



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

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Polyglass USA Inc.
150 Lyon Dr.
Fernley ,NV 89408

Your application for Notice of Acceptance (NOA) of:

Modified Bitumen Roof Systems Over Concrete Decks

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 01-0529.04
EXPIRES: 07/13/2003

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 08/16/2001

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen

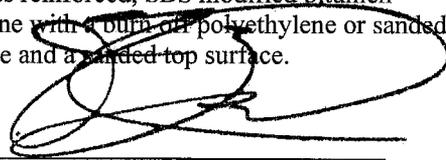
Approval Date: **August 16, 2001**

Expiration Date: **July 13, 2003**

Materials: SBS/APP/TPO
Deck Type: Concrete
Maximum Design Pressure: -622.5 psf (See Specific System Herein)
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<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	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.
Elastoshield TS4	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 TS4 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.



Frank Zuloaga, RRC
 Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastoflex VG	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.
Elastoflex VG FR	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 and fire retardant chemistry.
Xtraflex	32' 10" x 3' 6"	ASTM D 5147	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 5147	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 5147	Torch applied, polyester reinforced, TPO modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
Elastoflex SA-P FR	32' 6" x 3' 3-3/8"	ASTM D 6164	Self-adhered, polyester reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
Elastoflex SA-V FR Base	32' 6" 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	32' 6" x 3' 3-3/8"	ASTM D 6163	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
Elastobase	65' 2" x 3' 3-3/8"	ASTM D 4601	SBS modified asphalt coated fiberglass reinforced base sheet.
Polytherm A1	1.2" to 4" thick 4' x 4' or 8'	TAS 110	Polyisocyanurate insulation board.
Polytherm TF (Tapered)	1.5" to 3.5" thick 4' x 4' or 8'	TAS 110	Tapered polyisocyanurate insulation board.
Polytherm Composite	1.5" to 3.5" thick 4' x 4' or 8'	TAS 110	Polyisocyanurate/perlite composite insulation.

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Report No.</u>	<u>Date</u>
Factory Mutual Research Corporation	J.I. 2W7A7.AM	08.04.94
	J.I. 3001334	02.15.00
	J.I. 3000857	01.12.00
	J.I. 3004091	01.12.00
	#11752.09.99-1	02.08.00
Exterior Research & Design, LLC.	#11772.08.00-1	08.14.00
	#11757.12.00-1	12.07.00
	#11757.04.01-1	



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Roofing Product Control Examiner

APPROVED ASSEMBLIES:

- Deck Type 3I:** Concrete Decks, Insulated, New Construction or Reroof
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type A:** All layers of insulation adhered with approved asphalt. Base sheet adhered to insulation.

All General and System limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of any of the following insulations:

Approved Type(s): E'NRG'Y-2, ACFoam-II, Polytherm				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of any of the following insulations:

Approved Type(s): Fesco Board				
Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): High Density Wood Fiberboard				
Minimum: 1/2" x 4' x 4'	N/A	N/A	N/A	N/A

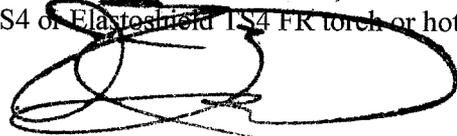
Approved Type(s): Dens Deck				
Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet. All insulation shall be adhered to the deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations 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 used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: (Optional if using ply sheet in hot asphalt) One ply of Elastobase, Modibase, Perma Ply No. 28 or GAFGLAS #75 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 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 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, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.



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Roofing Product Control Examiner

Surfacing:

(Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure:

- 290 psf (for Fesco Board)
- 557.5 psf (for High Density Wood Fiberboard)
- 622.5 psf (for Dens Deck)
- (See General Limitation #9)

*MAKING SENSORS
 WHAT DO WE DO WITH THE ISO
 HOW ABOUT IR YOU USE MORE THAN ONE
 INSULATION TYPE*



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 Roofing Product Control Examiner

Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(2): All layers of insulation adhered to an adhered anchor sheet. Membrane is subsequently adhered to insulation.

