MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

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 by the BCCO and accepted by the Building Code and Product Review Committee 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 BCCO (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. BCCO reserves the right to revoke this acceptance, if it is determined by BCCO that this product or material fails to meet the requirements of the applicable building code.

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

DESCRIPTION: Soprema Waterproofing Systems

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

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 04-0927.08 and consists of pages 1 through 32.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Waterproofing
Material:	Modified Bitumen SBS
Deck Type:	Steel and Concrete
Maximum Design Pressure	-570.0 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Sopra-G	39" x 108' (3.5 sq.)	ASTM D 4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate.
Modified Sopra-G	39" x 108' (3.5 sq.)	ASTM D 4601	Fiberglass reinforced modified asphalt base sheet for bonding or mechanically attaching to substrate.
Sopraglass M	39" x 66' (2 sq.)	ASTM D 5147	Fiberglass reinforced modified bitumen base sheet. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopraglass M GR	39" x 33' (1 sq.)	ASTM D5147	Fiberglass reinforced modified bitumen base sheet with a mineral granular top surface. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopra ESHAvent	39" x 49' (1.5 sq.)	ASTM D 1970	Fiberglass reinforced modified bitumen membrane with self-adhering round areas on back side and a sanded top side.
Sopraglass 40	39" x 82' (2.5 sq)	ASTM D 4601 Type I	Fiberglass reinforced oxidized asphalt base sheet for bonding, mechanically attaching or ribbon stripping to substrate.
Sopraglass 100	39" x 66' (2 sq.)	ASTM D 4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate.
Soprabase	39" x 99' (3 sq.)	ASTM D 6164	Oxidized asphalt, polyester reinforced base sheets. Primarily used as a mechanically attached anchor sheet. Applied in hot asphalt, cold adhesive or ribbon stripped.
Sopra IV or VI	36" x 180' (5 sq.)	ASTM D 2178 Type IV or VI	Type IV or VI, fiberglass reinforced, smooth surfaced ply sheet. Sopra IV or VI are used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Colvent TG	39" x 49' (1.5 sq.)	ASTM D 6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied heat weldable strips on back side.

Colvent SA	39" x 49' (1.5 sq.)	ASTM D 6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied self-adhering strips on back side
Colvent 180 TG	39" x 43' (1 sq.)	ASTM D 6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side.
Colvent 180 SA	39" x 43' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied self-adhering strips on back side
Colvent 180 TG GR	39" x 43' (1 sq.)	ASTM D 6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side, and a mineral granular top surface.
Colvent 180 SA GR	39" x 43' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied self-adhering strips on back side and a mineral granular top surface.
Elastophene Sanded, Elastophene FR	39" x 49' (1½ sq.)	ASTM D 6163	Fiberglass reinforced modified bitumen membrane sanded on both sides, used as a base and top ply. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Sanded 3.0	39" x 33' (1sq.)	ASTM D 6163	Fiberglass reinforced modified bitumen membrane sanded on both sides, used as a base and top ply. Applied in hot asphalt, cold adhesive or ribbon stripped.
Elastophene HD	39" x 33' (1 sq.)	ASTM D 6163	Fiberglass reinforced modified bitumen membrane sanded on both sides, used as a base and top ply. Applied in hot asphalt, cold adhesive or ribbon stripped.
Elastophene HS FR	39" x 66' (2 sq.)	ASTM D 6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Sanded FR	39" x 49' (1½ sq.)	ASTM D 6163	Fiberglass reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene HR	39" x 49' (1½ sq.)	ASTM D 6163	Fiberglass scrim reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene HR FR	39" x 49' (1½ sq.)	ASTM D 6163	Fiberglass scrim reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene HP	39" x 66' (2 sq.)	ASTM D 5147	Fiberglass/non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.

Elastophene PS, Elastophene PS 3.0	39" x 49' (1½ sq.)	ASTM D 6163	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 2.2mm	39" x 49' (1½ sq.)	ASTM D 6163	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 3.0mm	39" x 49' (1 sq.)	ASTM D 6163	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 D 6163	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' (1½ sq.)	ASTM D 6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam HS FR	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 Flam HP	39" x 66' (2 sq.)	ASTM D 5147	Fiberglass/non-woven polyester reinforced modified bitumen membrane with plastic burn-off film on both sides. Applied by heat welding.
Elastophene 180 Sanded	39" x 49' (1½ sq.)	ASTM D 6164	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 48' (1½ sq.)	ASTM D 6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top, used as a base sheet. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene GR, Elastophene LS FR GR	39" x 33' (1 sq.)	ASTM D 6163	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 or FR+ GR	39" x 33' (1 sq.)	ASTM D 6163	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 HR FR GR	39" x 33' (1 sq.)	ASTM D 6163	Fiberglass scrim 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 D 6162	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 HP FR GR	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass/non-woven polyester 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, Elastophene Flam LS FR GR	39" x 33' (1 sq.)	ASTM D 6163	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 or FR+ GR	39" x 33' (1 sq.)	ASTM D 6163	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 HR FR GR	39" x 33' (1 sq.)	ASTM D 6163	Fiberglass scrim 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).
Elastophene Flam HS FR GR	39" x 33' (1 sq.)	ASTM D 6162	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).
Elastophene Flam HP FR GR	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass/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 180, 250 or 350	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D 6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides, used as a base/ply/cap. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 SP 3.5 mm	39" x 33' (1 sq.)	ASTM D 6164	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).
Soprafix [S], [H], [F] and [X]	39" x 33' (1 sq.)	ASTM D 6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.

