



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Polyglass USA, Inc.
1111 W. Newport Center Drive
Deerfield Beach, FL 33442

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Polyglass Modified Bitumen Roof System Over Recover Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA 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 NOA renews NOA #21-1207.21 and consists of pages 1 through 53.
The submitted documentation was reviewed by Alex Tigera.

07/04/24



NOA No.: 23-1211.06
Expiration Date: 07/13/29
Approval Date: 07/04/24
Page 1 of 53

ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Materials	SBS/APP
Deck Type:	Recover
Maximum Design Pressure	See specific system assemblies.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Polyglass G2 Base	108' x 36"	ASTM D 4601 Type II	Asphalt-coated fiberglass reinforced base sheet
Polyflex SA Base	66' 8" x 3' 3-3/8"	ASTM D 4601 Type II	Self-adhered, fiberglass reinforced, APP modified bitumen base sheet.
Elastoshield VP HT	65' 8" x 3' 3-3/8"	ASTM D 6162	SBS modified asphalt coated fiberglass/polyester reinforced base sheet.
Elastobase V	65' 8" x 3' 3-3/8"	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.
Elastoflex SA V	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V FR	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V PLUS	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Elastoflex SA V PLUS FR	66' 8" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a fire retardant additive, self-adhering back face and a smooth top surface.
Elastoflex V	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a sanded top surface.
Elastoflex V G	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastoflex V G FR	32' 10" x 3' 3-3/8"	ASTM D 6163	Torch, hot asphalt or cold adhesive applied, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Elastobase P	65' 8" x 3' 3-3/8"	ASTM D 6164	SBS modified asphalt coated polyester reinforced base sheet.
Elastoflex S6	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a polyethylene or sanded top surface.
Elastoflex S6 HP	32' 10" x 3' 3-3/8"	ASTM D6164	SBS modified asphalt coated, polyester reinforced base or interply sheet, with sand or poly top and bottom surfaces.
Elastoflex S6 G	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.
Elastoflex S6 G FR	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, fire-rated, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Elastoshield TS G	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface.
Elastoshield TS G FR	32' 10" x 3' 3-3/8"	ASTM D 6164	Torch, hot asphalt or cold adhesive applied, fire-rated, polyester reinforced, SBS modified bitumen membrane with a burn off polyethylene or sanded back face and a granule top surface and fire retardant chemistry.
Polybond	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a smooth or sanded top surface.
Polybond G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Polyflex	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a smooth or sanded top surface.
Polyflex G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyflex G FR	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
Polyfresko G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Polyfresko G FR	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
Polybase V	65' 8" x 3' 3-3/8"	ASTM D 6509	APP modified bitumen, fiberglass reinforced, base/ply sheet.
PG 100	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	ASTM D41	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.
PG 350	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
POLYPLUS 35	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
PG 450	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement.
PG 500	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
POLYPLUS 50	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
PG 400	1, 3, 5, 50, 55 gal. or tube	ASTM D4586 ASTM D3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.



TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
PG 425	1, 3, 5, 50, 55 gal. or tube	ASTM D4586 ASTM D3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.
WB-3000	5 gallon pail	Proprietary	A low-VOC, water-based acrylic primer to enhance adhesion of self-adhered membranes.

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
Polytherm	Polyisocyanurate foam insulation	Polyglass USA, Inc.
Polytherm-H	Polyisocyanurate foam insulation	Polyglass USA, Inc.
Polytherm G	Polyisocyanurate foam insulation	Polyglass USA, Inc.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
DensDeck	Gypsum insulation board	Georgia-Pacific
DensDeck Prime	Gypsum insulation board	Georgia-Pacific
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
FescoBoard	Expanded mineral fiber	Johns Manville Corp.
Structodek High Density Fiberboard Roof Insulation	Wood fiber board	Blue Ridge Fiberboard, Inc.
SECUROCK Gypsum-Fiber Roof Board	Fiber reinforced Coverboard	USG Corporation
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, a div. of Carlisle Const. Materials, LLC
H-Shield CG	Polyisocyanurate/perlite composite insulation	Hunter Panels, a div. of Carlisle Const. Materials, LLC
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax A Business Unit of Sika Corporation
Thermarroof Composite-3	Polyisocyanurate foam insulation	Rmax A Business Unit of Sika Corporation



APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard Polyiso Insulation	Polyisocyanurate foam insulation	GAF
Insulfoam EPS	Expanded polystyrene board	Insulfoam, a Div. of Carlisle Const. Materials