All General and System limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of any of the following insulations:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer (Optional)</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of any of the following insulations:

Approved Type(s): **Fesco Board**

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **High Density Wood Fiberboard**

Minimum: 1/2" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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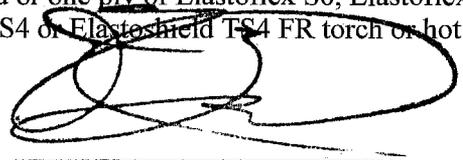
Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet. All insulation shall be adhered to the deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations 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 used as a top layer shall be placed with the polyisocyanurate side facing down.

Anchor Sheet: Elastoflex SA Vent loose laid on primed concrete deck followed by one ply of Polyflex, Polybond or Xtraflex torch applied.

Base Sheet: (Optional if using ply sheet in hot asphalt) One ply of Elastobase, Modibase, Perma Ply No. 28 or GAFGLAS #75 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

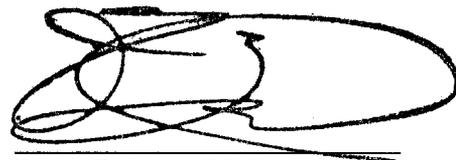
Ply Sheet: (Optional if using base sheet in hot asphalt) One ply of Polyflex, Polybond or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply No. 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or one or more plies of Type IV or VI ply sheet adhered to the coverboard in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.



- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure: -280 psf (See General Limitation #9)



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Roofing Product Control Examiner

Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type B(1): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **H-Shield, H-Shield P, Polytherm or Polytherm Composite P**

Minimum: 1.5" x 4' x 4'	Polygrip Hex with #14 or #15 fastener CF Dekfast #14 or #15	[3]	4	1:4 ft ²
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Note: Base layer shall be mechanically attached with fasteners and density described above. 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 RAS 117 for fastening details.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **Celotherm, ConPerl, GAFTEMP Permalite, Permalite or Fesco Board**

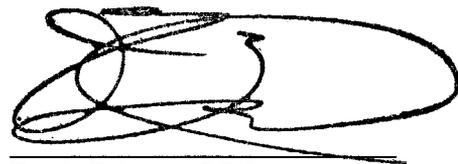
Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A
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Note: Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs. Refer to RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (Optional if using one or more plies of ply sheet or self-adhered membranes noted below) One ply of Elastobase, Modibase, Perma Ply No. 28 or GAFGLAS #75 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) One ply of Elastobase, Modibase or Perma Ply No. 28 or one to three 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 or Elastoflex SA V FR self adhered to a listed polyisocyanurate layer (no coverboard).

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied or one ply of Elastoflex SA-P FR or Elastoflex SA-V FR self-adhered.



- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

Maximum Design
Pressure: -45 psf; (See general limitation #9.)



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Roofing Product Control Examiner

Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type B(2): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt.

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **E'NRG'Y-2 or Polytherm**

Minimum: 1.5" x 4' x 4' CF Dekfast #14 or #15 with Hex Plates
Tru-Fast HD or XHD with MP-3 Plates

[3]	12	1:1.33 ft ²
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Note: Base layer shall be mechanically attached with fasteners and density described above. 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 RAS 117 for fastening details.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **High Density Wood Fiberboard**

Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Fesco Board**

Minimum: ¾" x 4' x 4'	N/A	N/A	N/A	N/A
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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, Modibase, Perma Ply No. 28 or GAFGLAS #75 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 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 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, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied or one ply of Elastoflex SA-P FR or Elastoflex SA-V FR self-adhered.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure: -90 psf; (See general limitation #7.)



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Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

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.