Soprafix	39" x 33' (1 sq.)	ASTM D 6164	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 D 6164	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 (X)	39" x 33' (1 sq.)	ASTM D 6164	Non-woven polyester reinforced modified bitumen membrane with plastic burn-off film or sanded on the top and bottom surfaces and a 6-inch wide side lap. Applied by heat welding.
Sopralene Flam 180, 250 or 350	39" x 33' (1 sq.)	ASTM D 6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film, used as a base/ply. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180, 250 or 350 GR or FR GR	39" x 33' (1 sq.)	ASTM D 6164	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, 250 or 350 GR	39" x 33' (1 sq.)	ASTM D 6164	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, 250 or 350 FR GR or FR+ GR	39" x 33' (1 sq.)	ASTM D 6164	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 2.7 mm	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	various	ASTM D 6298	Fiberglass reinforced modified bitumen sheeting faced with aluminum, copper or stainless steel foil. Applied by heat welding of ribbon stripping (after removal of plastic burn-off film).
Soprastar Flam	39" x 33' (1 sq)	ASTM D6163	Fiberglass 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 Stick	39" x 33' (1 sq)	ASTM D6163	Fiberglass reinforced SBS modified bitumen membrane with a release film covered self-adhering bottom side and a reflective white top surface.
UNILAY	39" x 33' (1 sq.)	ASTM D 6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants and surfaced with mineral granules. Applied by mechanical attachment, heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Stick	39" x 33' (1 sq.)	ASTM D 6164	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 D 6164	Self adhered, polyester reinforced membrane with a release film on the bottom and a plastic burn-off film on the top.
EPS Flam Stick	39" x 33' (1 sq.)	ASTM D 6163	Self adhered, film surfaced, glass mat/glass grid reinforced membrane with a release film on the bottom and a plastic burn-off film on the top.
Colphene 1500	39" x 33' (1 sq.) 39" x 132' (4 sq.) 39" x 66' (2.1 sq.)	ASTM D 1970	Self adhered, non-reinforced membranes used as a vapor retarder.
Colphene GR, Colphene FR GR	39" x 33' (1 sq.)	ASTM D 6163	Self adhered, granule surfaced, fiberglass reinforced membranes.
Colphene HR FR GR	39" x 33' (1 sq.)	ASTM D 6163	Self adhered, granule surfaced, fiberglass scrim reinforced membranes.
Lastobond S	39" x 49' (1½ sq.)	ASTM D 1970	Self-adhered underlayment membrane.
Lastobond Shield	various	ASTM D 1970	Self-adhering underlayment membrane.
Lastobond Shield HT	various	ASTM D 1970	Self-adhering underlayment membrane.
Lastobond Shield-R	various	ASTM D 1970	Self-adhering underlayment membrane.
Lastobond Shield-HT RW	various	ASTM D 1970	Self-adhering underlayment membrane.
Sopratape 606	5" wide		Bituminous tape for sealing of side and head laps.
Sopramastic 200	17 oz. pouch or 10.4 oz cartridge		Caulking compound.
Elastocol 400, 500 and 600c		ASTM D 41	Asphalt primers.
Sopracolle "E"			Cold-applied adhesive used to bond membrane to prepared substrates or to other membranes.
ALSAN Flashing™	1.25 gallon pail or 3.75 gallon pail		One part polyurethane/bitumen resin, moisture cure compound.
SBS Mastic	10.4 oz tube		Plasticized rubber/bitumen mastic compound.
SBS Elastic Cement	5 gallon pail		Elastomeric bitumen based mastic compound.

Soprawalk	39" x 26' (3/4 sq)		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)		Proprietary	One part elastomeric urethane foam adhesive.
High Velocity® Insulation Adhesive III (HVIA-III)		Proprietary	Two part elastomeric urethane foam adhesive.
FM Adhesive Squeegee Grade	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) Squeegee Grade	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
FM Adhesive (VOC) Trowel Grade	5 gallon pail	Proprietary	Elastomeric bitumen based cold adhesive.
High Velocity® Membrane Adhesive (HVMA)	5 gallon pail or 55 gallon drum	Proprietary	Polyurethane bitumen adhesive.
Sopraboard	various		Mineral fortified Asphaltic cored cover board between two layers of asphalt saturated fiberglass mat.
Sopra Filter Sheet TXC-75	10'x 150'		Non-woven polypropylene filter sheet
Granules	5 gallon pail or Supersac		Semi-ceramic coated colored granules.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Apache Pyrox, Apache White Line, Apache Pyrox PSI-25, Apache White Line PSI-25	Polyisocyanurate foam insulation	Apache Products Company
Apache Millox, Apache Millox-P	Composite Polyisocyanurate insulation	Apache Products Company
ACFoam II, ACFoam III	Polyisocyanurate foam insulation	Atlas Energy Products
ACFoam Composite	Composite Polyisocyanurate insulation board	Atlas Energy Products
FlintBoard ISO, FlintBoard ISO Cold	Polyisocyanurate foam insulation	CertainTeed Corp.
FlintBoard ISO Plus	Composite Polyisocyanurate insulation board	CertainTeed Corp.
Hytherm AP	Polyisocyanurate foam insulation	Dow
Hytherm Composite	Composite Polyisocyanurate insulation	Dow
ISO 95+, ISO 95+ (25psi)	Polyisocyanurate foam insulation	Firestone
ISO 95+ Composite	Composite Polyisocyanurate insulation board	Firestone
EnergyGuard ISO, EnergyGuard Ultra	Polyisocyanurate foam insulation	GAF
EnergyGuard Composite	Composite Polyisocyanurate insulation board	GAF
Extruded or Expanded Polystyrene	Polystyrene Insulation	generic
Gypsum	Gypsum board	generic
High Density Wood Fiberboard	Wood fiber insulation board	generic
Perlite Insulation	Perlite insulation board	generic
DensDeck, DensDeck Prime, DensDeck Fireguard, DensDeck Prime Fireguard, DensDeck DuraGuard	Water resistant gypsum board	G-P Gypsum Corp.
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, Inc.
H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, Inc.
H-Shield-P, H-Shield-WF	Composite Insulation board	Hunter Panels, Inc.
ENRGY-2	Polyisocyanurate foam insulation	Johns Manville
ENRGY-2 Plus, Composite, Fesco Foam	Composite Insulation board	Johns Manville
ENRGY-3	Polyisocyanurate foam insulation	Johns Manville
ENRGY-3 Plus	Composite Insulation board	Johns Manville
Multi-Max FA	Polyisocyanurate foam insulation	RMax
Thermaroof Composite	Composite Insulation board	RMax
UltraMax	Polyisocyanurate foam insulation	RMax
Multi-Max FA-3	Polyisocyanurate foam insulation	RMax
Thermaroof Composite-3	Composite insulation board	RMax
SECUROCK®	Gypsum board	US Gypsum

