



MIAMI-DADE COUNTY  
 PRODUCT CONTROL SECTION  
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
 BOARD AND CODE ADMINISTRATION DIVISION  
**NOTICE OF ACCEPTANCE (NOA)**

Soprema, Inc.  
 310 Quadral Drive  
 Wadsworth, OH 44281

**SCOPE:**

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

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

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

**DESCRIPTION: Soprema Self-Adhered Modified Bitumen Roofing Systems over Concrete 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 consists of pages 1 through 32.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 13-0205.03  
 Expiration Date: 12/31/14  
 Approval Date: 08/01/13  
 Page 1 of 32

## ROOFING SYSTEM APPROVAL

Category: Roofing  
Sub-Category: Modified Bitumen  
Material: SBS  
Deck Type: Concrete  
Maximum Design Pressure: -225 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>
Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate. <b>For use as a base/ply sheet only.</b>
Modified Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced modified asphalt base sheet for bonding or mechanically attaching to substrate. <b>For use as a base/ply sheet only.</b>
Soprabase	39" x 99' (3 sq.)	ASTM D4601	Oxidized asphalt, polyester reinforced, sand-surfaced base sheet. <b>For use as a base/ply sheet only.</b>
Soprabase S	39" x 65' (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, sand-surfaced base sheet. <b>For use as a base/ply sheet only.</b>
Sopra IV	36" x 180' (5 sq.)	ASTM D2178 Type IV	Type IV, fiberglass reinforced, smooth surfaced plysheet used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Sopra VI	36" x 180' (5 sq.)	ASTM D2178 Type VI	Type VI, fiberglass reinforced, smooth surfaced plysheet used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Colvent SA	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied self-adhering strips on back side
Colvent TG	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied heat weldable strips on back side.
Colvent 180 TG	39" x 33' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side.
Elastophene Sanded	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Sanded 3.0	39" x 33' (1sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripped.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene HS Sanded	39" x 66' (2 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS	39" x 49' (1.5sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS 3.0	39" x 49' (1.5sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene SP	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied b heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene SP 3.0	39" x 49' (1 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied b heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene Flam	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam 2.2	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam HS	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants and plastic burn-off film on both sides. Applied by heat welding.
Elastophene 180 Sanded	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene 180 PS	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene HS FR GR	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Flam GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam HS FR GR	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass composite reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 250 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 Sanded 2.2	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt or cold adhesive.
Sopralene 180 PS	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the top and sanded on the bottom.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene 180 PS 2.2	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 SP 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 SP	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top
Sopralene 250 SP	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top
Soprafix [S]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 612	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix [F]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 613	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix [X]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 614	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.
Soprafix Base 622	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.

Soprafix-e	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Soprafix Base 641	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Sopralene Flam 180	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).

Sopralene Flam 180 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralast 50 TV Alu	various	ASTM D6298	Fiberglass reinforced modified bitumen sheeting faced with aluminum foil. Applied by heat welding of ribbon stripping (after removal of plastic burn-off film).
Soprastar Flam	39" x 33' (1 sq.)	ASTM D6162	Polyester reinforced SBS modified bitumen membrane with a plastic burn-off film on the bottom side and a reflective white top surface. Applied by heat welding.
Soprastar Sanded	39" x 33' (1 sq.)	ASTM D6162	Stabilized polyester mat reinforced SBS modified bitumen membrane with a sanded bottom side and a reflective white top surface. Applied by hot asphalt or cold adhesive.
Soprastar Stick	39" x 33' (1 sq.)	ASTM D6162	Polyester reinforced SBS modified bitumen membrane with a release film covered self-adhering bottom side and a reflective white top surface.
Sopralene Stick	39" x 33' (1 sq.)	ASTM D6164	Self-adhered, polyester reinforced membrane with a release film on the bottom and a sanded top.
Sopralene Flam Stick	39" x 33' (1 sq.)	ASTM D6164	Self-adhered, polyester reinforced membrane with a release film on the bottom and a plastic burn-off film on the top.
Elastophene Stick FR GR	39" x 33' (1 sq.)	ASTM D6163	Self-adhered, granule surfaced, fiberglass reinforced membranes.
Elastophene Stick HR FR GR	39" x 33' (1 sq.)	ASTM D6164	Self-adhered, granule surfaced, polyester reinforced membranes.
Elastocol 500	various	ASTM D41	Asphalt primer.
Elastocol Stick	various	ASTM D41	Asphalt primer.
ALSAN Flashing™	1.25 gallon pail or 3.75 gallon pail	Proprietary	One part polyurethane/bitumen resin, moisture cure compound.
ALSAN Polyfleece	4", 8" or 39" wide by 50' long	Proprietary	Non-woven polyester reinforcement used in the ALSAN Flashing system.
SBS Elastic Cement	5 gallon pail	Proprietary	Elastomeric bitumen based mastic compound.
Soprawalk	39" x 26' (3/4 sq.)	Proprietary	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and mineral granules on the top. Applied by hot asphalt, cold adhesive or ribbon stripping.

