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
T (786) 315-2590 F (786) 315-2599
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 Steel 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# 21-1207.20 and consists of pages 1 through 52.
The submitted documentation was reviewed by Alex Tigera.

07/04/24

ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Materials	SBS/APP
Deck Type:	Steel
Maximum Design Pressure	-135 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
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.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
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 V V P	65’ 2” 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, 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, 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.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
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, 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 D 41	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 D 3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
POLYPLUS 35	1, 3, 5, 50, 55 gal. or tube	ASTM D 3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
PG 450	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement.
PG 500	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
POLYPLUS 50	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
PG 400	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586 ASTM D 3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
PG 425	1, 3, 5, 50, 55 gal. or tube	ASTM D 4586 ASTM D 3409	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

Product Name	Product Description	Manufacturer (With Current NOA)
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 Gypsum LLC
DensDeck Prime	Gypsum insulation board	Georgia-Pacific Gypsum LLC
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
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	United States Gypsum Corporation
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax, A Business Unit of Sika Corporatoin
ISO 95 + GL	Polyisocyanurate foam insulation	Holcim Solutions and Building Products US, LLC.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard Polyiso Insulation	Polyisocyanurate foam insulation	GAF
DEXcell Glass Mat Roof Board	Gypsum board	National Gypsum Company a dba of New NGC, Inc.
DEXcell FA Glass Mat Roof Board	Gypsum board	National Gypsum Company a dba of New NGC, Inc.
DEXcell Cement Roof Board	Cementitious insulation board	National Gypsum Company a dba of New NGC, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Polygrip Fasteners #12	Insulation fastener for wood, steel and concrete decks	Various	Polyglass USA, Inc.
2.	Polygrip Fasteners #14	Insulation fastener for wood, steel and concrete decks	Various	Polyglass USA, Inc.
3.	Polygrip Fasteners #15	Insulation fastener for wood, steel and concrete decks	Various	Polyglass USA, Inc.
4.	Polygrip Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	Polyglass USA, Inc.
5.	Dekfast DF-#12-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
6.	Dekfast DF-#14-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
7.	Dekfast DF-#15-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
8.	Dekfast PLT-H-2-7/8	Galvalume hex stress plate.	2 7/8" x 3 1/4"	SFS Group USA, Inc.
9.	#12 Standard Roofgrip	Insulation fastener for wood, steel and concrete decks.	Various	OMG, Inc.
10.	#14 Roofgrip	Insulation fastener for wood, steel and concrete decks.	Various	OMG, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
11.	3 in. Round Metal Plate	Galvalume stress plate.	3” round	OMG, Inc.
12.	Flat Bottom Metal Plate	Galvalume stress plate.	3” square	OMG, Inc.
13.	*isofast* PLT-R-2-3/8-BL	Galvalume AZ55 steel plate	2.37" round	SFS Group USA, Inc.
14.	Trufast #14 HD Stainless Steel Bi-Metal Fastener	Insulation fastener for wood, steel and concrete decks		Altenloh, Brinck & Co. U.S. Inc.
15.	Trufast 3” Recessed Metal Insulation Plate	3" round galvalume AZ55 steel plate	3" round	Altenloh, Brinck & Co. U.S. Inc.
16.	Trufast 3” TL Insulation Plate	3" round galvalume AZ55 steel plate	3" round	Altenloh, Brinck & Co. U.S. Inc.
17.	Trufast 3” Metal Insulation Plate	Round galvalume AZ50 steel plate	3" round	Altenloh, Brinck & Co. U.S. Inc.
18.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete decks		Altenloh, Brinck & Co. U.S. Inc.
19.	*isofast* PLT-S-2-3/4x2-3/4	Galvalume 19 ga. steel insulation and membrane attachment stress plate	$2^{3}/_{4}$” x $2^{3}/_{4}$”	SFS Group USA, Inc.
20.	Trufast 2.4” Scoop Seam Plate	Galvalume steel stress plate.	2.4” round	Altenloh, Brinck & Co. U.S. Inc.
21.	Trufast 2.4 Barded Metal Seam Plate	Galvalume steel stress plate.	2.4” round	Altenloh, Brinck & Co. U.S. Inc.
22.	Trufast 2-3/4" Barbed Metal Seam Plate (EHD)	Galvalume steel stress plate.	2.75” round	Altenloh, Brinck & Co. U.S. Inc.
23.	Dekfast PLT-R-2-3/8-6B	Galvalume steel stress plate.	2.37” round	SFS Group USA, Inc.
24.	Trufast #12 DP Fastener	Insulation fastener for wood and steel decks		Altenloh, Brinck & Co. U.S. Inc.
25.	AccuTrac Flat Bottom	Galvalume stress plate.	3” square	OMG, Inc.