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Tri-Fix Fastening System	Fastening system for base sheet attachment to lightweight concrete, gypsum or cementitious wood fiber decks.	3" diameter plate with various length fasteners	Soprema, Inc.
2.	#12, #14 & #15 Soprema Fasteners	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.		Soprema, Inc.
3.	Soprafix [X]#15-EL	Fasteners for membrane attachment to steel or concrete decks.		Soprema, Inc.
4.	Soprafix Plates	AZ-55 Galvalume steel plate for use with the Soprafix system.	2" diameter	Soprema, Inc.
5.	Soprema Plates	Metal or plastic stress plates for use with Soprema Fasteners.	3" diameter	Soprema, Inc.
6.	Sopradisc	Galvanized metal bearing plate used for side lap attachment of Soprafix system.	2" diameter	Soprema, Inc.
7.	Soprema Isofast IF/IFT	AZ-50 Galvalume steel plate for use with the Soprafast System.	2¾" diameter	Soprema, Inc.
8.	Soprafix/Soprafast	Stress plates for membrane securement.	3" diameter	Soprema, Inc.
9.	UNILAY Plate	Stress plates for Unilay membrane securement.	2-3/8" diameter	Soprema, Inc.
10.	#12, #14 & #15 Dekfast Fastener	Insulation fastener		SFS Intec, Inc.
11.	Omega Fastener	Stainless steel insulation fastener		SFS Intec, Inc.
12.	Dekfast Hex Plate	Galvalume AZ50 steel plate	2 $^{7}/_{8}$" x 3 ¼"	SFS Intec, Inc.
13.	Dekfast Lock Plate	Polypropylene locking plate.	3" x 3 ¼"	SFS Intec, Inc.
14.	Twin Loc-Nails	Base ply fastening systems for lightweight concrete, gypsum or cementitious wood fiber decks		ES Products, Inc.
15.	FM-30, FM-45, FM-60, FM-90 Fasteners	Base ply fastening systems for lightweight concrete decks		ES Products, Inc.
16.	OMG AccuTrac Hextra Fasteners	Insulation fastener for wood, steel and concrete.		OMG, Inc.
17.	OMG Accutrac Plate	Galvalume square stress plate	3" square	OMG, Inc.
18.	OMG 3" Standard Metal Plate	Galvalume stress plate.	3" round 3" square	OMG, Inc.

19.	Olympic CR Base Ply Fasteners	Base ply fastening assembly		OMG, Inc.
20.	NTB Magnum	Glass reinforced Nylon insulation fastener for gypsum & CWF decks with barbs.		OMG, Inc.
21.	NTB Plate	Galvalume stress plate	3" round	OMG, Inc.
22.	Lite-Deck	Insulation fastener for CWF and Gypsum decks.		OMG, Inc.
23.	Lite-Deck Plate	Galvalume stress plate	3" round	OMG, Inc.
24.	Olympic Fastener #12, #14 & #15	Insulation fastener.		OMG, Inc.
25.	Olympic CD-10	Insulation fastener.		OMG, Inc.
26.	Olympic Fluted Nail	Insulation fastener.		OMG, Inc.
27.	Olympic Standard	Galvalume AZ50 steel plate	3" round	OMG, Inc.
28.	Olympic Plastic	Polypropylene stress plate	3.25" round	OMG, Inc.
29.	Powerlite	Insulation fastener.		Powers Fasteners, Inc.
30.	Powerlite	Galvalume stress plate.	3" round	Powers Fasteners, Inc.
31.	Base-Lok Fasteners	Base sheet fastener for lightweight concrete, cwf and gypsum decks	1.75" long with 3" dia. head	Simplex Nails
32.	Turbo Tube-Lok Fasteners	Base sheet fastener for lightweight concrete, cwf and gypsum decks	1.75" long with 2" dia. head	Simplex Nails
33.	SFS Base-Lok Fasteners	Base sheet fastener for lightweight concrete, cwf and gypsum decks	1.75" long with 3" dia. head	SFS Intec, Inc.
34.	Insul-Fixx Fastener	Insulation fastener for wood, steel and concrete.		SFS Intec, Inc.
35.	Isofast Fasteners	Insulation fastener for wood, steel and concrete.		SFS Intec, Inc.
36.	Extra Load Fasteners #15	Fasteners for membrane attachment to steel or concrete decks.		SFS Intec, Inc.
37.	Insul-Fixx S Plate	Galvalume AZ50 steel plate	3" round	SFS Intec, Inc.
38.	Insul-Fixx P Plate	Polyethylene stress plate	3" round	SFS Intec, Inc.
39.	Isofast Plate	Square or oblong galvalume steel plates for use with Isofast fasteners		SFS Intec, Inc.
40.	#14 ES-I Fastening System	Insulation fastening assembly with plate.	3" round	SFS Intec, Inc.
41.	#12, #14 & #15 Dekfast Fastener	Insulation fastener		SFS Intec, Inc.
42.	Omega Fastener	Stainless steel insulation fastener		SFS Intec, Inc.
43.	Dekfast Hex Plate	Galvalume AZ50 steel plate	2 $^{7}/_{8}$" x 3 ¼"	SFS Intec, Inc.
44.	DekFlat Lock Plate	Polypropylene locking plate.	3" x 3 ¼"	SFS Intec, Inc.
45.	Tru-Fast TL Fastener	Insulation fastener for lightweight concrete, CWF and gypsum decks		The Tru-Fast Corp.
46.	Tru-Fast Fastener	Insulation fastener for wood, steel and concrete.		The Tru-Fast Corp.