High Velocity® Insulation Adhesive II (HVIA-II)	3 gallon pail	Proprietary	One part elastomeric urethane foam adhesive.
High Velocity® Insulation Adhesive III (HVIA-III)	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity® Insulation Adhesive III – Green	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity Insulation Adhesive PG	5 gal. or 50 gal.	Proprietary	Two part elastomeric urethane foam adhesive.
FM Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Plastomeric bitumen based cold adhesive.
FM Adhesive Trowel Grade	5 gallon pail	Proprietary	Plastomeric bitumen based cold adhesive.
FM Adhesive (VOC)	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
COLPLY Modified Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
Soprastar Adhesive	5 gallon pail or 55 gallon drum	Proprietary	SBS modified bitumen based cold adhesive.

**APPROVED INSULATIONS:**

**TABLE 2**

<b>Product Name</b>	<b>Product Description</b>	<b>Manufacturer (With Current NOA)</b>
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
Sopra-ISO s, Sopra-ISO+ s	Polyisocyanurate foam insulation	Soprema, Inc.
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
EPS	Type IX 1.8 pcf. Expanded Polystyrene Insulation	Generic
High Density Wood Fiberboard	Wood fiber insulation board	Generic
DensDeck	Water resistant gypsum board	Georgia Pacific Gypsum LLC
M-Shield	Polyisocyanurate foam insulation	Soprema, Inc.
Sopra-ISO r, Sopra-ISO+ r	Polyisocyanurate foam insulation	Soprema, Inc.
H-Shield	Polyisocyanurate foam insulation	Hunter Panels LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
Multi-Max FA-3	Polyisocyanurate foam insulation	RMax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	USG Corp.
FescoBoard	Expanded mineral fiber insulation	Johns Manville Corp.
Sopraboard	Mineral fortified asphaltic cored coverboard	Soprema, Inc.



**APPROVED FASTENERS:**

**Table 3**

<b>Fastener Number</b>	<b>Product Name</b>	<b>Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
1.	Soprema #12, #14 & #15 Fasteners	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.		Soprema, Inc.
2.	Soprema 2" Seam Plate	Seam plates	2" round	Soprema, Inc.
3.	Soprema #14 Soprafix	Insulation and membrane fasteners	Various	Soprema, Inc.
4.	Soprema Soprafix 2 in. Round Barbed Stress Plates	Insulation and membrane fasteners	2" round	Soprema, Inc.
5.	Dekfast 12, 14 & 15 HS	Insulation fasteners	Various	SFS Intec, Inc.
6.	Dekfast Steel Batten Bar	Galvalume AZ50 steel		SFS Intec, Inc.
7.	Trufast #14 HD Fastener	Insulation and membrane fasteners	Various	Altenloh, Brinck & Co. U.S., Inc.
8.	Trufast 2" Barbed Metal Seam Plate	Seam Plates	2" diameter	Altenloh, Brinck & Co. U.S., Inc.
9.	TruFast 2" Metal Seam Plate	Seam Plates	2" diameter	Altenloh, Brinck & Co. U.S., Inc.
10.	Trufast Flat Batten Bar	Batten Bars for mechanical attachment of membrane	Various	Altenloh, Brinck & Co. U.S., Inc.
11.	Trufast #15 EHD Fastener	Insulation fasteners for wood, steel and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
12.	Polymer Batten Strip	Modified polymer batten bars	Various	OMG, Inc.
13.	#14 Roofgrip	Carbon steel fasteners	Various	OMG, Inc.
14.	OMG Heavy Duty	Insulation and membrane fasteners	Various	OMG, Inc.
15.	OMG 2" Barbed Plate	Round galvanized steel stress plates	2" Round	OMG, Inc.