APPROVED SURFACING:

TABLE 4

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

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
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.
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.

APPROVED SURFACING:

TABLE 4

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

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
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:

Test Agency	Test Name/Report	Report No.	Date
Factory Mutual Research Corporation	4470	2W7A7.AM	08/04/94
	447 0	3000857	01/12/00
	4470	3004091	01/12/00
	4470	3001334	02/15/00
	4450	3023458	07/18/06
	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 117(B)-ASTM D6862	C8500SC.11.07	11/30/07
	ASTM D6163 / ASTM D 4601	P33960.03.11	03/15/11
	FM 4470 & TAS 114	P33970.03.11	03/15/11
	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
	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
	FM 4474, UL1897, TAS 114	PLYG-SC8905.05.16-1	05/17/16
	FM 4474, UL1897, TAS 114	PLYG-SC8905.05.16-2	05/17/16
	TAS 114 & FM 4474	PLYG-SC10815.07.16-R1	09/23/16
	TAS 114 & FM 4474	PLYG-SC13235.01.17	01/17/17
	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
Nemo|etc.	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

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Factory Mutual Research Corp.	RoofNav Listings	C(2), D(6), D(8), D(9)	08/17/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	B, C(3), C(5), D(1), D(2), D(3), D(4), D(7), D(10), D(13), D(15), D(16)	08/30/16
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(12), D(14)	01/17/17
Robert Nieminen, P.E.	Signed/Sealed Calculations	D(5), D(11), D(17)	07/17/17
Robert Nieminen, P.E.	Signed/Sealed Calculations	C(1), C(5), C(6)	10/20/17

APPROVED ASSEMBLIES:

Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type B: Base layer of insulation mechanically fastened through loose laid optional thermal barrier to roof deck, top layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, ISO 95+ GL, H-Shield CG, Multi-Max FA-3 Minimum 1.5" thick	**2 with 4, 6 with 4, 14 with 17**	**1:1.33 ft²**

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).

Top Insulation Layer (Coverboard)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**

Note: Apply top layer of insulation in a full mopping of any approved mopping 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. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (*Optional if using ply sheet in hot asphalt*)
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.

Ply Sheet:	(*Optional if using base sheet in hot asphalt*) 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, 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. *Requires torch-applied ply or 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:	-90 psf; (See General Limitation #7.)

Membrane Type: SBS/APP

Deck Type 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type C(1): Insulation layers are mechanically attached through loose laid optional thermal barrier to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	**N/A**	**N/A**
Top Insulation Layer (Coverboard)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4; 6 with 8; 14 with 17; 10 with 25**	**1:1.78 ft²**
DensDeck Prime Minimum ¼" thick	**15 with 18; 10 with 26**	**1:1.78 ft²**

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

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: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP 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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type WR, Grade 33 Steel Deck attached 6" o.c. with Traxx 5 screws to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Traxx 1 screws spaced 24" o.c.

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

System Type C(2): Insulation layers are mechanically attached through loose laid optional thermal barrier to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Polytherm, Polytherm-H, Polytherm G, ACFoam-II, ACFoam-III, H-Shield, ISO 95 +GL, ENRGY 3 Minimum 2" thick	**N/A**	**N/A**

Top Insulation Layer (Coverboard)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum 1/2" thick	**9 or 10 with 12; 5 or 6 with 8; 1 or 2 with 4**	**1:1.78 ft²**

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.

Base Sheet: (*Optional if using ply sheet in hot asphalt*)
One ply of 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.

Ply Sheet:	(*Optional if using base sheet in hot asphalt*) One or more plies of Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, torch applied. 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, 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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type C(3): Insulation layers are mechanically attached through loose laid optional thermal barrier to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, H-Shield, Polytherm-H, ENRGY 3, ISO 95+ GL, H-Shield CG, Multi-Max FA-3 Minimum 1.5" thick	**2 or 6 with 19**	**1:1.33 ft²**

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

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

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.

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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, ACFoam-III, Polytherm, Polytherm G Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer (Coverboard)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**2 with 4; 6 with 8**	**1:1.33 ft²**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4; 6 with 8**	**1:1.33 ft²**

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.

Base Sheet: (*Optional if using ply sheet in hot asphalt*)
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.

Ply Sheet:	(*Optional if using base sheet in hot asphalt*) 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, 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. *Requires torch-applied ply or 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:	-82.5 psf; (See General Limitation #7.)

Membrane Type:	SBS/APP
Deck Type 2I:	Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.
	This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.
System Type C(5):	Insulation layers are mechanically attached through loose laid optional thermal barrier to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional)	Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any approved polyisocyanurate listed in Table 2 Minimum 1.0" thick	**N/A**	**N/A**
Top Insulation Layer (Coverboard)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 or 3 with 4; 6 or 7 with 8; 10 with 11 or 25; 14 or 18 with 17;**	**1:1 ft²**

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: (Optional)	Apply WB-3000 at 1 gal. per 300 sq. ft.
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: (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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type C(6): Insulation layers are mechanically attached through loose laid optional thermal barrier to roof deck. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

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

Top Insulation Layer (Coverboard)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime Minimum ¼" thick	**2 or 3 with 4; 6 or 7 with 8; 10 with 12; 14 or 18 with 17;**	**1:1 ft²**

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

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: (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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type D(1): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, ACFoam-III, Polytherm Polytherm G 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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type D(2): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	**N/A**	**N/A**

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

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 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Yield Strength 50.6 ksi. steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(3): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, ACFoam-III, Polytherm, Polytherm G 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: Attach base sheet using Trufast #15 EHD Fasteners 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: Attach base sheet using Trufast #15 EHD Fasteners 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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type D(4): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

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

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" 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 Elastobase V, Elastobase P, Elastoshield VP HT, Polybase V*, Polyglass G2 Base, fastened to the deck as described below:
*Requires torch-applied ply or cap sheet.

Fastening: Attach base sheet using Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or Polygrip Fastener #14 or Polygrip Fastener #15 with Polygrip Hex Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plate 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the 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, one or more plies of Type IV or VI ply sheet 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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(5): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
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 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: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type WR, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(6): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Polytherm, Polytherm-H, Polytherm G, ACFoam-II, ACFoam-III, H-Shield 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 Elastobase V, Elastoshield VP HT, fastened to the deck as described below:

Fastening: Attach base sheet using Trufast #12 DP, Trufast #14 HD Stainless Steel Bi-Metal Fasteners or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plate 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

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

Maximum Design Pressure: -67.5 psf; (See General Limitation #7.)

Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade C steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c

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

System Type D(7) Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	**N/A**	**N/A**

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

Base Sheet: One ply of Polybond, Polybase V* or Polyglass G2 Base fastened to the deck as described below:
*Requires torch-applied ply or cap sheet.

Fastening: Attach base sheet using Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 fasteners with Dekfast PLT-H-2-7/8 plates or Polygrip Fastener #14 or Polygrip Fastener #15 with Polygrip Hex Plates or Trufast #14 HD Stainless Steel Bi-Metal Fasteners or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plate 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

Membrane: One ply of Polybond, Polyflex G FR, 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 2I: Steel, Insulated

Deck Description: Minimum 22 gauge, Type WR, Grade 80 steel deck fastened to steel support at a maximum span of 6 feet o.c. Steel deck shall be fastened with minimum ITW Buildex Traxx/5 at a maximum spacing of 6 inches o.c. Side laps shall be fastened with ITW Buildex Traxx/1 at a maximum spacing of 24 inches o.c.

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.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam-II, Polytherm, Polytherm G, ACFoam-III, H-Shield, Polytherm-H 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 Polybond, Polyflex, mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 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.

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 2I: Steel, Insulated

Deck Description: Minimum 22 gauge, Type WR, Grade 80 steel deck fastened to steel support at a maximum span of 6 feet o.c. Steel deck shall be fastened with minimum ITW Buildex Traxx/5 at a maximum spacing of 6 inches o.c. Side laps shall be fastened with ITW Buildex Traxx/1 at a maximum spacing of 24 inches o.c.

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

System Type D(9): 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.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	**N/A**	**N/A**

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

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

Fastening: Attach base sheet using Polygrip Fastener #14 with Polygrip Hex Plates or Dekfast DF-#14-PH3 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.

Membrane: One ply of Polybond, Polybond G, Polyflex, Polyflex G, Polyfresko G, 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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Deck Stress Analysis Table.**

System Type D(10): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof 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:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
FescoBoard		
Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation		
Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" 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 Polyflex fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip Fastener #15 or Dekfast DF-#15-PH3 and *isofast* PLT-R-2-3/8-BL plates spaced 12" o.c. in a 5" heat welded side lap.

Ply Sheet: (Optional) One or more plies of Polybond, Polyflex, torch applied.

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 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 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 40 steel deck attached 6" o.c. with Tek/5 screws and ¾"washers to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(11): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
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 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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(12): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
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 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Yield Strength 50.6 ksi. steel deck attached 6" o.c. with 5/8" puddle welds to steel supports spaced max. 6 ft. o.c. deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(13): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation, ACFoam-II, ACFoam-III, Polytherm Polytherm G 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: 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: 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 2I: Steel, 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. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(14): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
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 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type D(15): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, H-Shield, Polytherm-H, Multi-Max FA-3, EnergyGuard Polyiso Insulation		
Minimum 1" thick	**N/A**	**N/A**
Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
FescoBoard **Minimum ¾" thick**	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation **Minimum ½" thick**	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board **Minimum ¼" 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 Polybond, Polyflex, fastened to the deck as described below:

Fastening: Attach base sheet using Dekfast DF-#12-PH3 with Dekfast PLT-H-2-7/8 plates or Polygrip Fasteners #12 with Polygrip Hex Plates or OMG #14 Roofgrip with Flat Bottom Metal 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.

Ply Sheet: (Optional)	One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, 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 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:	-112.5 psf; (See General Limitation #7.)

Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade 33 steel deck attached 6" o.c. with Tek/5 screws to steel supports spaced max. 5 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 20" o.c.

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

System Type D(16): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Miami-Dade Approved Lightweight Concrete Minimum 2.0" thick, Minimum 300 psi.	**N/A**	**N/A**

Note: Load capacity of the structural substrate must be verified for the additional load of the LWC. The LWC must be properly vented.

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

Fastening: Attach base sheet using Dekfast DF-#12-PH3 with Dekfast PLT-H-2-7/8 plates or Polygrip Fasteners #12 with Polygrip Hex Plates or OMG #14 Roofgrip with Flat Bottom Metal 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.

Ply Sheet: (Optional) One or more plies of Elastobase V, Elastobase P, Elastoflex S6, Elastoflex V, Elastoshield VP HT, Polybond, Polyflex, 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 Elastoflex S6 G, Elastoflex S6 G FR, 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: -112.5 psf; (See General Limitation #7.)

Membrane Type: SBS/APP

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-22 ga. Type B, Grade 80 steel deck attached 6" o.c. with Tek/5 screws and ¾"washers to steel supports spaced max. 6 ft. o.c. Deck side laps are attached with Tek/1 screws spaced 24" o.c.

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

System Type D(17): Insulation layers are loosed laid with preliminary attachment, through loose laid optional thermal barrier, to roof deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System limitations apply.

Thermal Barrier: (Optional) Min. ¼" thick DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DEXcell Glass FA Mat Roof Board, DEXcell Glass Mat Roof Board or min. 7/16" thick DEXcell Cement Roof Board or min. ¾" thick FescoBoard, loose laid.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
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.)

STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gauge attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.

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