<u>Insulation Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **ENRG'Y 2, Polytherm**

Minimum: 1.5" x 4' x 4' SFS HD Insulfixx with IFC/IW Plates
 Tru-Fast HD with IFC/IW Plates
 CF Dekfast #14 with IFC/IW Plates

[3]	12	1:1.33 ft ²
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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: None

Ply Sheet: One ply of Elastoflex SA-V self adhered.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied or one ply of Elastoflex SA-V followed by one layer of Elastoflex SA-P FR or Elastoflex SA-V FR self-adhered.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

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



Frank Zuloaga, RRC
 Roofing Product Control Examiner

Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

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.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
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Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **High Density Wood Fiberboard**

Minimum: ½" x 4' x 4'	CF Dekfast #14 or #15 with Hex Plates Tru-Fast HD or XHD with MP-3 Plates	[3]	12	1:1.33 ft ²
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Approved Type(s): **Dens-Deck**

Minimum: ¼" x 4' x 8'	CF Dekfast #14 or #15 with Hex Plates Tru-Fast HD or XHD with MP-3 Plates	[4]	24	1:1.33 ft ²
N/A	N/A	N/A	N/A	

Base Sheet: (Optional if using ply sheet in hot asphalt) One ply of Elastobase, Modibase, Perma Ply No. 28 or GAFGLAS #75 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

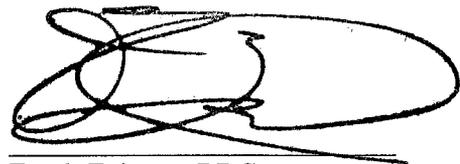
Ply Sheet: (Optional if using base sheet in hot asphalt) One ply of Polyflex, Polybond or Xtraflex torch applied or one ply of Elastobase, Modibase, Perma Ply No. 28, Elastoflex S6, Elastoflex V or Elastoflex V 2.5 or one or more plies of Type IV or VI ply sheet adhered to the coverboard in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied or one ply of Elastoflex SA-P FR or Elastoflex SA-V FR self-adhered.



- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

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



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Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(1): All layers of insulation and base sheet simultaneously attached.

All General and System Limitations apply.

<u>Insulation Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Fiberbond**

Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A
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Approved Type(s): **Armor Board Regular Fiberboard, Armor Board High Density Fiberboard, Esgard Fiberboard Roof Insulator, Celotex Fiberboard, Celotex High Density Fiberboard, Traffic Top Fiberboard, High Density Roof Fiberboard, GAFTEMP Fiberboard, GAFTEMP High Density Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber, Fiber Base HD1, Fiber Base HD6, Structodek**

Minimum: 1/2" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Celotherm, ConPerl, GAFTEMP Permalite, Permalite or Fesco Board**

Minimum: 3/4" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **ACFoam II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation, Multi-Max FA, H-Shield, Tapered H-Shield**

Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Thermarroof Composite, Polytherm Composite**

Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Standard or Wide Flute Armor-R Glass, Standard or Wide Flute Fiberglas Roof Insulation, Standard or Wide Flute Fiber Glass Roof Insulation**

Minimum: 15/16" x 4' x 4'	N/A	N/A	N/A	N/A
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Note: Top layer shall have preliminary attachment, prior to installation of the base sheet, at an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density.

Base Sheet: One ply of Elastobase or Perma Ply No. 28 fastened to the deck as described below:

Fastening: Attach base sheet using CF Dekfast Hex Plates or Dekfast Autoset Plates with #14 Dekfast fasteners fasteners spaced 12" o.c. in a 4" lap and 18" o.c. in two equally spaced staggered rows in the center of the sheet.



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- Ply Sheet: (Optional) One ply of Elastobase or Perma Ply No. 28 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, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.
- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.
- Maximum Design Pressure: -45 psf; (See General Limitation #9.)



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Deck Type 2I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System Limitations apply.

<u>Insulation Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): H-Shield, H-Shield-P, Polytherm, Polytherm Composite P, ACFoam II				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): Fesco Board				
Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): Celotex Fiberboard, Flat Top Fiberboard, Esgard Fiberboard Roof Insulator, High Density Fiberboard, Huebert Fiberboard, Structodek, Fiberboard Roof Insulation, High Density Fiberboard Roof Insulation				
Minimum: 1" x 4' x 4'	N/A	N/A	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.

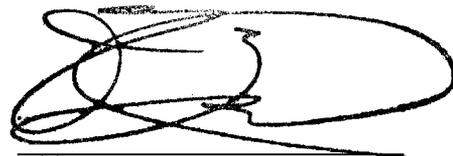
Base Sheet: One ply of Polybond, Polyflex or Xtraflex mechanically fastened to the deck as described below:

Fastening #1: (Polybond or Polyflex only) Attach base sheet using Polygrip 2½" Membrane Plates and #14 Polygrip fasteners or Dekfast 2½" HS Membrane Plates and #14 Dekfast fasteners spaced 18" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed.
(Meets -45 psf - See General Limitation #9.)

