



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Polyglass USA, Inc.
150 Lyon Drive
Fernley, NV 89408**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 and 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 revises NOA No. 07-1030.01 and consists of pages 1 through 17.
The submitted documentation was reviewed by Jorge L. Acebo,



**NOA No.: 08-0827.14
Expiration Date: 07/13/13
Approval Date: 11/06/08
Page 1 of 17**

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Materials: SBS/APP/TPO
Deck Type: Steel
Maximum Design Pressure -112.5 psf

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>
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.
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 Type I	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
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 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.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastoshield TSG	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 TSG 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.
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.
Polyfresko Mop	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.
Polyfresko Mop 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.
Polyfresko Torch	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 Torch 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.
Xtraflex	32' 10" x 3' 6"	ASTM D 6222	Torch applied, polyester reinforced, TPO modified bitumen membrane with a burn off polyethylene back face and a smooth top surface.
Xtraflex G	32' 10" x 3' 6"	ASTM D 6222	Torch applied, polyester reinforced, TPO modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
Xtraflex G FR	32' 10" x 3' 6"	ASTM D 6222	Torch applied, polyester reinforced, TPO modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
Elastobase	65' 2" x 3' 3-3/8"	ASTM D 6163 Type I	SBS modified asphalt coated fiberglass reinforced base sheet.
Elastobase P	65' 2" x 3' 3-3/8"	ASTM D 6164	SBS modified asphalt coated polyester reinforced base sheet.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Cold Process Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered cold process adhesive for use with roll or BUR roofing.
PG100 Asphalt Primer	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.
PG350 Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
PG400 Plastic Roof Cement	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.
PG425 Wet/Dry Roof Cement	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.
PG450 Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement.
PG500 MB Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
Polyplus 35 Premium Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
Polyplus 45 Premium Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement.
Polyplus 50 Premium MB Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
Polyplus 55 Premium Modified Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A mastic compound for use as a roof flashing adhesive.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
POLYTHERM, POLYTHERM A1	Polyisocyanurate foam insulation	Polyglass USA, Inc.
POLYTHERM Composite	Polyisocyanurate/perlite composite insulation.	Polyglass USA, Inc.
ACFoam II	Polyisocyanurate foam insulation	Atlas Energy Products
ACFoam III	Polyisocyanurate foam insulation	Atlas Energy Products
GAF High Density Wood Fiberboard	High Density Wood Fiberboard	GAF Materials Corp.
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Perlite Insulation	Perlite insulation board	Generic
Dens-Deck or Dens Deck Prime	Gypsum insulation board	Georgia-Pacific
Dens-Deck DuraGuard	Gypsum insulation board	Georgia-Pacific
Armor Board High Density Wood Fiberboard	Wood fiber insulation board	Honeywell Int'l. Inc.



APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, LLC
H-Shield P	Polyisocyanurate/perlite composite insulation	Hunter Panels, LLC
ENRGY-3	Polyisocyanurate foam insulation	Johns Manville Corp.
Fesco Board	Expanded mineral fiber	Johns Manville Corp.
Structodek, Structodek FS	Wood fiber board	Masonitec
Multi-Max FA	Polyisocyanurate foam insulation	RMax, Inc.
Thermarroof Composite	Polyisocyanurate/perlite composite insulation.	RMax, Inc.
Fiberbond	Type-x Gypsum	United States Gypsum Co.
Securock	Fiber reinforced coverboard	USG

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Polygrip Fasteners #12, #14 & #15	Insulation fastener for wood, steel and concrete decks		Polyglass USA, Inc.
2.	Polygrip Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	Polyglass USA, Inc.
3.	Polygrip 2-1/2" Membrane Plate	Galvalume barbed stress plate	2.5" round	Polyglass USA, Inc.
4.	Dekfast Fasteners #12, #14 & #15	Insulation fastener for wood, steel and concrete decks		SFS Intec
5.	HWH Dekfast Fasteners	Insulation fastener for wood, and steel decks		SFS Intec
6.	Omega Fasteners	Insulation fastener for wood, and steel decks		SFS Intec
7.	Dekfast Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	SFS Intec
8.	Dekfast Autoset Plate	Galvalume stress plate.	2-7/8" x 3 1/4"	SFS Intec
9.	#14 & #15 Roofgrip Fasteners	Insulation fastener for wood, steel and concrete decks.		OMG
10.	Metal Plate	Galvalume stress plate.	3" round 3" square	OMG
11.	Flat Bottom Metal Plate	Galvalume stress plate.	3" square	OMG
12.	2-3/8" Round Barbed Seam Plates	Galvalume stress plate.	2-3/8" round	OMG



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
13.	#14 HD Insul-Fixx Fastener	Insulation fastener for wood, steel and concrete decks		SFS Intec
14.	Extra Load Fasteners	Insulation fastener for concrete decks		SFS Intec
15.	Insul-Fixx S Plate	Galvalume AZ50 steel plate	3" round	SFS Intec
16.	IF-2.375 Plates	Galvalume AZ55 steel plate	2.37" round	SFS Intec
17.	IF/IFT-70x70 Plates	Galvalume steel plate	2.75" square	SFS Intec
18.	Tru-Fast HD	Insulation fastener for wood, steel and concrete decks		The Tru-Fast Corp.
19.	Tru-Fast Plates	3" round galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
20.	Tru-Fast MP-3	Round galvalume AZ50 steel plate	3.23 round 3" round	The Tru-Fast Corp.