**APPROVED SURFACING/COATING OPTIONS:**

**TABLE 4**

**Chosen components must be applied according to manufacturer’s application instructions. Any coating, listed below, used as a surfacing, must be listed within a current NOA.**

<b>System Number</b>	<b>Manufacturer</b>	<b>Application</b>
1.	Generic	Gravel applied at 400 lbs./sq., adhered with flood coat of asphalt at 60 lbs./sq.
2.	Generic	Slag applied at 300 lbs./sq., adhered with flood coat of asphalt at 60 lbs./sq.
3.	Soprema, Inc.	Gravel applied at 400 lbs./sq., adhered with FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 4 gal./sq.
4.	Karnak Corporation	Karnak #97 Fibrated Aluminum Roof Coating applied at an application rate of 1.5 gal./sq.
5.	Soprema, Inc.	Cural Aluminizer applied at an application rate of 2 gal./sq.
6.	Thermo Manufacturing Systems, LLC	Super Prep Roof Coating applied in two coats at an application rate of 1.5 gal./sq./coat.
7.	United Coatings Manufacturing Company	Roof Mate Coating, applied in one base coat at a rate of 1.5 gal./sq., and one finish coat at a rate of 1.5 gal./sq.
8.	Insulating Coatings Corporation	Astec 2000 Finish Coat applied in two base coats at a rate of 0.75 gal./sq./coat and two finish coats at a rate of 0.75 gal./sq./coat.
9.	Henry Company	HE280DC White Elastomeric Roof Coating applied in two coats at an application rate of 1 gal./sq./coat.
10.	National Coating Corp.	Acryshield® A500 applied in two coats at an application rate of 1 gal./sq./coat.
11.	Soprema, Inc.	R-Nova Roof Coating
12.	Generic	Semi-ceramic coated colored granules.



**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>
Factory Mutual Research Corp.	3002351	FM 4470	02/28/03
	3017614	FM 4470	02/27/06
	3023749	FM 4470	09/28/06
	3029098	FM 4470	10/25/07
	3026964	FM 4470	07/25/07
	3026964	FM 4470	07/25/07
	3023458	FM 4470	07/18/06
Underwriters Laboratories	R11436	UL 790	06/18/13
Exterior Research & Design, LLC	2757.02.05	ASTM D6163/D6164	02/03/05
	2774.04.05	TAS 114	04/01/05
	2779.11.05-R1	TAS 114	04/18/07
	2761.09.03	TAS 114	09/02/03
	2761.10.03-2	TAS 114	10/03/03
	2777.09.05-R2	TAS 114	04/18/07
Trinity   ERD	S6740.11.07	ASTM D 6163	11/02/07
	S12370.03.09-1	ASTM D 6164	03/06/09
	S12370.03.09-2	ASTM D 6164	03/06/09
	S12370.03.09-3	ASTM D 6162	03/06/09
	C8500SC.11.07-R1	TAS 117(B)/ASTM D6862	08/07/09
	S11440.06.10	ASTM D4798/TAS 110	06/01/10
	S11440.01.11-R1	ASTM D6164	06/07/12
	S11440.11.10-4	ASTM D2178	11/17/10
	S11440.11.10-3-R1	ASTM D4601	01/30/13
	S11440.12.10-1-R1	ASTM D6163	06/07/12
	S32700.12.10	ASTM D6162	12/15/10
	S35860.12.11-1	ASTM D2178	12/12/11
	S35860.12.11-2	ASTM D4601	12/12/11
	S35860.05.12-1-R1	ASTM D6163	06/07/12
	S35860.05.12-2-R1	ASTM D6164	06/07/12
	S35860.05.12-3	ASTM D6164	05/08/12
S14000.08.09-R2	TAS 114	10/09/09	
PRI Construction Materials Technologies, LLC	SOP-049-02-01	ASTM D1644/D2196	05/31/12
	SOP-043-02-01	ASTM D4601	02/27/12
	SOP-042-02-01	ASTM D4601	02/27/12
	SOP-041-02-01	ASTM D2178	02/27/12
	SOP-040-02-01	ASTM D2178	02/27/12
	SOP-010-02-01.03	TAS-138	07/26/11
	SOP-050-02-01	ASTM D3019	07/12/12