Fastening #2: (Polybond or Polyflex only) Attach base sheet using Polygrip 2½" Membrane Plates and #14 Polygrip fasteners or Dekfast 2½" HS Membrane Plates and #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.
(Meets -82.5 psf - See General Limitation #7.)

Fastening #3: (Xtraflex only) Attach base sheet using Polygrip 2½" Membrane Plates and #14 Polygrip fasteners or Dekfast 2½" HS Membrane Plates and #14 Dekfast fasteners or Buildex 2-3/8" Round Barbed Seam Plates with #14 Roofgrip fasteners spaced 12" o.c. in a minimum 5" wide side lap. The side lap is either torch or hot air welded closed. *(Meets -45 psf - See General Limitation #9.)*

- Ply Sheet: None.
- Membrane: One ply of Polyflex, Polflex G, Polyflex G FR, Polybond, Polybond G, Xtraflex G or Xtraflex G FR torch applied.
- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.
- Maximum Design Pressure: See Fastening Options above



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Deck Type 2I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

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.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer (Optional)</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **Fesco Board**

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **High Density Wood Fiber**

Minimum: 1/2" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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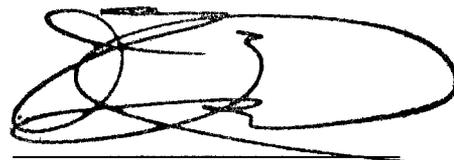
Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One ply of Elastobase Poly/Sand, Sand/Sand fastened to the deck as described below:

Fastening: Attach base sheet using Buildex #14 or #15 Roofgrip Fasteners and Flat Bottom Plates spaced 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. or one ply of Elastoflex SA-V self-adhered.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied or one ply of Elastoflex SA-P FR or Elastoflex SA-V FR self-adhered.



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- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

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



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Deck Type 2I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

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.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer (Optional)</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **Fesco Board**

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **High Density Wood Fiber**

Minimum: 1/2" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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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 S 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, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch applied.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1 1/2 gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1 1/2 gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1 1/2 gal/sq.

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



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Deck Type 2I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(5): 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.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer (Optional)</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **Fesco Board**

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **High Density Wood Fiber**

Minimum: 1/2" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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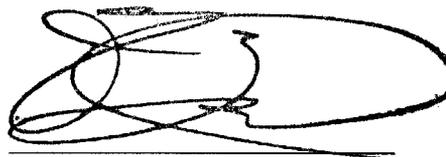
Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

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

Fastening: Attach base sheet using CF Dekfast #14 Fasteners and Dekfast Hex platex or Buildex Roof grip 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.

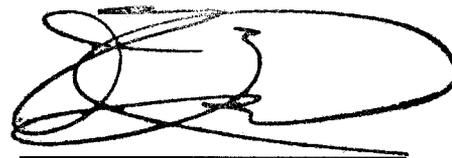
Membrane: One ply of Polyflex, Polflex G, Polyflex G FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.



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- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

Maximum Design
Pressure: -112.5 psf; (See General limitation #7.)



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Deck Type 2I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(6): 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.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): **Any approved Polyisocyanurate**

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer (Optional)</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **Fesco Board**

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **High Density Wood Fiber**

Minimum: 1/2" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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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 or GAFGLAS #75 fastened to the deck as described below:

Fastening: Attach base sheet using CF Dekfast #14 or #15 Fasteners and Dekfast Hex platex or Tru-Fast HD or XHD with MP-3 Plates spaced 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.

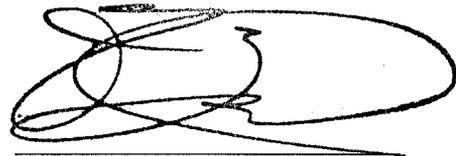
Membrane: One ply of Polyflex, Polflex G, Polyflex G FR, Polybond, Polybond G, Xtraflex, Xtraflex G or Xtraflex G FR torch applied or one ply of Elastoflex S6, Elastoflex S6 G, Elastoflex S6 G FR, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.