47.	Tru-Fast HD or EHD	Insulation fastener for wood, steel and concrete.		The Tru-Fast Corp.
48.	Tru-Fast MP-3	Galvalume AZ50 steel plate	3" round	The Tru-Fast Corp.
49.	Tru-Fast Metal	Galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
50.	Tru-Fast Plastic	Polypropylene plate	3" round	The Tru-Fast Corp.
51.	ES Products Batten Bar-TL	Batten bar		ES Products, Inc.
52.	#12 OMG Fastener	Insulation fastener		OMG, Inc.
53.	OMG Polymer Batten Strip	Modified polymer batten bar		OMG, Inc.
54.	OMG MAXLoad	Insulation fastener		OMG, Inc.
55.	Olympic Heavy Duty	Insulation fastener		OMG, Inc.
56.	Olympic ASAP 3P	Pre-assembled insulation fastener and plastic plate	3" round	OMG, Inc.
57.	Olympic ASAP 3S	Pre-assembled insulation fastener and steel plate	3" round	OMG, Inc.
58.	Isofast IF2	Insulation fastener		SFS Intec, Inc.
59.	Isofast IF/IG	Galvalume AZ50 steel plate	82 x 40 mm	SFS Intec, Inc.
60.	Isofast IFC/IW	Galvalume AZ50 steel plate	70 x70 mm	SFS Intec, Inc.
61.	#15 Dekfast HS	Insulation fastener		SFS Intec, Inc.
62.	Galvalume Steel 3" Round Insulation Plate	Galvalume AZ50 steel plate	3" round	SFS Intec, Inc.
63.	K-Fast Fastener	Insulation Fastener		SFS Intec, Inc.
64.	Dekfast Steel Batten Bar	Galvalume AZ50 steel		SFS Intec, Inc.
65.	Dekfast Coiled Batten Strip	Batten bar		SFS Intec, Inc.
66.	Soprafix #14 PAS-2" SB Stress Plate	Pre-assembled plate and fastener	2" diameter	Soprema, Inc.
67.	Soprema 3" Insulation Plate	Stress plate	3" diameter	Soprema, Inc.
68.	Soprafix 2" – SB Stress Plate	Stress plate	2" diameter	Soprema, Inc.
69.	Soprafix 2-3/8" – SB Stress Plate	Stress plate	2-3/8" diameter	Soprema, Inc.
70.	Soprafix (X) 2-3/4" Stress Plate	Stress plate	2-3/4" diameter	Soprema, Inc.
71.	Soprafix MBB-R	Metal Batten Bar		Soprema, Inc.
72.	Soprema PAS #12-3" Insulation Plate	Pre-assembled plate and fastener	3" diameter	Soprema, Inc.
73.	Soprafix #21-K Fastener	Insulation and membrane fastener		Soprema, Inc.
74.	Tru-Fast DP	Insulation fastener for wood, steel and concrete		The Tru-Fast Corp.
75.	Tru-Fast SHD	Insulation fastener for wood, steel and concrete		The Tru-Fast Corp.
76.	Tru-Fast MPH-3	Galvalume AZ50 steel plate	3" round	The Tru-Fast Corp.
77.	Tru-Fast MP-2000			The Tru-Fast Corp.
78.	Tru-Fast MPB-2000			The Tru-Fast Corp.

79.	Tru-Fast MPB-2400		The Tru-Fast Corp.
80.	Tru-Fast BB-18 Batten Bar	Galvalume AZ55 steel batten bar	The Tru-Fast Corp.
81.	Tru-Fast BB-18-R Batten Bar	Galvalume AZ55 steel batten bar with recessed holes	The Tru-Fast Corp.
82.	Tru-Fast Twin-Loc Batten Bar	Batten bar	The Tru-Fast Corp.

APPROVED SURFACING/COATING OPTIONS:

TABLE 4

System Number	Manufacturer	Application
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	Gravel applied at 400 lbs/sq., adhered with FM Adhesive or FM Adhesive (VOC) at 4 gal/sq.
4.	Karnak Corporation	Karnak #97 Fibrated Aluminum Roof Coating applieat at an application rate of 1.5 gal/sq.
5.	Soprema	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	Acryshield® A500 applied in two coats at an application rate of 1 gal/sq/coat.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Atlantic & Caribbean Roof Consulting	ACRC# 08-0359	Wind Uplift	6/20/08
Factory Mutual Research Corp.	J.I. 1W8A1.AM	Wind Uplift Classification	07.15.93
	J.I. 1Z3A6.AM	Wind Uplift Classification	04.27.95
	J.I. 2D0A0.AM	Wind Uplift Classification	08.15.97
	FM Approval Guide	Uplift Classifications	Published Annually
	3026028	FM 4470	05.25.06
	3028631	FM 4470	08.09.07
	3029098	FM 4470	10.25.07
Underwriters Laboratories, Inc.	UL Roofing Materials and Systems Directory	File No. R11436 Fire Classification	Published Annually
Dynatech Engineering Corp.	10.94.27	Wind Uplift	10.27.94
	2491-04.95	Wind Uplift	01.04.95
Exterior Research & Design, LLC	2003.02.97-1	Wind Uplift	02.15.97
	2003-2.04.97-1	Wind Uplift	04.15.97
	2002.07.97-1	Wind Uplift	08.15.97
	2755.09.02	Wind Uplift	10.19.02
	2761.09.03	Wind Uplift	09.02.03
	2761.10.03-2	Wind Uplift	10.03.03
	2757.02.05	Physical Properties	02.03.05
	S6740.11.07	Physical Properties	11.02.07
IRT of S. Florida, Inc.	01-002	TAS 114	01.21.01
ITS / Warnock Hersey		ASTM D 5147 Physical Property Testing	05.27.93