**APPROVED ASSEMBLIES:**

**Membrane Type:** SBS

**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(1):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Sopra-ISO s, ACFoam-III, Sopra-ISO+ s, H-Shield, Sopra-ISO r, Sopra-ISO+ r, ERNGY 3, ISO 95+ GL, Multi-Max FA-3, M-Shield		
Minimum 1.5" thick	N/A	N/A

**Note:** All insulations shall be adhered with High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous 3/4" wide ribbons at a maximum spacing of 12" o.c. 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.

**Base Sheet:** One layer of Elastophene Sanded in 1 in. ribbons of Soprema PV Adhesive spaced 12" o.c.

**Primer:** Base sheet primed with Elastocol 500 or Elastocol Stick.

**Ply Sheet:** None

**Membrane:** One layer of Elastophene Stick FR GR or Soprastar Stick self-adhered.

**Maximum Design Pressure:**

-45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)  
 -50 psf.; (See General Limitation #9.)



**Membrane Type:** SBS

**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(2):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete deck.

**All General and System Limitations apply.**

**Primer:** Elastocol Stick applied at a rate of 1 gal./sq., to deck.

**Vapor Barrier:** One ply of Sopralene Flam Stick\* or Sopralene Stick, self-adhered followed by the following layers:

Sopralene Flam Stick or Sopralene Stick self-adhered.

Or

Elastophene Flam, Elastophene Flam 2.2, Elastophene SP, Elastophene SP 3.0, Elastophene Flam HS, Sopralene 180 SP, Sopralene 180 SP 3.5, Sopralene 250 SP, Sopralene Flam 180, Sopralene Flam 250, heat welded.

Or

One or more layers of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene 180 PS 2.2, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq.

\*Requires heat welded top layer.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>H-Shield, Sopra-ISO r, M-Shield, ACFoam-II, Sopra-ISO s, ENRGY 3 Minimum 1.4" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved High Density Wood Fiberboard Minimum ½" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered with Insta-Stick Adhesive applied in continuous ¾" wide ribbons at a maximum spacing of 12" o.c. or with High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous ¾" wide ribbons at a maximum spacing of 12" o.c. 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.



**Base Sheet:  
(Optional)** One ply of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires heat welded ply membrane.

**Ply Sheet:** One or two plies of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180\*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, heat welded (if base membrane present)

Or

One ply of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of ASTM D2178 type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square

\*Requires heat welded cap membrane.

**Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square to sand surfaced ply membrane.

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -52.5 psf. with Insta-Stick (See General Limitation #9.)  
-67.5 psf.; with other insulation adhesives (See General Limitation #9.)



- Membrane Type:** SBS
- Deck Type 3I:** Concrete Decks, Insulated
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type A(3):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete deck.
- All General and System Limitations apply.**
- Primer:** Elastocol Stick applied at a rate of 1 gal./sq., to deck.
- Vapor Barrier:** One ply of Sopralene Flam Stick\* or Sopralene Stick, self-adhered followed by the following layers:
- Sopralene Flam Stick or Sopralene Stick self-adhered.
- Or
- Elastophene Flam, Elastophene Flam 2.2, Elastophene SP, Elastophene SP 3.0, Elastophene Flam HS, Sopralene 180 SP, Sopralene 180 SP 3.5, Sopralene 250 SP, Sopralene Flam 180, Sopralene Flam 250, heat welded.
- Or
- One or more layers of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene 180 PS 2.2, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprarstar Adhesive at a rate of 1.5 gal./sq.
- \*Requires heat welded top layer.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>H-Shield, Sopra-ISO r, M-Shield, ACFoam-II, Sopra-ISO s, ENRGY 3 Minimum 1.4" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Minimum ¼" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered with Insta-Stick Adhesive applied in continuous ¾" wide ribbons at a maximum spacing of 12" o.c. or with High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous ¾" wide ribbons at a maximum spacing of 12" o.c. 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.



**Base Sheet:  
(Optional)** One ply of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires heat welded ply membrane.

**Ply Sheet:** One or two plies of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180\*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, heat welded (if base membrane present)

Or

One ply of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of ASTM D2178 type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square

\*Requires heat welded cap membrane.

**Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square to sand surfaced ply membrane.

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(4):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete deck.

**All General and System Limitations apply.**

**Primer:** Elastocol Stick applied at a rate of 1 gal./sq., to deck.

**Vapor Barrier:** One ply of Sopralene Flam Stick\* or Sopralene Stick, self-adhered followed by the following layers:

Sopralene Flam Stick or Sopralene Stick self-adhered.

Or

Elastophene Flam, Elastophene Flam 2.2, Elastophene SP, Elastophene SP 3.0, Elastophene Flam HS, Sopralene 180 SP, Sopralene 180 SP 3.5, Sopralene 250 SP, Sopralene Flam 180, Sopralene Flam 250, heat welded.

Or

One or more layers of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene 180 PS 2.2, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq.

\*Requires heat welded top layer.

One or more layers of any of the following insulations.

<b>Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>H-Shield, Sopra-ISO r, M-Shield, ACFoam-II, Sopra-ISO s, ENRGY 3 Minimum 1.4” thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A

**Note: All insulation shall be adhered with Olybond Adhesive at 1 gal./sq. 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.**

**Base Sheet:  
(Optional)** One ply of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires heat welded ply membrane.



**Ply Sheet:** One or two plies of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180\*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, heat welded (if base membrane present)

Or

One ply of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of ASTM D2178 type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square

\*Requires heat welded cap membrane.

**Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square to sand surfaced ply membrane.

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.  
Surfacing is Required for smooth or sanded surfaced field cap membranes.  
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications  
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system

**Maximum Design Pressure:** -67.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(5):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete deck.

**All General and System Limitations apply.**

**Primer:** Elastocol Stick applied at a rate of 1 gal./sq., to deck.

**Vapor Barrier:** One ply of Sopralene Flam Stick\* or Sopralene Stick, self-adhered followed by the following layers:

Sopralene Flam Stick or Sopralene Stick self-adhered.

Or

Elastophene Flam, Elastophene Flam 2.2, Elastophene SP, Elastophene SP 3.0, Elastophene Flam HS, Sopralene 180 SP, Sopralene 180 SP 3.5, Sopralene 250 SP, Sopralene Flam 180, Sopralene Flam 250, heat welded.

Or

One or more layers of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene 180 PS 2.2, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq.

\*Requires heat welded top layer.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>H-Shield, Sopra-ISO r, M-Shield, ACFoam-II, Sopra-ISO s, ENRGY 3 Minimum 1.4” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>FescoBoard Minimum ¾” thick</b>	N/A	N/A

**Note: All insulation shall be adhered with hot asphalt full mop applied at a rate of 25 lbs./sq. 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.**

**Base Sheet:  
(Optional)** One ply of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires heat welded ply membrane.



- Ply Sheet:** One or two plies of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180\*, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, heat welded (if base membrane present)
- Or
- One ply of Elastophene Sanded, Elastophene Sanded 3.0, Elastophene HS Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of ASTM D2178 type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square
- \*Requires heat welded cap membrane.
- Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded.
- Or
- One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square to sand surfaced ply membrane.
- Surfacing:** Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
- Maximum Design Pressure:** -67.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(6):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete 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/ft <sup>2</sup>
Approved EPS Minimum 1.5" thick	N/A	N/A

**Note:** Insulation shall be adhered with High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous 3/4" wide ribbons at a maximum spacing of 12" o.c. 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.

**Base Sheet:** One ply of Sopralene Stick self-adhered.  
**Primer:** Base sheet primed with Elastocol 500 or Elastocol Stick.  
**Ply Sheet:** None  
**Membrane:** One layer of Soprastar Stick, Elastophene Stick FR GR, self-adhered.  
**Maximum Design Pressure:** -45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)  
-75 psf. (See General Limitation #9.)



**Membrane Type:** SBS

**Deck Type 3I:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(7):** One or more layers of insulation adhered with approved adhesive onto vapor barrier adhered onto primed concrete deck.

**All General and System Limitations apply.**

**Primer:** Concrete deck shall be primed with ASTM D-41 primer.

**Vapor Barrier:** FM approved woven fiberglass/polyester composite reinforced modified bitumen sheet adhered with FM Adhesive at 1.5 gallons / square.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Sopra-ISO s, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	N/A	N/A

**Note:** Insulation shall be adhered with High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous ½" wide ribbons at a maximum spacing of 12" o.c. 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.

**Primer:** Elastocol Stick or AquaTac Primer applied at a rate of 1 gal./sq., to top surface of any insulation, base or ply sheet prior to application of next layer.

**Base Layer:** One ply of Sopralene Flam Stick self-adhered.

**Ply Sheet:** None

**Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Soprastar Flam, Sopralast 50 TV Alu, heat welded

Or

One layer of Soprastar Stick, self-adhered to sand surfaced base or ply membrane primed with Elastocol 500, Elastocol Stick applied at ½ gal./sq.

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)  
-150 psf.; (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(8):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Primer:** Elastocol 500 or Elastocol Stick applied at a rate of 1 gal./sq.

**Vapor Retarder:** Elastophene Flam GR, heat welded

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved EPS</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard</b>		
<b>Minimum ¼" thick</b>	N/A	N/A

**Note: All Insulations shall be adhered with High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous ¾" wide ribbons at a maximum spacing of 12" o.c. 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.**

**Primer:** Top insulation layer primed with Elastocol 500 or Elastocol Stick

**(Optional)**

**Base Sheet:** One layer of Colvent SA self-adhered.

**Ply Sheet:** None

**Membrane:** One layer of Elastophene Stick FR GR self-adhered.  
 Or  
 SopraStar Stick, self-adhered to Elastocol Stick primed base sheet.  
 Or  
 One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, SopraStar Flam, Sopralast 50 TV Alu, heat welded.  
 Or  
 One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive. FM Adhesive (VOC). COLPLY Modified Adhesive or SopraStar Adhesive at a rate of 1.5 gal./sq.



**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.  
Surfacing is Required for smooth or sanded surfaced field cap membranes.  
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications  
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -152.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(9):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to deck.  
**Vapor Retarder:** Colvent SA self-adhered.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, ISO 95+ GL, ENRGY 3 Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8" thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with **High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG** applied in continuous 3/4" wide ribbons at a maximum spacing of 12" o.c. 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.

**Primer:** Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to the base sheet.

**Base Sheet:** One ply of Colvent SA self-adhered.

**Ply Sheet:** None.

**Membrane:** One layer of Elastophene Stick FR GR or Soprastar Stick, self-adhered to Elastocol 500 or Elastocol Stick primed sand surfaced base or ply membrane.  
 Or  
 One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Soprastar Flam, Sopralast 50 TV Alu, heat welded.  
 Or  
 One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive. FM Adhesive (VOC). COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq.

**Maximum Design Pressure:** -45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)  
 -155 psf.; (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(10):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, Sopra-ISO r, M-Shield, ENRGY 3 Minimum 2” thick</b>	N/A	N/A
<b>ISO 95+ GL (Only with Hot Asphalt, Insta-Stik or HVIA Adhesives) Minimum 2” thick</b>		
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulations shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or Insta-Stik, OlyBond 500, TITASET Roofing Adhesive, 3M Polyurethane Foam Insulation Adhesive CR-20 or Millennium One Step Foamable Adhesive or High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous ¾” wide ribbons at a maximum spacing of 12” o.c. 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.**

**Primer:** ASTM D41 asphaltic primer, applied at 0.75 gal./sq.  
**(Optional)**  
**Base Sheet:** One ply of Sopralene Stick or Colvent SA self-adhered.  
**Ply Sheet:** None.  
**Membrane:** One layer of SopraStar Stick, Elastophene Stick HR FR GR, Elastophene Stick FR GR, self-adhered to sand surfaced base or ply membrane primed with Elastocol 500, Elastocol Stick.  
 Or  
 One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, SopraStar Flam, Sopralast 50 TV Alu, heat welded.  
 Or  
 One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive. FM Adhesive (VOC). COLPLY Modified Adhesive or SopraStar Adhesive at a rate of 1.5 gal./sq.



**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.  
Surfacing is Required for smooth or sanded surfaced field cap membranes.  
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications  
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -172.5 psf. (See General Limitation #9)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(11):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Primer:** Concrete deck primed with ASTM D41 primer  
**Vapor Barrier:** One or more plies of Sopra G, Modified Sopra G, Sopra IV, Sopra VI,  
**(Optional)** Soprabase, Soprabase S adhered in FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons/square.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Sopra-ISO s, H-Shield, Sopra-ISO r, M-Shield Minimum 1.4" thick	N/A	N/A

**Note:** All insulation shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III – Green or High Velocity Insulation Adhesive PG applied in continuous 3/4" wide ribbons at a maximum spacing of 12" o.c. 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.

**Primer:** Elastocol 500, Elastocol Stick applied at a rate of 1 gal./sq., to top surface of base  
**(Optional)** or ply sheet prior to application of next layer.

**Base Sheet:** One ply of Sopralene Flam Stick self-adhered.

**Ply Sheet:** One or more layers of Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP, Elastophene SP 3.0, Sopralene Flam 180, Sopralene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250, Sopralene 250 SP, heat welded

**Membrane:** One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.  
 Surfacing is Required for smooth or sanded surfaced field cap membranes.  
 Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications  
 Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design Pressure:** -187.5 psf.; With vapor barrier (See General Limitation #9)  
 -225 psf.; Without vapor barrier (See General Limitation #9)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(12):** One or more layers of insulation adhered with approved adhesive.  
**Primer:** Elastocol 500, Elastocol Stick, AquaTac applied at a rate of 1 gal./sq., to deck.  
**Vapor Retarder:** Colvent SA self-adhered.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved EPS</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>		
	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard</b>		
<b>Minimum 1/8" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with High Velocity Insulation Adhesive II (HVIA-II), High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III Green or High Velocity Insulation Adhesive PG applied in continuous 3/4" wide ribbons at a maximum spacing of 12" o.c. 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.**

**Primer:** Elastocol 500, Elastocol Stick or AquaTac applied at a rate of 1 gal./sq., to the base sheet.

**Base Sheet:** One layer of Colvent SA self-adhered.

**Ply Sheet:** None

**Membrane:** One layer of Elastophene Stick FR GR or Soprastar Stick, self-adhered to Elastocol 500 or Elastocol Stick primed sand surfaced base or ply membrane.  
 Or  
 One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Soprastar Flam, Sopralast 50 TV Alu, heat welded.  
 Or  
 One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive. FM Adhesive (VOC). COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq.

**Maximum Design Pressure:** -45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)  
 -215 psf.; (See General Limitation #9.)



**Membrane Type:** SBS

**Deck Type 3:** Concrete Decks, Non-Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type F:** Base sheet adhered to primed substrate.

**All General and System Limitations apply.**

**Primer:** Elastocol Stick applied to deck at a rate of 1 gal./sq.

**Base Sheet:** One layer of Sopralene Stick or Sopralene Flam Stick\*, self-adhered  
\*Requires heat welded ply or cap sheet.

**Primer:** Base sheet is primed with Elastocol 500, Elastocol Stick at a rate of 1 gal./sq.

**(Optional)**

**Ply Sheet:** None

**Membrane:** One layer of Soprastar Stick, Elastophene Stick HR FR GR, Elastophene Stick FR GR, self-adhered to sand surfaced base or ply membrane primed with Elastocol 500, Elastocol Stick.

Or

One layer of Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Elastophene Flam HS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, heat welded

Or

One layer of Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Elastophene HS FR GR, Sopralene 180 FR GR, Sopralene 250 FR GR, adhered in hot asphalt at 25 lbs./sq. or applied in FM Adhesive, FM Adhesive (VOC), COLPLY Modified Adhesive or Soprastar Adhesive at a rate of 1.5 gal./sq. to sand surfaced base or ply membrane.

**Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.

Surfacing is Required for smooth or sanded surfaced field cap membranes.

Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications

Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.

**Maximum Design** -45 psf.; Soprastar Stick with Elastocol 500 (See General Limitation #9.)

**Pressure:** -67.5 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 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 Professional Engineer, Registered 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 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.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

**END OF THIS ACCEPTANCE**



NOA No.: 13-0205.03  
Expiration Date: 12/31/14  
Approval Date: 08/01/13  
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