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- Surfacing: (Optional) Install one of the following to obtain required fire classification.
1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
 2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
 3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
 4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
 5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
 6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure: -52.5 psf; (See General limitation #7.)



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Deck Type 3: Concrete Decks, Non-Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(1): Optional base sheet fully adhered with approved asphalt.

All General and System Limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet.

Base Sheet: (Optional) One ply of Elastobase or Perma Ply No. 28 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

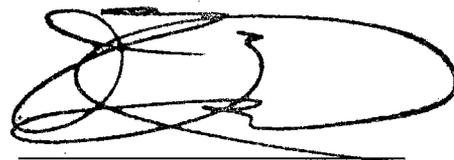
Ply Sheet: (Optional) One ply of Elastobase or Perma Ply No. 28 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

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



Frank Zuloaga, RRC
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Deck Type 3: Concrete Decks, Non-Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(2): Optional base sheet self-adhered.

All General and System Limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet.

Base Sheet: (Optional) One ply of Elastoflex SA V FR Base self-adhered to the primed deck.

Ply Sheet: none.

Membrane: One ply of Elastoflex SA P FR or Elastoflex SA V FR self-adhered to the base sheet or to the primed deck.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure: -315 psf; (See General Limitation #9.)



Deck Type 3: Concrete Decks, Non-Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(3): Optional base sheet torch applied to deck.

All General and System Limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet.

Base Sheet: (Optional) One ply of Xtraflex torch applied to the primed deck.

Ply Sheet: none.

Membrane: One ply of Xtraflex G FR torch applied to the base sheet or to the primed deck.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibrated Aluminum Coating at 1½ gal/sq.

Maximum Design

Pressure: -180 psf; (See General Limitation #9.)



Frank Zuloaga, RRC
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Deck Type 3I: Concrete Decks, Insulated, New Construction or Reroof

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(4): Membrane adhered to roof deck

All General and System Limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet.

Base Sheet: Elastoflex SA Vent loose laid on primed concrete deck.

Ply Sheet: (Optional) One ply of Polyflex, Polybond, or Xtraflex torch applied.

Membrane: One ply of Polyflex, Polflex G, Polyflex G 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, Elastoshield TS4 or Elastoshield TS4 FR torch or hot asphalt applied.

Surfacing: (Optional) Install one of the following to obtain required fire classification.

1. Gravel or slag at 400 lbs/sq or 300 lbs/sq, respectively, in a flood coat of approved asphalt at 60 lbs/sq.
2. Karnak 97 Fibrated Aluminum Asphalt Roof Coating or Asbestos Free Aluminum Roof Coating at 1½ gal/sq.
3. Kokem Products Sunguard Acrylic Roof Coating at 1 gal/sq.
4. Monsey Endure Aluminum Roof Coating, Weather Check or Pro-Grade Aluminum Roof Coating at 1½ gal/sq.
5. Grundy al MB Aluminum Roof Coating at 1-2 gal/sq.
6. Fields F350 Heat Shield Aluminum Coating or F630 Heat Shield Fibered Aluminum Coating at 1½ gal/sq.

Maximum Design Pressure: -280 psf (See General Limitation #9)

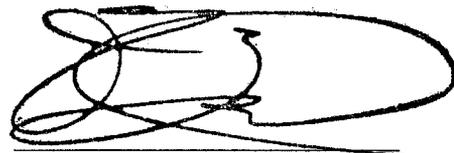


CONCRETE DECK SYSTEM LIMITATIONS:

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 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.

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 sidelap 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 Engineer, 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. **(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 with 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.)**



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NOTICE OF ACCEPTANCE STANDARD CONDITIONS

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
 - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
 - b) The product is no longer the same product (identical) as the one originally approved;
 - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
 - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
 - a) Unsatisfactory performance of this product or process;
 - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 31.

END OF THIS ACCEPTANCE



Frank Zuloaga, RRC
Roofing Product Control Examiner