APPROVED APPLICATIONS:

Deck Type 2I: Steel, Insulated

Deck Description: Terrace/Plaza Deck, Planter, Traffic

System Type 1: Waterproofing System for Terrace/Plaza Decks, Planters or Traffic Areas

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Toprox Minimum 1" thick	2, 24	1:2.4 ft^2
AC Foam II, ACFoam III, H-Shield (flat or tapered) Minimum 1.5" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:2 ft^2
ACFoam Composite, ENRGY-2 Composite, ENRGY-2 Plus, ENRGY-3 Plus (flat or tapered) Minimum 1.5" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:4 ft^2
AC Foam II, ACFoam III, ENRGY-2, ENRGY-3, PSI-25 H-Shield (flat or tapered) Minimum 2" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:4 ft^2
ENRGY-2, ENRGY-3, PSI-25 (flat or tapered) Minimum 1.4" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:2.67 ft^2
Dens-Deck Minimum ¼" thick	2, 10, 16, 34	1:4 ft^2
Fireguard, type X gypsum Minimum 5/8" thick	2, 10, 16, 34	1:4 ft^2
GAFTEMP Permalite, Fesco Board Minimum ¾" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:2 ft^2
Esgard, High Density Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard Minimum 1" thick	2, 10, 11, 16, 24, 34, 35, 40, 46	1:4 ft^2

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

Primer: Elastocol 400, 500 or ASTM D 41 primer applied to top of composite board or top of cover board in insulation assembly.

Base Sheet:	Sopralene Flam 180 or 250, heat welded.	
Top Sheet:	Sopralene Flam 250 GR, Sopralene Flam Antirock, Sopralene Flam 180 GR heat welded.	
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.	
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.	
Drain Board:	SopraDrain (for planters only)	
Filter Layer:	Sopra Filter Sheet TXC-75 (for planters only)	
Surfacing:	**For Terrace/Plaza Deck:**	Mortar set tile or paver system
	For Planters:	Soil or Sand
	For Traffic Areas:	Mortar set exterior traffic grade surface tile.
Maximum Design Pressure:	-52.5 psf (See General Limitation #9)	

Deck Type 2I: Steel, Insulated

Deck Description: Terrace/Plaza Deck, Planter, Traffic

System Type 2: Waterproofing System for Terrace/Plaza Decks, Planters or Traffic Areas

All General and System Limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Dens Deck		
Minimum ¼" thick	2, 10, 24, 34	1:4 ft^2
Fireguard, Fiberbond		
Minimum 5/8" thick	2, 10, 24, 34	1:4 ft^2

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 Roofing Application Standard RAS 117 for fastening details).

Intermediate Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Dow Chemical ROOFMATE or PLAZAMATE		
Minimum 1.5 thick	N/A	N/A

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Perlite		
Minimum ¾" thick	N/A	N/A

Note: Intermediate and top layer of insulation shall be adhered with approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2, allow asphalt to cool to 225°-250°F before placement of insulation. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Primer: Elastocol 400, 500 or ASTM D 41 primer applied to top of composite board or top of cover board in insulation assembly.

Base Sheet: Sopralene Flam 180 or 250, heat welded.

Top Sheet: Sopralene Flam 250 GR, Sopralene Flam Antirock, Sopralene Flam 180 GR heat welded.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.

Drain Board: SopraDrain (for planters only)

Filter Layer: XC-75 (for planters only)

Surfacing:
- **For Terrace/Plaza Deck:** Mortar set tile or paver system
- **For Planters:** Soil or Sand
- **For Traffic Areas:** Mortar set exterior traffic grade surface tile.

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

Deck Type 2I: Steel, Insulated

Deck: 18-22 ga. Grade 33 Steel decking fastened 6" o.c. with two Traxx/5 fasteners and 0.75" diameter washers to supports spaced maximum 6' o.c. Deck side laps are fastened maximum 13" o.c. with Traxx/1 fasteners.

Deck Description: Terrace/Plaza Deck, Planter, Traffic

System Type 3: Waterproofing System for Terrace/Plaza Decks, Planters or Traffic Areas

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
AC Foam II, H-Shield, M-Shield, Hy-Therm AP, ENRGY 3, ISO 95+GL, Multi-Max 3 (flat or tapered)		
Minimum 1.5" thick	N/A	N/A

Middle Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck (staggered from base layer)		
Minimum 0.5" thick	N/A	N/A

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Sopraboard (staggered from middle layer)		
Minimum 0.25" thick	2 (min #14)	1:4

Note: Insulation layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One ply of Soprafix [X] or Sopralene Flam 250, heat welded to insulation with a minimum 6" wide lap, then fastened to the deck as described below:

Fastening #1: Attach base sheet using Soprafix 2-3/8" SB Stress Plates and Soprema #15 Fasteners in rows spaced maximum 18" o.c., with fasteners spaced maximum 6" o.c. within each row.

(Meets Maximum Design Pressure of -157.5 psf, See General Limitation #7)

Fastening #2: Attach base sheet using Soprafix 2-3/8" SB Stress Plates and Soprema #15 Fasteners in rows spaced maximum 18" o.c., with fasteners spaced maximum 12" o.c. within each row.

(Meets Maximum Design Pressure of -60.0 psf, See General Limitation #7)

Fastening #3: Attach base sheet using Soprafix 2-3/8" SB Stress Plates and Soprema #15 Fasteners in rows spaced maximum 12" o.c., with fasteners spaced maximum 12" o.c. within each row.

(Meets Maximum Design Pressure of -157.5 psf, See General Limitation #7)

Ply Sheet: Sopralene Flam 180, Sopralene Flam 250, Sopralene Flam 350 heat welded with minimum 3" wide lap.

Membrane:	Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 250 GR, Sopralene Flam 250 FR GR, Sopralene Flam 350 GR, Sopralene Flam 350 FR GR, heat welded with minimum 3" wide lap.
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:	See Fastening Requirements Above.

Deck Type 3I:	Concrete Decks, Non-Insulated
Deck Description:	Min. 2500 psi.
System Type 4:	Tile Finish over Membrane.

All General and System Limitations apply.

Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
Primer:	Elastocol 400, 500 or ASTM D 41 primer applied to deck at a minimum rate of 100-150 ft^2/gal.
Base Sheet:	One or more plies of Elastophene Flam, heat welded according to manufacturer's application instruction.
Top Sheet:	Elastophene Flam GR or Elastophene Flam LS FR GR, heat welded according to manufacturer's application instruction.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.
Insulation:	Min. 2" thick Dow Chemical STYROFOAM High Load 60 Insulation (Minimum 60 psi) adhered to membrane with High Velocity Insulation Adhesive II applied in ¾" wide strips spaced 12" o.c. or hot asphalt is applied to the membrane at a rate of 20-40 lbs/100 ft^2 and allowed to cool to 225°-250°F before placement of extruded polystyrene boards.
Surfacing:	Exterior grade ceramic plaza deck walking tiles (Maximum size of 12" x 12" and minimum ½" thick), tiles shall be embedded into dry-set Portland Cement applied with a ¼" square notched trowel. Tiles should then be carefully embedded in the mortar bed and tapped in place to insure full solid bearing. Tile shall be installed in accordance with applicable Building Code.
Maximum Design Pressure:	-277.5 psf (See General Limitation #9)

Deck Type 3I:	Concrete Decks, Non-Insulated
Deck Description:	Min. 2500 psi.
System Type 5:	Tile Finish over Membrane.

All General and System Limitations apply.

Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
Primer:	Elastocol 400, 500 or ASTM D 41 primer applied to deck at a rate of 100-150 ft^2/gal.
Base Sheet:	One or more plies of Elastophene Flam or Sopralene Flam 180, 250 or 350, heat welded according to manufacturer's application instruction.
Top Sheet:	Elastophene Flam GR, Elastophene Flam LS FR GR, Sopralene Flam 180, 250 or 350 GR or Sopralene Antirock, heat welded according to manufacturer's application instruction.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.
Surfacing:	Exterior grade ceramic plaza deck walking tiles (Maximum size of 12" x 12" and minimum ½" thick), tiles shall be embedded into dry-set Portland Cement applied with a ¼" square notched trowel. Tiles should then be carefully embedded in the mortar bed and tapped in place to insure full solid bearing. Tile shall be installed in accordance with applicable Building Code.
Maximum Design Pressure:	-457.5 psf (See General Limitation #9)

Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	Min. 2500 psi concrete or concrete plank.
System Type 6:	Concrete Paver Finish over Membrane.

All General and System Limitations apply.

Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
Primer:	Elastocol 400, 500 or ASTM D 41 primer applied to deck at a rate of 100-150 ft^2/gal.
Base Sheet:	One or more plies of Sopralene Flam 180 or 250, heat welded according to manufacturer's application instruction.
Top Sheet:	Sopralene Flam 180, 250, 350 GR Sopralene Flam 180, 250, 350 FR GR, heat welded according to manufacturer's application instruction.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.
Insulation:	(Optional) Min. 1.5" thick Dow Chemical STYROFOAM High Load 60 Insulation (Min. 60 psi) adhered to membrane with High Velocity Insulation Adhesive II applied in ¾" wide strips spaced 12" o.c. or hot asphalt is applied to the membrane at a rate of 20-40 lbs/100 ft^2 and allowed to cool to 225°-250°F before placement of extruded polystyrene boards.
Surfacing:	Concrete pavers (24" x 24" x 1.5" thick), 4000 psi minimum shall be embedded into dry-set Portland Cement applied with a ¼" square notched trowel. Pavers should then be carefully embedded in the mortar bed and tapped in place to insure full solid bearing. Tile shall be installed in accordance with applicable Building Code.
Maximum Design Pressure:	-340 psf (See General Limitation #9)

Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type 7:	One or more layers of insulation adhered with approved adhesive
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Base Insulation:	Min 1.5" thick ASTM C578, Type I expanded Polystyrene applied in High Velocity Insulation Adhesive II in ¾" diameter strips spaced 12" o.c.
Base Layer:	One layer of Sopralene Flam Stick*, EPS Flam Stick*, Sopralene Stick, Colvent SA or Colvent 180 SA, self-adhered. * Requires heat welded ply or cap membrane.
Primer:	Sand surfaced base membranes are primed with Elastocol 400, 500, Elastocol 600c or Aquatac applied at a rate of 1 gal/sq. (Optional) Elastocol 500, Elastocol 600c or AquaTac applied at a rate of 1 gal/sq, to top surface of any base or ply sheet prior to application of next layer
Ply Layer:	(Optional) One or more layers of Sopralene Flam Stick*, EPS Flam Stick*, Sopralene Stick, self-adhered to primed sand surfaced base membrane Or Elastophene Flam*, Elastophene Flam FR*, Elastophene Flam 2.2 mm*, Elastophene Flam HS FR*, Elastophene Flam HR 3.0 mm*, Elastophene Flam HP*, Elastophene SP, Elastophene 180 SP, Sopralene Flam 180, Sopralene Flam 180 2.7 mm*, Sopralene 180 SP, Sopralene 180 SP 3.5 mm, Sopralene Flam 250*, Sopralene 250 SP, Sopralene Flam 350*, Sopralene 350 SP, heat welded Or Elastophene Sanded, Elastophene Sanded FR, Elastophene Sanded 3.0 mm, Elastophene HR, Elastophene HR 3.0 mm, Elastophene HD, Elastophene HP, Elastophene PS*, Elastophene 180 Sanded, Elastophene 180 PS*, Sopralene 180 Sanded, Sopralene 180 Sanded 3.5 mm, Sopralene 180 PS*, Sopralene 250 Sanded, Sopralene 250 Sanded 3.5 mm, Sopralene 250 PS*, Sopralene 250 PS 2.7 mm, Sopralene 350 Sanded, Sopralene 350 PS*, adhered in hot asphalt at 25 lbs/sq. to sand sufaced base membrane. *Requires heat welded cap membrane.

Top Layer:

One layer of Colphene HR FR GR, Colphene FR GR, Colphene GR, Sopralene Stick* or Colphene SA GR, self-adhered to primed sand surfaced base or ply membrane

Or

Soprastar Stick, self-adhered to Elastocol 600c primed sand surfaced base or ply membrane.

Or

Elastophene Flam GR, Elastophene Flam LS FR GR, Soprastar Flam, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam HR FR GR, Elastophene Flam HS FR GR, Elastophene Flam HP FR GR, Sopralene 180 SP 3.5mm*, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene 250 SP*, Sopralene Flam 250 GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralene 350 SP*, Sopralene Flam 350 GR, Sopralene Flam 350 FR GR, UNILAY, Sopralene Flam Jardin, Sopralene Mammoth GR, Sopralast 50 TV Alu, Sopralast Alu, Sopralast TV Copper, Sopralast Copper, Sopralast TV Inox or Sopralast Stainless Steel, heat welded

Or

Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Elastophene HD FR GR, Elastophene HR FR GR, Elastophene HS FR GR, Elastophene HP FR GR, Sopralene 180 Sanded*, Sopralene 180 GR, Sopralene 180 FR GR, Sopralene 250 Sanded*, Sopralene 250 GR, Sopralene 250 FR GR, Sopralene 350 Sanded*, Sopralene 350 GR or Sopralene 350 FR GR, adhered in hot asphalt at 25 lbs/sq. to sand surfaced base or ply membrane

*Requires Approved Surfacing

Integrity Test:

Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.

Inspection:

Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.

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:

-75 psf (See General Limitation #9.)

Deck Type 3 or 3I:	Concrete Decks, Insulated or Non-Insulated, Roof Plaza Decks, Parking Decks
Deck Description:	2500 psi structural concrete or concrete plank
System Type 8:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 400, 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Coat:	Apply ALSAN Base Coat at 20 wet mils (Approx. 1.25 gallon per square). Apply a single layer of ALSAN Fleece reinforcement into the wet Base Coat with minimum 3" wide overlaps. Immediately apply and second coat of ALSAN Base Coat at 20 wet mils (Approx. 1.25 gallon per square). Wait a minimum two hours or maximum 12 hours prior to Finish Coat application.
Top Coat:	Apply ALSAN Finish Coat at 15 wet mils (Approx. 0.9 gallons per square). Wait 45 minutes and apply Soprema ceramic granules, pressing them into the finish coat.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Insulation:	(Optional) One or more layers of ASTM C578, type VII extruded polystyrene insulation applied in High Velocity Insulation Adhesive II or III using a ribbon pattern with ½ to ¾ inch wide beads spaced 12" o.c. Insulation is immediately set into the wet adhesive and walked-in. Alternatively, asphalt is applied to the Top Ply membrane at a rate of 25 lbs/square and allowed to cool to 225°-250°F before placement of extruded polystyrene boards.
Surfacing:	Concrete pavers (24" x 24" x 1½"), 4000 psi minimum or exterior grade ceramic plaza deck tiles (min. 12" x 12" x ½") embedded into dry-set Portland cement mortar or latex-Portland cement mortar complying with ANSI A118.1 or ANSI A118.4, respectively, applied with a ¼" square notched trowel. Tiles should then be carefully embedded in the mortar bed and taped in place to ensure full solid bearing. Tile shall be installed in accordance with applicable Building Code.
Maximum Design Pressure:	-570 psf (for non-insulated) (See General Limitation #9.) -277 psf (for insulated) (See General Limitation #9.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	Min. 2500 psi, dual slab construction (roof plaza and parking decks)
System Type 9:	Membranes applied directly to substrate.

All General and System Limitations apply.

Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids, and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
Primer:	Elastocol 400, 500, 600c or ASTM D 41 primer applied to deck at a rate of 100-150 ft^2/gal.
Base Sheet:	One or more plies of Sopralene Flam 180 or 250, heat welded according to manufacturer's application instruction.
Top Sheet:	Sopralene Flam 180, 250, 350 GR, Sopralene Flam 180, 250, 350 FR GR or Sopralene Antirock, heat welded according to manufacturer's application instruction.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.
Insulation:	(Optional) Min. 1.5" thick Dow Chemical STYROFOAM High Load 60 Insulation (Min. 60 psi) adhered to membrane with High Velocity Insulation Adhesive II applied in ¾" wide strips spaced 12" o.c. or hot asphalt is applied to the membrane at a rate of 20-40 lbs/100 ft^2 and allowed to cool to 225°-250°F before placement of extruded polystyrene boards.
Protection Board and/or Drainage Layer:	(Optional) Install drainage board over top ply membrane
Surfacing:	Structural Concrete Slab, minimum 2500 psi, in compliance with applicable Building Code.
Maximum Design Pressure:	N/A (Topping concrete slab shall comply with applicable Building Code requirement.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type 10:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Layer:	One layer of Sopralene Stick, Colvent SA or Colvent 180 SA, self adhered
Primer:	(Optional) Elastocol 500, Elastocol 600c or AquaTac applied at a rate of 1 gal/sq, to top surface of any base or ply sheet prior to application of next layer
Ply Layer:	(Optional) One or more layers of Elastophene Sanded, Elastophene Sanded FR, Elastophene Sanded 3.0 mm, Elastophene HR, Elastophene HR 3.0 mm, Elastophene HD, Elastophene HP, Elastophene PS, Elastophene 180 Sanded, Sopralene 180 Sanded, Sopralene 180 Sanded 3.5 mm, Sopralene 250 Sanded, Sopralene 250 Sanded 3.5 mm, Sopralene 350 Sanded, applied in asphalt at a rate of 25 lbs/sq to sand surface base membrane
Top Layer:	One layer of Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Elastophene HD FR GR, Elastophene HR FR GR, Elastophene HS FR GR, Elastophene HP FR GR, Sopralene 180 Sanded, Sopralene 180 GR, Sopralene 180 FR GR, Sopralene 250 Sanded, Sopralene 250 GR, Sopralene 250 FR GR, Sopralene 350 Sanded, Sopralene 350 GR or Sopralene 350 FR GR, applied in hot asphalt at a rate of 25 lbs/sq.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Surfacing:	None
Maximum Design Pressure:	-240 psf (See General Limitation #9.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type 11:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 400, 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Layer:	One layer of Sopralene Flam Stick*, EPS Flam Stick*, Sopralene Stick, Colvent SA or Colvent 180 SA, self adhered *Requires heat welded ply or cap membrane
Primer:	(Optional) Elastocol 500, Elastocol 600c or AquaTac applied at a rate of 1 gal/sq, to top surface of any base or ply sheet prior to application of next layer
Ply Layer:	(Optional) One or more layers of Elastophene Flam*, Elastophene Flam FR*, Elastophene Flam 2.2 mm*, Elastophene Flam HS FR*, Elastophene Flam HR 3.0 mm*, Elastophene Flam HP*, Sopralene Flam 180*, Sopralene Flam 180 2.7 mm*, Sopralene Flam 250*, Sopralene Flam 350*, heat welded *Requires heat welded cap membrane.
Top Layer:	One layer of Elastophene Flam GR, Elastophene Flam LS FR GR, Soprastar Flam, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam HR FR GR, Elastophene Flam HS FR GR, Elastophene Flam HP FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam 350 GR, Sopralene Flam 350 FR GR, Sopralene Flam Jardin, Sopralene Mammoth GR, Sopralast 50 TV Alu, Sopralast Alu, Sopralast TV Copper, Sopralast Copper, Sopralast TV Inox or Sopralast Stainless Steel, heat welded.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Surfacing:	None
Maximum Design Pressure:	-270 psf (See General Limitation #9.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type 12:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 400, 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Layer:	One layer of Colvent TG is heat welded
Primer:	(Optional) Elastocol 400, 500, Elastocol 600c or AquaTac applied at a rate of 1 gal/sq, to top surface of any base or ply sheet prior to application of next layer
Ply Layer:	(Optional) One or more layers of Elastophene Sanded, Elastophene Sanded FR, Elastophene Sanded 3.0 mm, Elastophene HR, Elastophene HR 3.0 mm, Elastophene HD, Elastophene HP, Elastophene 180 Sanded, Sopralene 180 Sanded, Sopralene 180 Sanded 3.5 mm, Sopralene 250 Sanded, Sopralene 250 Sanded 3.5 mm, Sopralene 350 Sanded, applied in asphalt at a rate of 25 lbs/sq to sand surfaced base membrane.
Top Layer:	One layer of Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Elastophene HD FR GR, Elastophene HR FR GR, Elastophene HS FR GR, Elastophene HP FR GR, Sopralene 180 GR, Sopralene 180 FR GR, Sopralene 250 GR, Sopralene 250 FR GR, Sopralene 350 GR or Sopralene 350 FR GR applied in asphalt at a rate of 25 lbs/sq to sand surfaced base or ply membrane.
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Surfacing:	None
Maximum Design Pressure:	-262.5 psf (See General Limitation #9.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type 13:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 400, 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Layer:	One layer of Colvent TG is heat welded
Primer:	(Optional) Elastocol 400, 500, Elastocol 600c or AquaTac applied at a rate of 1 gal/sq, to top surface of any base or ply sheet prior to application of next layer
Ply Layer:	(Optional) One or more layers of Elastophene Flam, Elastophene Flam FR, Elastophene Flam 2.2 mm, Elastophene Flam HS FR, Elastophene Flam HR 3.0 mm, Elastophene Flam HP, Elastophene SP, Elastophene 180 SP, Sopralene Flam 180, Sopralene Flam 180 2.7 mm, Sopralene 180 SP, Sopralene 180 SP 3.5 mm, Sopralene Flam 250, Sopralene 250 SP, Sopralene Flam 350, Sopralene 350 SP, heat welded
Top Layer:	One layer Elastophene Flam GR, Elastophene Flam LS FR GR, Soprastar Flam, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam HR FR GR, Elastophene Flam HS FR GR, Elastophene Flam HP FR GR, Sopralene Flam 180 GR, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 GR, Sopralene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam 350 GR, Sopralene Flam 350 FR GR, Sopralene Flam Jardin, Sopralene Mammoth GR, Sopralast 50 TV Alu, Sopralast Alu, Sopralast TV Copper, Sopralast Copper, Sopralast TV Inox or Sopralast Stainless Steel is heat welded
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Surfacing:	None
Maximum Design Pressure:	-292.5 psf (See General Limitation #9.)

Deck Type 3:	Concrete Decks, Non-Insulated
Deck Description:	5000 psi structural concrete or concrete plank
System Type 14:	Membranes adhered to primed substrate.
Substrate Preparation:	All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants.
Primer:	Elastocol 400, 500 or ASTM D41 primer at an application rate of 100-150 ft^2/gallon.
Base Layer:	None
Ply Layer:	None
Top Layer:	Colvent 180 TG GR, heat welded
Integrity Test:	Required, and shall be performed in accordance with ASTM D 5957. Water may be maintained for a period longer than 24 hours if required.
Inspection:	Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards or traffic surfacing. All defects observed shall be corrected.
Surfacing:	None
Maximum Design Pressure:	-220.0 psf (See General Limitation #9.)

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 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE