 3" Galvalume Steel Plates, OMG Roofgrip #14 with OMG Flat

 $Bottom\ Plates\ (AccuTrac),\ Trufast\ HD\ with\ Trufast\ 3-inch\ Insulation\ Plates\ or\ Simplex\ MAXX\ Cap\ Fasteners$

Spacing: 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows. Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

#38 Maximum Design Pressure = -90.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.



#39 Maximum Design Pressure = -90.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase (sand top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#40 Maximum Design Pressure = -90.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Polyglass Base

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#41 Maximum Design Pressure = -97.5 psf:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: 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 Spacing: 4-inch o.c. at the 4-inch wide side laps and 4-inch o.c. at four (4) equally spaced staggered center rows.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#42 Maximum Design Pressure = -97.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#43 Maximum Design Pressure = -97.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase (sand top surface)
Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#44 Maximum Design Pressure = -97.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Polyglass Base Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#45 Maximum Design Pressure = -105 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.



#46 Maximum Design Pressure = -105.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#47 Maximum Design Pressure = -105.0 psf:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase (sand top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#48 <u>Maximum Design Pressure = -105.0 psf</u>:

Deck: APA rated, 7/16 CAT, 0.418 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority Having

Jurisdiction.

Base Sheet: Elastobase or Polyglass Base

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with two (2) screws per plate installed 180° into the holes of the plate, parallel to

the width-direction of the sheet

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

#49 Maximum Design Pressure = -112.5 psf:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: 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 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer at all tin-caps

Base Ply: Polystick MTS Plus, self-adhered

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#50 Maximum Design Pressure = -120 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)

Fasteners: OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

#51 Maximum Design Pressure = -120 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.

Base Sheet: Elastobase (sanded top surface)

Fasteners: Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates

Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.

 $\label{thm:condition} \textbf{Underlayment: Elast of lex S6 G, applied in full mopping of hot as phalt.}$



#52 Maximum Design Pressure = -127.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with one (1) screw per plate, in the center hole.

Spacing: 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.

Primer: PG100 or ASTM D41 primer applied to stress plates.

Base Ply: (Optional) Polystick MTS Plus, self-adhered.

Underlayment: Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick TU Max, Polystick

TU P or Polystick TU Plus, self-adhered.

#53 Maximum Design Pressure = -127.5 psf:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase (sand top surface)

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with one (1) screw per plate, in the center hole.

Spacing: 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

#54 <u>Maximum Design Pressure = -127.5 psf</u>:

Deck: APA rated, 19/32 CAT, 0.578 in., Exposure 1, OSB sheathing to meet project requirements to satisfaction of Authority

Having Jurisdiction.

Base Sheet: Elastobase or Polyglass Base

Fasteners: TRUFAST Versa-Fast Fasteners & Plates with one (1) screw per plate, in the center hole.

Spacing: 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.

Underlayment: Polyflex G, torch-applied.

5.9 <u>Exposure Limitations:</u>

TABLE 3: EXPOSURE LIMITATIONS					
Underlayment	Prepared Roof Cover Installation Type	Maximum Exposure (days)			
Elastobase, Elastobase P, Polyglass G2 Base or Polyglass Base	Mechanically attached	30			
Polystick IR-Xe or Polystick MU-X	Mechanically attached	90			
HydraGuard Dual Pro, HydraGuard Tile Pro, Polystick MTS Plus, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick XFR	Any type (per Table 1)	180			
Elastoflex S6 G, Elastoflex S6 G FR, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap	Adhesive-set tile roof system	180			
Sheet (FR), Polyflex G, Polyflex G FR, Polyflex SA P or Polyflex SA P FR	Mechanically attached	UNLIMITED			



5.10 <u>Tile Slippage Limitations:</u> 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 4: 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:

- 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.
- 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, Elastobase P or Mule-Hide Nail Base:
- 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, Elastobase P or Mule-Hide Nail Base may be covered with a layer of Polystick IR-Xe, Polystick MTS Plus, Polystick MU-X, Polystick TU Max, Polystick TU P, Polystick TU Plus, Polystick XFR, Polyflex SAP, Polyflex SA P FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (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 are those associated with the top-layer underlayment, as set forth in Table

- 6.3.2 Tile Applications:
- 6.3.2.1 Elastobase (poly-film top), Elastobase P (poly-film top) and Mule-Hide Nail Base 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, Polyflex SA P FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (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 1. Refer to Section 5.8.3.2 herein for attachment requirements.

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- 6.3.2.2 Elastobase (sanded-top) and Elastobase P (sanded-top)e 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 1.
 - When Elastobase (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 Section 5.8.3.2 herein for attachment requirements.
 - When Elastobase (sanded-top) or Elastobase P (sanded-top) is followed by torch-applied Polyflex G or Polyflex G FR, refer to Section 5.8.3.2 herein for attachment requirements.
- HydraGuard Dual Pro, HydraGuard Tile Pro, Mule-Hide SA-APP Cap Sheet, Mule-Hide SA-APP Cap Sheet (FR), Polyflex SA P, Polyflex SA P FR, Polystick IR-Xe, Polystick MTS Plus, Polystick MU-X, 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, Elastobase P or Mule-Hide Nail Base, 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, Polystick IR-Xe and Polystick MU-X):

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 5.8.3 herein for attachment limitations.

Refer to Table 4 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 MU-X, Polystick TU Max, Polystick TU P, Polystick TU Plus or Polystick XFR is allowable for use under <u>mechanically attached</u> 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 5.8.2 and 5.8.3 herein for attachment limitations.

Refer to Table 4 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 5.8.3 herein for attachment limitations.

Refer to Table 4 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; (414) 248-6409; Karen.buchmann@ul.com

- END OF EVALUATION REPORT -

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