APPROVED SURFACING:

TABLE 4

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
1.	PG200 Non-Fibered Roof Coating	A non fibered asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Polyglass USA, Inc.
2.	PG300 Fibered Roof Coating	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.
3.	PG600 Non-Fibered Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
4.	PG650 Fibered Aluminum Roof Coating	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
5.	PG700 White Reflective Roof Coating	A premium white 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.	PG800 Non-Fibered Asphalt Emulsion Roof Coating	An asphalt based, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.



APPROVED SURFACING:

TABLE 4

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
7.	PG850 Fibered Asphalt Emulsion Roof Coating	An asphalt base, fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
8.	Polyplus 65 Premium Fibered Aluminum Roof Coating	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
9.	Polyplus 60 Premium Non-Fibered Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
10.	Polybrite 70 White Elastomeric Roof Coating	A premium white 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.	Mule-Hide 111 Non-Fibrated Roof Coating	A non-fibered asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Mule-Hide Products Co., Inc.
12.	Mule-Hide 102 Fibrated Roof Coating	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Mule-Hide Products Co., Inc.
13.	Mule-Hide 416 Standard Non-Fibrated Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Mule-Hide Products Co., Inc.
14.	Mule-Hide 406 Standard Fibrated Aluminum Roof Coating	Fibrated aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Mule-Hide Products Co., Inc.
15.	Mule-Hide 401 Premium Fibrated Aluminum Roof Coating	Fibrated aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Mule-Hide Products Co., Inc.
16.	Mule-Hide 410 Premium Non-Fibrated Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Mule-Hide Products Co., Inc.
17.	Mule-Hide 311 Emulsion Non-Fibrated	An asphalt base, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Mule-Hide Products Co., Inc.



APPROVED SURFACING:

TABLE 4

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
18.	Mule-Hide 301 Emulsion Fibrated	An asphalt base, fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Mule-Hide Products Co., Inc.
19.	Gravel	To be installed in a flood coat of approved asphalt at 60 lbs/sq	400 lbs/sq	N/A	Generic
20.	Slag	To be installed in a flood coat of approved asphalt at 60 lbs/sq	300 lbs/sq	N/A	Generic

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Name/Report</u>	<u>Report No.</u>	<u>Date</u>
Factory Mutual Research Corporation	4470	J.I. 2W7A7.AM	08.04.94
	4470	J.I. 3001334	02.15.00
	4470	J.I. 3000857	01.12.00
	4470	J.I. 3004091	01.12.00
Underwriters Laboratory	TAS 114	00NK20869	06.08.00
Trintiy ERD	TAS 114	11752.09.99-1	02.08.00
	TAS 114	11757.12.00-1	12.01.00
	TAS 114	11757.04.01-1	04.27.01
	TAS 114	11776.06.02	06.13.02
	TAS 114	11776.06.02	08.11.03
	TAS 114	020843.02.05-1	02.10.05
	TAS 117(B)-ASTM D6862 ASTM D 6164 / D 6222	C8500SC.11.07 P10490.08.08	11.30.07 08.14.08
PRI Asphalt Technologies	ASTM D6222	PUSA-062-02-01	12.04.07
	ASTM D6163	PUSA-064-02-02	02.27.08



APPROVED ASSEMBLIES:

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade C steel deck

System Type B: Base layer of insulation mechanically fastened, top layer adhered with approved asphalt.

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, POLYTHERM, H-Shield Minimum 1.5" thick	4 or 18	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
High Density Wood Fiberboard Minimum ½" thick	N/A	N/A
Fesco Board 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 or more plies of Elastobase, Modibase, Perma Ply 28 or GAFGLAS #75 adhered to the coverboard 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 Polybond, Polyflex or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or one or more plies of Type IV or VI ply sheet adhered to the coverboard 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 Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG or Elastoshield TSG 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.)



Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade C steel deck

System Type C(1): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY-3, POLYTHERM, H-Shield Minimum 1.5" thick	4, 13 or 18	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.

Base Sheet: One or more plies of Elastoflex SA-V self adhered to the insulation.

Membrane: One or more plies of Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR Elastoshield TSG or Elastoshield TSG 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.)



Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. Type B, Grade C steel deck
System Type C(2): All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

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
Any approved Polyisocyanurate Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Coverboard)	Insulation Fasteners (Table 3)	Fastener Density/ft²
High Density Wood Fiberboard Minimum ½" thick	4 or 18	1:1.33 ft ²
Dens-Deck, Dens Deck Prime, Securock Minimum ¼" thick	4 or 18	1:1.33 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.

Base Sheet: (Optional if using ply sheet in hot asphalt) One or more plies of Elastobase, Modibase, Perma Ply 28 or GAFGLAS #75 adhered to the coverboard 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 Polybond, Polyflex or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or one to more plies of Type IV or VI ply sheet adhered to the coverboard 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 Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG or Elastoshield TSG 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.)



- Deck Type 2I:** Steel, Insulated
- Deck Description:** 18-22 ga. Type B, Grade 80 Steel Deck attached 6" o.c. to steel supports spaced max. 6 ft. o.c.
- System Type C(3):** All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

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
Any approved Polyisocyanurate (Optional) Minimum 2" thick	N/A	N/A
Top Insulation Layer (Coverboard)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Securock Minimum 1/4" thick	10	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 or more plies of Polyflex, Polybond, Elastoflex S6 or Elastoflex V adhered to the coverboard 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 Polyflex, Polybond, Elastoflex S6 or Elastoflex V 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 Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond G, Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG, Elastoshield TSG 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.)



Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 gage ASTM A 446 Grade E 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.

System Type D(1): 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:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
H-Shield, H-Shield-P, POLYTHERM, POLYTHERM Composite P, AC Foam II, AC Foam III Minimum 1.5" thick	N/A	N/A
High Density Fiberboard, Structodek, Fiberboard Roof Insulation Minimum 1" thick	N/A	N/A
Fesco Board 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, or Polyflex mechanically fastened to the deck as described below:

Fastening: Attach base sheet using Polygrip 2½" Membrane Plates and #14 Polygrip fasteners or #14 Dekfast fasteners spaced 12" o.c. in a minimum 6" wide side lap. The side lap is either torch or hot air welded closed.

Ply Sheet: None.

Membrane: One ply of Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR Polybond, Polybond G, Xtraflex G or Xtraflex 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.)



Deck Type 2I: Steel, Insulated
Deck Description: 18-22 ga. Type B, Grade C steel deck
System Type D(2): 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:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Any approved Polyisocyanurate Minimum 1" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Fesco Board Minimum 3/4" thick	N/A	N/A
High Density Wood Fiber Minimum 1/2" thick	N/A	N/A
Dens-Deck, Dens Deck Prime, Securock Minimum 3/4" 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 SFS Extra Load Fasteners and IF-2.375 Plates spaced 12" o.c. in a 5" heat welded side lap.
Ply Sheet: (Optional) One ply of Polyflex, Polybond, or Xtraflex torch applied
Membrane: One ply of Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG or Elastoshield TSG 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.)



Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade C steel deck

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:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Any approved Polyisocyanurate Minimum 1" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Fesco Board Minimum 3/4" thick	N/A	N/A
High Density Wood Fiber Minimum 1/2" thick	N/A	N/A
Dens-Deck, Dens Deck Prime, Securock Minimum 1/4" 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 or Elastoshield TS fastened to the deck as described below:

Fastening: Attach base sheet using CF Dekfast #14 Fasteners and Dekfast Hex plates or Roofgrip with Flat Bottom 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 ply of Polyflex, Polybond, or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply No. 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or 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 Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG or Elastoshield TSG 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.)



Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Type B, Grade C steel deck

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:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Any approved Polyisocyanurate Minimum 1" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Fesco Board Minimum 3/4" thick	N/A	N/A
High Density Wood Fiber Minimum 1/2" thick	N/A	N/A
Dens-Deck, Dens Deck Prime, Securock Minimum 1/4" 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 CertainTeed GlasBase, Polyglass Base, Firestone MB Base, JM Perma Ply 28, Tamko Glass Base, Elastobase or Elastobase P or GAFGLAS #75 fastened to the deck as described below:

Fastening: Attach base sheet using CF Dekfast #14 or #15 Fasteners with Hex Plates or Tru-Fast HD or XHD with MP-3 Plates 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 ply of Polyflex, Polybond, or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply No. 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or 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 Polyflex, Polyflex G, Polyflex G FR, Polyfresko Torch, Polyfresko Torch FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Polyfresko Mop, Polyfresko Mop FR, Elastoshield TSG or Elastoshield TSG 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.)



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 gage 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.)**

END OF THIS ACCEPTANCE



NOA No.: 08-0827.14
Expiration Date: 07/13/13
Approval Date: 11/06/08
Page 17 of 17