APPROVED FASTENERS/ADHESIVES:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Polygrip Fastener #14	Insulation fastener for wood, steel and concrete decks	Various	Polyglass USA, Inc.
2.	Polygrip Fastener #15	Insulation fastener for wood, steel and concrete decks	Various	Polyglass USA, Inc.
3.	Polygrip Hex Plate	Galvalume hex stress plate.	2 7/8" x 3-1/4"	Polyglass USA, Inc.
4.	Dekfast DF-#14-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
5.	Dekfast DF-#15-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
6.	Dekfast PLT-H-2-7/8	Galvalume hex stress plate.	2 7/8" x 3 1/4"	SFS Group USA, Inc.
7.	#14 Roofgrip	Insulation fastener for wood, steel and concrete decks.	Various	OMG, Inc.
8.	3 in. Round Metal Plate	Galvalume stress plate.	3" round 3" square	OMG, Inc.
9.	<i>isofast</i> PLT-R-2-3/8-BL	Galvalume AZ55 steel plate	2.37" round	SFS Group USA, Inc.
10.	Trufast FM-90 Base Sheet Fastener	Pre-assembled Galvalume Base Sheet Fastener and stress plate	Various	Altenloh, Brinck & Co. U.S., Inc.
11.	Flat Bottom Metal Plate	Steel plate used with OMG roofgrip fasteners	Various	OMG, Inc.
12.	OMG 3" Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.



APPROVED FASTENERS/ADHESIVES:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
13.	AccuTrac Flat Bottom	Aluminized steel plate	3” square	OMG, Inc.
14.	OMG Heavy Duty	Truss head, self-drilling, pinch point fastener	Various	OMG, Inc.
15.	Trufast #14 HD Stainless Steel Bi-Metal Fastener	Insulation fastener for steel and wood decks	Various	Altenloh, Brinck & Co. U.S., Inc.
16.	Trufast 3” Metal Insulation Plate	Galvalume steel plate	3" round	Altenloh, Brinck & Co. U.S., Inc.
17.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete decks		Altenloh, Brinck & Co. U.S. Inc.
18.	Trufast 2.4” Scoop Seam Plate	Galvalume steel stress plate.	2.4” round	Altenloh, Brinck & Co. U.S. Inc.
19.	Trufast 2-3/4" Barbed Metal Seam Plate (EHD)	Galvalume steel stress plate.	2.75” round	Altenloh, Brinck & Co. U.S. Inc.
20.	Simplex MAXX Cap	3-inch diameter stress plate fitted with two integral ring-shank nails.		Simplex Nails, Inc.
21.	Trufast Twin Loc-Nail Assembled Fastener	Pre-assembled Galvalume Base Sheet Fastener and stress plate.	Various	Altenloh, Brinck & Co. U.S., Inc.
22.	Trufast 2.4 Barded Metal Seam Plate	Galvalume steel stress plate.	2.4” round	Altenloh, Brinck & Co. U.S. Inc.
23.	Trufast #12 DP Fastener	Insulation fastener for wood and steel decks		Altenloh, Brinck & Co. U.S. Inc.
24.	Polyset Commercial Roof Adhesive	A two component elastomeric polyurethane foam adhesive		ICP Construction, Inc.
25.	Millennium One Step Foamable Insulation Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company
26.	Millennium One Step Green Foamable Insulation Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company
27.	Millennium PG-1 Pump Grade Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company



APPROVED FASTENERS/ADHESIVES:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
28.	OlyBond 500	A two component polyurethane foam adhesive		OMG, Inc.
29.	OlyBond 500 Green	A two component, low rise, polyurethane foam adhesive		OMG, Inc.

APPROVED SURFACING:

TABLE 4

Chosen components must be applied according to manufacturer’s application instructions.

<u>Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
1.	Gravel	To be installed in a flood coat of approved asphalt at 60 lbs/sq	400 lbs/sq	N/A	Generic
2.	Slag	To be installed in a flood coat of approved asphalt at 60 lbs/sq	300 lbs/sq	N/A	Generic
3.	KM Acryl 15	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
4.	KM Acryl 15 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
5.	KM Acryl 25	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
6.	KM Acryl 25 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.



APPROVED SURFACING:

TABLE 4

Chosen components must be applied according to manufacturer’s application instructions.

<u>Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
7.	PG 300	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
8.	PG 600	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
9.	PG 650	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
10.	PG 700	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
11.	PG 700 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
12.	PG 800	An asphalt based, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
13.	PolyBrite 70	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
14.	PolyBrite 70 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
15.	POLYPLUS 60	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
16.	POLYPLUS 65	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Name/Report</u>	<u>Report No.</u>	<u>Date</u>
Factory Mutual Research Corporation	4470	2W7A7.AM	08/04/94
	4470	3000857	01/12/00
	4470	3004091	01/12/00
	4470	3001334	02/15/00
	4470	3024311	11/01/06
	4470	3031350	09/27/07
	4470	3036182	07/31/09
	4470	RR202591	10/22/15
	4470	3057029	02/02/17
Underwriters Laboratory	TAS 114	00NK20869	06/08/00
	UL 790	R14571	06/30/15
Trintiy ERD	TAS 114	11776.06.02	01/16/03
	TAS 114 & FM 4470	P1730.06.06	06/19/06
	TAS 117(B)-ASTM D6862	C8500SC.11.07	11/30/07
	ASTM D6163 & D4601	P33960.03.11	03/15/11
	TAS 117 (B) & TAS 114	P39680.03.13	03/04/13
	ASTM D6164	P37590.03.13-3A	03/06/13
	TAS 114	11757.04.01-1-R1	04/30/13
	ASTM D6509	P37590.03.13-1-R1	06/26/13
	ASTM D6222	P37590.07.13-2	07/01/13
	ASTM D6222	P37590.03.13-5-R1	07/01/13
	ASTM D6163	P37590.03.13-2-R1	07/01/13
	ASTM D6164	P37590.07.13-1	07/02/13
	TAS 114 & FM 4474	P41630.08.13	08/06/13
	ASTM D4601 / TAS 117	P45940.09.13	09/04/13
	ASTM D4601	P44370.10.13	10/04/13
	ASTM D4601 / TAS 117	P45970.05.14	05/12/14
	FM 4470 & TAS 114	SC6160.11.14	11/10/14
	ASTM D6162	SC5170.05.15	05/08/15
	ASTM D6162	SC5170.12.15-1	12/29/15
	ASTM D6163	PLYG-P45440SC.03.15-2-R1	12/29/15
	ASTM D6163	PLYG-P45440SC.03.15-1-R1	02/19/16
	TAS 114 & FM 4474	PLYG-SC8905.05.16-1	05/17/16
	TAS 114 & FM 4474	PLYG-SC8905.05.16-2	05/17/16
	TAS 114 & FM 4470	P1739.01.07-R1	07/19/16
	TAS 114	P1734.07.06-R2	08/24/16
	TAS 114 & FM 4474	PLYG-SC10815.07.16-R1	09/23/16
	TAS 114 & FM 4474	PLYG-SC13235.01.17	01/17/17
FM 4470 & ASTM D1876	PLYG-SC9455.03.17	03/08/17	
TAS 114	11757.12.00-1-R2	04/05/17	
TAS 114 & FM 4474	CTL13945.05.17-1	05/30/17	
TAS 114 & FM 4474	CTL13945.05.17-3	05/30/17	
TAS 114 & FM 4474	PLYG-SC13920.05.17-R1	07/17/17	
PRI Asphalt Technologies	Physical Properties	PUSA-213-02-01	05/02/17



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Name/Report</u>	<u>Report No.</u>	<u>Date</u>
NEMO ETC, LLC.	ASTM D6163	4S-PLYG-18-002.01.19-A	01/24/19
	ASTM D6222	4S-PLYG-18-002.05.19-C	05/20/19
	ASTM D6222	4S-PLYG-18-002.05.19-D	05/20/19
	TAS 114(H)	4p-ICP-19-SSLAP-04.A	05/28/20

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

<u>Engineer/Agency</u>	<u>Identifier</u>	<u>Assemblies</u>	<u>Date</u>
Factory Mutual Research Corp.	RoofNav Listings	D(6)	06/28/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(3), D(4), D(9), E(4), E(5), E(7)	08/30/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(7), D(10)	01/17/17
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(5), D(8), D(11)	07/17/17
Robert Nieminen, P.E.	Signed/Sealed Calculations	C(2), C(4), C(5),	10/20/17



APPROVED ASSEMBLIES:

- Membrane Type:** SBS
- Deck Type 7I:** Recover, Insulated
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type A(1):** One or more layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime, DEXcell FA Glass Mat Roof Board* Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered with OlyBond 500, OlyBond 500 Green, Millennium One Step Foamable Insulation Adhesive, Millennium One Step Green Foamable Insulation Adhesive, Millennium PG-1 Pump Grade Adhesive or Polyset Commercial Roof Adhesive in beads/ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

*DEXcell FA Glass Mat Roof Board not used with Polyset Commercial Roof Adhesive.

Base Sheet: One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered to deck with PG 350 adhesive at a rate of 2.0 gal/sq.

Ply Sheet: One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered to deck with PG 350 adhesive at a rate of 2.0 gal/sq.

Or

One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V*, torch applied.

*Requires torch-applied cap sheet.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G FR, torch applied or adhered with PG 350 adhesive at a rate of 2.0 gal/sq.

Or

One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Surfacing: Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -45.0 psf; (See General Limitation #9.)



- Membrane Type:** SBS/APP
- Deck Type 7I:** Recover, Insulated
- Deck Description:** Min ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
- The deck should record a Minimum Characteristic Resistance Force (MCRF) of 58 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
- System Type A(2):** All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

- Anchor Sheet:** One ply of Polyglass G2 Base fastened to the deck as described fastened as below:
- Fastening:** Fastened to deck using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3" Metal Insulation Plates spaced 10" o.c. in 4" lap and 10" o.c. in three equally spaced staggered center rows.

One or more layers of the following:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered in a full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as Base Layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

- Primer:** (For self-adhering base sheets only) Top insulation is primed with WB-3000.
(Optional)



- Base Sheet:** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Or
- One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
*Requires torch-applied ply or cap sheet.
- Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
- Or
- One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
- Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design
Pressure:** -52.5 psf; (See General Limitation #7)

- Membrane Type:** SBS/APP
- Deck Type 7I:** Recover, Insulated
- Deck Description:** Min ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" o.c. with #10 wood screws at 6" o.c. at edges and intermediate supports.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 66 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
- System Type A(3):** All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

- Anchor Sheet:** One ply of Polyglass G2 Base fastened to the deck as described fastened as below:
- Fastening:** Fastened to deck using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3" Metal Insulation Plates spaced 9" o.c. in 4" lap and 9" o.c. in four equally spaced staggered center rows.

One or more layers of the following:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
DensDeck Prime Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered in a full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as Base Layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

- Primer:** (For self-adhering base sheets only) Top insulation is primed with WB-3000.
- (Optional)**



- Base Sheet:** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Or
- One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
*Requires torch-applied ply or cap sheet.
- Ply Sheet:
(Optional)** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
- Or
- One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
- Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design
Pressure:** -82.5 psf; (See General Limitation #7)

Membrane Type: SBS/APP
Deck Type 7I: Recover over existing asphalt BUR
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(4): One or more layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Polytherm, ENRGY 3, H-Shield, Polytherm-H, Insulfoam EPS (min 2.0 pcf) Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

Note: Apply insulation in OlyBond 500, OlyBond 500 Green Adhesive in ¾” to 1” continuous beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Additional layers of insulation should be adhered in OlyBond 500, OlyBond 500 Green or SpotShot Adhesive in ¾” to 1” continuous beads/ribbons spaced 12” o.c.

Primer: (For self-adhering base sheets only) Top insulation is primed with WB-3000
(Optional)
Base Sheet: One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, torch applied.
 Or
 One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
 Or
 One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
 *Requires torch-applied ply or cap sheet.

Ply Sheet: One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, torch applied.
(Optional)
 Or
 One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
Or
One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -120.0 psf; (See General Limitation #9.)



Membrane Type: SBS/APP
Deck Type 7I: Recover over existing asphalt BUR
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(5): One or more layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Polytherm, ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3 Minimum 2” thick	N/A	N/A

Note: Apply insulation in Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Insulation Adhesive or Millennium PG-1 Pump Grade Adhesive in 1/2” to 3/4” continuous beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Additional layers of insulation should be adhered in Millennium One-Step Foamable Adhesive, Millennium One Step Green Foamable Insulation Adhesive or Millennium PG-1 Pump Grade Adhesive in 1/2” to 3/4” continuous beads/ribbons spaced 12” o.c.

Primer: (For self-adhering base sheets only) Top insulation is primed with WB-3000.
(Optional)
Base Sheet: (Optional if using ply sheet in hot asphalt)
 One ply of Elastobase V, Elastoshield VP HT, adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
 Or
 One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, self-adhered.
 *Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional if using base sheet in hot asphalt)
 One or more plies of Polybond, Polyflex, torch applied.
 Or
 One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, one or more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
 Or
 One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.



**Surfacing:
(Optional)**

Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:**

-157.5psf, (See General Limitation #9)



- Membrane Type:** SBS/APP
- Deck Type 7I:** Recover, Insulated
- Deck Description:** Min. 1⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 150 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
- System Type B(1):** Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of the following:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, H-Shield, Polytherm-H, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 2.0" thick	1 with 3, 4 with 6, 14 with 12, or 15 with 16	1:1 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: Top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

- Primer:** (For self-adhering base sheets only) Top insulation is primed with WB-3000.
- (Optional)**
- Base Sheet:** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
Or
One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
*Requires torch-applied ply or cap sheet.



- Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
Or
One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
Or
One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
- Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design
Pressure:** -75 psf; (See General Limitation #7)



Membrane Type: SBS/APP
Deck Type 7I: Recover, Insulated
Deck Description: Min ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
 The deck should record a Minimum Characteristic Resistance Force (MCRF) of 160 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type C(1): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of the following:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, H-Shield, Polytherm-H, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 1.0" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick	1 with 3, 4 with 6, 14 with 12, or 15 with 16	1:1.78 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Primer: (For self-adhering base sheets only) Top insulation is primed with WB-3000.
(Optional)



- Base Sheet:** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Or
- One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
- *Requires torch-applied ply or cap sheet.
- Ply Sheet:
(Optional)** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
- Or
- One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
- Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design
Pressure:** -45 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6” o.c. with 5/8” puddle welds to steel supports spaced max. 6 ft. o.c.

The deck should record a Minimum Characteristic Resistance Force (MCRF) of 195 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(2): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	1 with 3; 4 with 6; 7 with 13; 15 with 16	1:1.78 ft ²
DensDeck Prime Minimum ¼” thick	7 with 14; 15 with 16	1:1.78 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Primer: Apply WB-3000 at 1 gal. per 300 sq. ft.
(Optional)

Base Sheet: One ply of Elastoflex SA V, Elastoflex SA V FR, Elastoflex SA V PLUS, Elastoflex SA V PLUS FR, self-adhered.

Ply Sheet: One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP
(Optional) HT, Polybond, Polyflex, Polybase V, torch applied.



Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Or

One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -45.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7I: Recover, Insulated
Deck Description: Min. 1⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" with 8d ring shank nails at 6" o.c.
 The deck should record a Minimum Characteristic Resistance Force (MCRF) of 150 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type C(3): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of the following:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
ACFoam-II, Polytherm, H-Shield, Polytherm-H, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 1.0" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick	1 with 3, 4 with 6, 14 with 12, or 15 with 16	1:1 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Primer: (For self-adhering base sheets only) Top insulation is primed with WB-3000.
(Optional)



- Base Sheet:** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Or
- One ply of Elastoflex SA V*, Elastoflex SA V FR*, Elastoflex SA V PLUS*, Elastoflex SA V PLUS FR*, Polyflex SA Base*, self-adhered.
- *Requires torch-applied ply or cap sheet.
-
- Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
-
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
- Or
- One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
-
- Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
-
- Maximum Design
Pressure:** -75 psf; (See General Limitation #7)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6” o.c. with 5/8” puddle welds to steel supports spaced max. 6 ft. o.c.

The deck should record a Minimum Characteristic Resistance Force (MCRF) of 180 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type C(4): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0” thick	N/A	N/A
 <u>Top Insulation Layer</u>	 <u>Insulation Fasteners</u> <u>(Table 3)</u>	 <u>Fastener</u> <u>Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	1 or 2 with 3; 4 or 5 with 6; 7 or 8 with 9 or 13; 15 or 17 with 16;	1:1 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density.

Primer: Apply WB-3000 at 1 gal. per 300 sq. ft.
(Optional)

Base Sheet: One ply of Elastoflex SA V, Elastoflex SA V FR, Elastoflex SA V PLUS, Elastoflex SA V PLUS FR, Polyflex SA Base, self-adhered.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Surfacing: Install one of the approved surfacing products listed in Table 4 to obtain desired coating or
(Optional) required fire classification.

Maximum Design Pressure: -90.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7I: Recover, Insulated
Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.
 The deck should record a Minimum Characteristic Resistance Force (MCRF) of 195 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.
System Type C(5): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck Prime Minimum 1/4" thick	1 or 2 with 3; 4 or 5 with 6; 7 with 9; 15 or 17 with 16	1:1 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density.

Primer: Apply WB-3000 at 1 gal. per 300 sq. ft.
(Optional)
Base Sheet: One ply of Elastoflex SA V, Elastoflex SA V FR, Elastoflex SA V PLUS, Elastoflex SA V PLUS FR, Polyflex SA Base*, self-adhered.
**Not to be used with WB-3000 primer.*

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
 Or
 One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Surfacing: Install one of the approved surfacing products listed in Table 4 to obtain desired coating or
(Optional) required fire classification.

Maximum Design Pressure: -97.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7I: Recover, Insulated
Deck Description: 2500 psi structural concrete or concrete plank / 18-22 ga. Steel, 33ksi.
System Type D(1): All layers of insulation and base sheet simultaneously attached. Membranes subsequently adhered.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, Multi-Max FA-3, H-Shield, Polytherm-H, Tapered H-Shield, Thermanroof Composite-3 Minimum 1.5” thick	N/A	N/A
Structodek High Density Fiberboard Roof Insulation Minimum 1” thick	N/A	N/A
FescoBoard Minimum ¾” thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to installation of the base sheet, at an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density.

Base Sheet: One ply of Elastobase V, Elastoshield VP HT, Polybase V, Polyglass G2 Base, fastened to the deck as described below:

Fastening: Attach base sheet using Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or Polygrip Fastener #14 with Polygrip Hex plates or OMG #14 Roofgrip fasteners with OMG Flat Bottom Metal plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3” Metal Insulation Plates spaced 12” o.c. in a 4” lap and 18” o.c. in two equally spaced staggered rows in the center of the sheet. Fasteners shall penetrate through the existing roof to the structural deck.

Ply Sheet: One or more plies of Elastobase V, Elastoshield VP HT, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
(Optional)

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

Surfacing: Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
(Optional)

Maximum Design Pressure: -45 psf; (See General Limitation #9.)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi structural concrete or Min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 258 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(2): All layers of insulation and base sheet simultaneously attached. Membranes subsequently adhered.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, Polytherm Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6, Elastoshield VP HT, fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4" Scoop Seam Plates spaced 12" o.c. in a 5" heat welded side lap.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, torch or hot asphalt applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -45.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi. structural concrete, or min. 18-22 ga. Type B, Grade 40 steel deck attached 6” o.c. with 5/8” puddle welds to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF), see fastening options, when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(3): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, Polytherm Minimum 1” thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6, Elastoshield VP HT, fastened to the deck as described below:

Fastening #1: (*MCRF = 258 lbf*) Attach base sheet using Trufast #15 EHD Fasteners or Trufast #14 HD Stainless Steel Bi-Metal Fastener with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 12” o.c. in a 5” heat welded or torch sealed side lap.
(Maximum Design Pressure –45.0 psf – General Limitation #7.)

Fastening #2: (*MCRF = 172 lbf*) Attach base sheet using Trufast #15 EHD Fasteners or Trufast #14 HD Stainless Steel Bi-Metal Fastener with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 6” o.c. in a 5” heat welded or torch sealed side lap.
(Maximum Design Pressure –60.0 psf – General Limitation #7.)

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, torch or hot asphalt applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: See Fastening Options Above



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.
 The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 516 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(4): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6 HP, Elastoshield VP HT, Base mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 18" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, Elastoshield TS G FR, torch applied.
 Or
 One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -60.0 psf; (See General Limitation #7.)



Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Min 2500 psi structural concrete or min. 18-22 ga. Type WR, Grade 80 steel deck fastened with Traxx/5 fastener spaced 6" o.c. to steel supports spaced max. 6 ft. Deck side laps are secured with Traxx/1 fasteners spaced 30" o.c.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(5): All layers of insulation and base sheet simultaneously attached. Membranes subsequently adhered.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
H-Shield, Polytherm-H, AC Foam-II, Polytherm, Polytherm G, AC Foam-III Minimum 1.5" thick	N/A	N/A
Structodek High Density Fiberboard Roof Insulation Minimum 1" thick	N/A	N/A
FescoBoard Minimum 3/4" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to installation of the base sheet, at an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density.

Base Sheet: One ply of Polybond, Polyflex, mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip #14 fasteners with Polygrip Hex Plates or Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates spaced 12" o.c. in a minimum 6" wide side lap. The side lap is either torch or hot air welded closed. Fasteners shall penetrate through the existing roof to the structural deck.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -82.5 psf (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7I: Recover, Insulated
Deck Description: Min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.
 The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 473 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.
System Type D(6): All layers of insulation and base sheet simultaneously attached. Membranes subsequently adhered.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6 HP, Elastoshield VP HT, mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 12" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.

**Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, Elastoshield TS G FR, torch applied.
 Or
 One ply of Polyflex G FR, Polyfresko G FR, torch applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with Tek/5 screws and 3/4" washers to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 236 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(7): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoshield VP HT mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate (EHD), Trufast 2.4 Scoop Seam Plate or Dekfast DF-#15-PH3 fasteners with Dekfast PLT-R-2-3/8-6B plates spaced 6" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -82.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 2500 psi structural concrete or min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF), see fastening options, when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(8): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, AC Foam-II, Polytherm Minimum 1" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoshield VP HT fastened to the deck as described below:

Fastening #1: ($MCRF = 472 \text{ lbf}$) Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4 Barded Metal Seam Plate or Trufast 2-3/4" Barbed Metal Seam Plate (EHD) or Trufast 2.4" Scoop Seam Plates or Dekfast DF-#15-PH3 fasteners with Dekfast PLT-R-2-3/8-6B plates spaced 12" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –82.5 psf – General Limitation #7.)

Fastening #2: ($MCRF = 279 \text{ lbf}$) Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2.4 Barded Metal Seam Plate or Trufast 2-3/4" Barbed Metal Seam Plate (EHD) or Trufast 2.4" Scoop Seam Plates or Dekfast DF-#15-PH3 fasteners with Dekfast PLT-R-2-3/8-6B plates spaced 6" o.c. in a 5" heat welded or torch sealed side lap.
(Maximum Design Pressure –97.5 psf – General Limitation #7.)

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, torch or hot asphalt applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.



**Surfacing:
(Optional)**

Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:**

See Fastening Options Above



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 279 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(9): All layers of insulation and base sheet simultaneously attached. Membranes subsequently adhered.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6 HP, Elastoshield VP HT, mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 6" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -97.5 psf; (See General Limitation #7.)



Membrane Type: SBS/APP

Deck Type 7I: Recover, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 80 steel deck attached 6" o.c. with Tek/5 screws and 3/4" washers to steel supports spaced max. 6 ft. o.c.

The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 387 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type D(10): All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> <u>Density/ft²</u>
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	N/A	N/A

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastoflex S6 HP, Elastoshield VP HT, mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #15 EHD Fasteners with Trufast 2-3/4" Barbed Metal Seam Plate (EHD) spaced 6" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, torch applied.

Membrane: One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoshield TS G, Elastoshield TS G FR, torch applied.

Or

One ply of Polyflex G FR, Polyfresko G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -135.0 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non-Insulated
Deck Description: 2500 psi structural concrete or concrete plank / 18-22 ga. Steel, 33ksi.
System Type E(1): Base sheet mechanically attached. Membranes subsequently adhered.

All General and System limitations apply.

Base Sheet: One ply of Elastobase V, Elastoshield VP HT, Polybase V, Polyglass G2 Base, fastened to the deck as described below:

Fastening: Attach base sheet using Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or Polygrip Fastener #14 with Polygrip Hex plates or OMG #14 Roofgrip fasteners with OMG Flat Bottom Metal plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3” Metal Insulation Plates spaced 12” o.c. in a 4” lap and 18” o.c. in two equally spaced staggered rows in the center of the sheet. Fasteners shall penetrate through the existing roof to the structural deck.

**Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastoshield VP HT, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -45 psf; (See General Limitation #9.)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non-Insulated
Deck Description: Min ¹⁹/₃₂" plywood or wood plank, fastened to structural supports spaced at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 32 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type E(2): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Polybase V sheet fastened to the deck as described below:
Fastening: Attach base sheet using 11 ga. annular grooved shank and 1" diameter caps spaced 6" o.c. in a 3" lap and 6" o.c. in four equally spaced staggered center rows.
Membrane: One ply of Polybond, Polybond G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
Or
One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure: -52.5 psf; (See General Limitation #7)



Membrane Type: SBS
Deck Type 7: Recover, Non-Insulated
Deck Description: Min ¹⁹/₃₂" plywood or wood plank, fastened to structural supports spaced at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 32 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type E(3): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Elastobase V, Elastoshield VP HT, sheet fastened to the deck as described below:
Fastening: Attach base sheet using 11 ga. annular grooved shank and 1" diameter caps spaced 6" o.c. in a 3" lap and 6" o.c. in four equally spaced staggered center rows.
Membrane: One ply of Elastoflex S6 G torch or hot asphalt applied.
**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
**Maximum Design
Pressure:** -52.5 psf; (See General Limitation #7)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non-Insulated
Deck Description: Min. 330 psi. Elastizell with Zell-Crete fibers with supplemental attachment with Roofgrip #21 screws and 3" Flat Bottom Plates at 1 per 8ft² over min 2500 psi structural concrete or min. 18-22 ga., Type B, Grade 33 vented steel deck secured to structural supports spaced 5 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. Deck side laps are secured 12" o.c. with Traxx/1 fasteners.
The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 44 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type E(4): Base sheet mechanically fastened. Membranes subsequently adhered.

All General and System limitations apply.

Base Sheet: One ply of Elastobase V, Elastobase P, Elastoshield VP HT, Polyglass G2 Base, fastened as outlined below:

Fastening: Trufast Twin Loc-Nail Assembled Fastener at 6" o.c. in 4" lap and 6" o.c. in three equally spaced center rows.

Ply Sheet: One or more plies of Elastobase V, Elastoshield VP HT, or one or more plies of Type IV or VI ply sheet adhered to the Base Sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs.

Or

One or more plies of Elastoflex SA V*, Elastoflex SA V PLUS*, Elastoflex SA V FR*, Elastoflex SA V PLUS FR*, self-adhered.

*Requires torch-applied cap sheet

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -60 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non-Insulated
Deck Description: Min. 380 psi Celcore MF Lightweight Concrete over min 2500 structural concrete or min. 18-22 ga., Type B, Grade 33 vented steel deck secured to structural supports spaced 5 ft. o.c. with Traxx/5 fasteners spaced 6" o.c. Deck side laps are secured 12" o.c. with Traxx/1 fasteners.
The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 59 lbf when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.

System Type E(5): Base sheet mechanically fastened. Membranes subsequently adhered.

All General and System limitations apply.

Base Sheet: One ply of Elastobase V, Elastobase P, Elastoshield VP HT, fastened as outlined below:

Fastening: Trufast FM-90 Base Sheet Fasteners at 8" o.c. in 4" lap and 8" o.c. in three equally spaced center rows.

Ply Sheet: One or more plies of Elastobase V, Elastoshield VP HT, or one or more plies of Type IV or VI ply sheet adhered to the Base Sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs.

Or

One or more plies of Elastoflex SA V*, Elastoflex SA V PLUS*, Elastoflex SA V FR*, Elastoflex SA V PLUS FR*, self-adhered.

*Requires torch-applied cap sheet

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -60 psf; (See General Limitation #7.)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non- Insulated
Deck Description: Min ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced at maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
System Type E(6): Base sheet mechanically attached. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Polybase V or Polyglass G2 Base fastened to the deck as described below:
Fastening: Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with OMG Flat Bottom Plates or AccuTrac Flat Bottom Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3" Metal Insulation Plate or Simplex MAXX Cap Fasteners spaced 10" o.c. in 4" lap and 10" o.c. in three equally spaced staggered center rows.

**Ply Sheet:
(Optional)** One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
Or
One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
Or
One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

**Surfacing:
(Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design
Pressure:** -75.0 psf; (See General Limitation #7)



Membrane Type: SBS/APP
Deck Type 7: Recover, Non-Insulated
Deck Description: Min. 1⁹/₃₂" plywood or wood plank, attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 66 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type E(7): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Polybase V or Polyglass G2 Base sheet fastened to the deck as described below:
Fastening: Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced staggered center rows.
Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
Or
One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure: -90.0 psf; (See General Limitation #7)



Membrane Type: SBS
Deck Type 7: Recover, Non-Insulated
Deck Description: Min. 1⁹/₃₂" plywood or wood plank, attached to structural supports spaced at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 66 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type E(8): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Elastobase V, Elastoshield VP HT, Polybase V, Polyglass G2 Base, sheet fastened to the deck as described below:
Fastening #1: Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced staggered center rows.
Fastening #2: *(Only with asphalt applied cap sheets)* Attach base sheet using Trufast #12 DP or Trufast #14 HD Stainless Steel Bi-Metal Fasteners and Trufast 3" Metal Insulation Plates spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced staggered center rows.
Membrane: One ply of Elastoflex S6 G torch or hot asphalt applied.
Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure: -90.0 psf; (See General Limitation #7)



- Membrane Type:** SBS/APP
- Deck Type 7:** Recover, Non-Insulated
- Deck Description:** Min ¹⁵/₃₂" plywood or wood plank attached to structural supports spaced at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
- The deck should record a Minimum Characteristic Resistance Force (MCRF) of 72 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
- System Type E(9):** Base sheet mechanically fastened. Membranes subsequently adhered.

All General and System Limitations apply.

- Base Sheet:** One ply of Polybase V or Polyglass G2 Base fastened to the deck as described below:
- Fastening:** Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with OMG Flat Bottom Plates or AccuTrac Flat Bottom Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners with Trufast 3" Metal Insulation Plate or Simplex MAXX Cap Fasteners spaced 9" o.c. in 4" lap and 9" o.c. in four equally spaced staggered center rows.
- Ply Sheet: (Optional)** One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, Polybase V, torch applied.
- Or
- One ply of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.
- Or
- One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.
- Surfacing: (Optional)** Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design Pressure:** -90.0 psf; (See General Limitation #7)



Membrane Type: SBS/APP

Deck Type 7: Recover, Non-Insulated

Deck Description: Min. 1⁹/₃₂" plywood or wood plank, attached to structural supports spaced at a maximum of 24" o.c. with #10 wood screws at 4" o.c.

The deck should record a Minimum Characteristic Resistance Force (MCRF) of 59 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.

System Type E(10): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Polybase V or Polyglass G2 Base sheet fastened to the deck as described below:

Fastening: Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in five equally spaced staggered center rows.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyflex G FR, Polyfresko G, Polyfresko G FR, torch applied.

Or

One ply of Elastoflex S6 G, Elastoflex S6 G FR, Elastoflex V G, Elastoflex V G FR, Elastoshield TS G, Elastoshield TS G FR, torch or hot asphalt applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -120.0 psf; (See General Limitation #7)



Membrane Type: SBS
Deck Type 7: Recover, Non-Insulated
Deck Description: Min. ¹⁹/₃₂" plywood or wood plank, attached to structural supports spaced at a maximum of 24" o.c. with #10 wood screws at 4" o.c.
The deck should record a Minimum Characteristic Resistance Force (MCRF) of 59 lbf. when tested with fasteners, listed in this assembly, installed through to the deck in accordance with TAS 105.
System Type E(11): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Elastobase V, Elastoshield VP HT, Polybase V, Polyglass G2 Base, sheet fastened to the deck as described below:
Fastening #1: Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in five equally spaced staggered center rows.
Fastening #2: *(Only with asphalt applied cap sheets)* Attach base sheet using Trufast #12 DP or Trufast #14 HD Stainless Steel Bi-Metal Fasteners and Trufast 3" Metal Insulation Plates spaced 6" o.c. in a 4" lap and 6" o.c. in five equally spaced staggered center rows.
Membrane: One ply of Elastoflex S6 G torch or hot asphalt applied.
Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure: -120.0 psf; (See General Limitation #7)



RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.
2. All assemblies listed herein shall be installed in compliance with the applicable sections of FBC 1521. Uplift performance of assemblies bonded to existing roofing system shall be verified per 1521.10. Uplift performance of assemblies mechanically attached through existing roofing system shall be verified per 1521.11.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
11. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE