



BUILDING CODE COMPLIANCE OFFICE
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CONTRACTOR ENFORCEMENT DIVISION
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PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Soprema Roofing and Waterproofing, Inc.
310 Quadral Drive
Wadsworth ,OH 44281

Your application for Notice of Acceptance (NOA) of:

Soprema Roof Systems Over Concrete Deck

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

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

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

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 01-0116.02
EXPIRES: 03/01/2006

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

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

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

APPROVED: 03/01/2001

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen

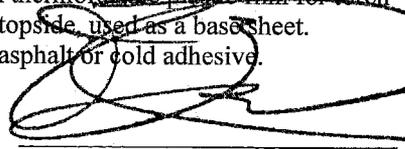
Approval Date: March 1, 2001

Material: SBS
Deck Type: Concrete
Maximum Design Pressure -620 psf
Fire Classification: See General Limitation #1

Expiration Date: March 1, 2006

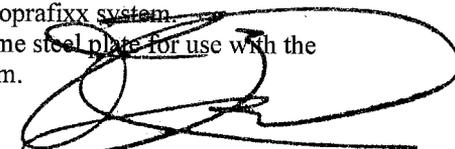
TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopra-G	39" x 99' (3 sq.)	ASTM D 4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate.
Modified Sopra-G	39" x 99' (3 sq.)	ASTM D 4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching 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.
Elastobase	39" x 99' (3 sq.)	ASTM D 5147	Oxidized asphalt, polyester reinforced base sheets. Primarily used as a mechanically attached anchor sheet. Applied in hot asphalt or cold adhesive.
Sopra VI	36" x 180' (5 sq.)	ASTM D 4601 type VI	Type VI, fiberglass reinforced, smooth surfaced plysheet. Sopra VI is used in multi-ply systems and complies with ASTM and UL standards. Applied in hot asphalt or cold adhesive.
Elastophene	39" x 49' (1½ sq.)	ASTM D 5147	Fiberglass reinforced SBS modified bitumen membrane sanded on both sides, used as a base and top ply. Applied in hot asphalt or cold adhesive.
Elastophene FR	39" x 49' (1½ sq.)	ASTM D 5147	Fiberglass reinforced SBS modified bitumen membrane sanded on both sides, used as a base sheet for U.L. Class 'A' systems. Applied in hot asphalt or cold adhesive.
Elastophene HR FR	39" x 49' (1½ sq.)	ASTM D 5147	Fiberglass scrim reinforced SBS modified bitumen membrane sanded on both sides, used as a base sheet for U.L. Class 'A' systems. Applied in hot asphalt or cold adhesive.
Elastophene PS	39" x 49' (1½ sq.)	ASTM D 5147	Glass reinforced SBS modified bitumen membrane with thermofusible plastic film for torch bonding to the top side; applied in hot asphalt or cold adhesive.
Elastophene Flam	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass reinforced SBS modified bitumen membrane covered on both sides with a thermofusible plastic film. Applied by torch.
Elastophene 180	39" x 49' (1½ sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane sanded on both sides, used primarily as a base ply. Applied in hot asphalt or cold adhesive.
Elastophene 180 PS	39" x 48' (1½ sq.)	ASTM D 5147	Polyester reinforced SBS modified bitumen membrane with thermofusible plastic film for torch bonding to the top side, used as a base sheet. Applied in hot asphalt or cold adhesive.



Frank Zuloaga, RRC
 Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene Granule	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass reinforced SBS modified bitumen membrane surfaced with colored granules. Applied in hot asphalt or cold adhesive.
Elastophene FR Granule	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass reinforced SBS modified bitumen membrane surfaced with colored granules. Top ply membrane formulated for Class 'A'. Applied in hot asphalt or cold adhesive.
Elastophene Flam Granule	39" x 33' (1 sq.)	ASTM D 5147	Fiberglass reinforced modified bitumen membrane surfaced with colored granules. Applied by torch.
Sopralene 180, 250 or 350	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane saned on both sides, used primarily as a base ply. Applied in hot asphalt or cold adhesive.
Soprafixx or Soprafixx-T	39" x 33' (1 sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane saned on both sides, used primarily as a base ply. Applied by mechanical attachment, in hot asphalt or cold adhesive. Soprafixx-T has tapered lap edges.
Sopralene Flam 180 or 250	39" x 32' (1 sq.) 39" x 26' (¾ sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with thermofusible plastic film, primarily used as a base ply. Applied by torch.
Sopralene 180, 250 or 350 Granule	39" x 26' (¾ sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane surfaced with colored granules. Applied in hot asphalt or cold applied adhesive.
Sopralene Flam 180, 250 or 350 Granule	39" x 26' (¾ sq.)	ASTM D 5147	Non-woven polyester reinforced SBS modified bitumen membrane surfaced with colored granules. Applied by torch.
Sopralast	various	ASTM D 5147	Fiberglass reinforced modified bitumen waterproof sheeting faced with aluminum, copper or stainless steel foil.
Sopralene Flam Stick	39" x 33' (1 sq.)	ASTM D 5147	Self adhered, film surfaced, polyester reinforced waterproofing membrane.
Colphene 1000 or 1500	39" x 33' (1 sq.) 39" x 132' (4 sq.) 39" x 66' (2.1 sq.)	ASTM D 5147	Self adhered, non-reinforced waterproofing membranes ('Peel and Stick') used as a vapor barrier.
Colphene FR Granules	39" x 33' (1 sq.)	ASTM D 5147	Self adhered, granule surfaced, fiberglass reinforced waterproofing membranes ('Peel and Stick').
Colphene Granules HR FR	39" x 33' (1 sq.)	ASTM D 5147	Self adhered, granule surfaced, fiberglass scrim reinforced waterproofing membranes ('Peel and Stick').
Lastobond S or P Soprema Fasteners	39" x 49' (1½ sq.) #12 or #14	ASTM D 5147 PA 114	Self adhered underlayment membrane. Fasteners for membrane or insulation attachment to wood, steel or concrete decks.
Soprema Plates	3" diameter	PA 114	Metal or plastic stess plates for use with Soprema Fasteners.
SopraFixx	2 in. round; .032 in. thick	PA 114	AZ-55 Galvalume steel plate for use with the Soprafixx system.
Sopradisc	2 in. round; .032 in. thick	PA 114	Galvanized metal bearing plate used for side lap attachment of Soprafixx system.
Soprema Isofast IF/IFT	2¾ in. diameter; .04 in. thick.	PA 114	AZ-50 Galvalume steel plate for use with the Soprafast System.



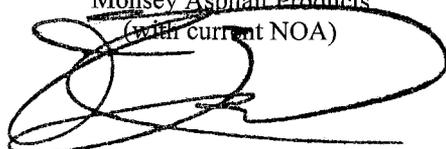
Frank Zuloaga, RRC
Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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 500 and 600		ASTM D 41	Asphalt primers.
Sopracolle			Cold-applied adhesive used to bond membrane to prepared substrates or to other membranes.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products (with current NOA)
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation	Johns Manville Corp. (with current NOA)
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	see Approved Systems Listings
Perlite Insulation	various	PA 110	Perlite insulation board	see Approved Systems Listings
ACFoam Composite	various	PA 110	Composite polyisocyanurate insulation board	Atlas (with current NOA)
Fesco Foam	various	PA 110	Composite polyisocyanurate insulation board	Johns Manville Corp. (with current NOA)
E'NRG'Y-2 Composite	various	PA 110	Composite polyisocyanurate insulation board	Johns Manville Corp. (with current NOA)
E'NRG'Y-2 Plus	various	PA 110	Composite polyisocyanurate insulation board	Johns Manville Corp. (with current NOA)
Dens-Deck	various	PA 110	Gypsum insulation board	Georgia-Pacific (with current NOA)
GAFGLAS # 75	36" or 39" x 108'	ASTM D 4601	G2 Fiberglass base sheet	GAF Materials Corp. (with current NOA)
JM Glasbase	36" x 108'	ASTM D 4601	G2 Fiberglass base sheet	Johns Manville Corp. (with current NOA)
Vaporbar GB	36" x 108'	ASTM D 4601	G2 Fiberglass base sheet	Celotex Corp. (with current NOA)
Dekfast Fasteners	various	PA 114	Fastener for wood, steel and concrete decks	Construction Fasteners (with current NOA)
Dekfast Hex Plate	2 7/8" x 3 1/4"	PA 114	Galvalume hex stress plate.	Construction Fasteners (with current NOA)
Roofgrip Fasteners	various	PA 114	Fasteners for wood, steel or concrete decks	ITW Buildex (with current NOA)
Accutrac Fasteners	various	PA 114	Fasteners for wood or steel decks	ITW Buildex (with current NOA)
Hextra Fasteners	various	PA 114	Fasteners for wood or steel decks	ITW Buildex (with current NOA)
Accutrac Plate	3" square	PA 114	Galvalume square stress plate	ITW Buildex (with current NOA)
Gearlok Plate	3" round	PA 114	Polyolefin round stress plate	ITW Buildex (with current NOA)
Olympic Fasteners	various	PA 114	Fasteners for wood, steel or concrete decks	Olympic (with current NOA)

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Olympic Standard	3" round	PA 114	Galvalume stress plate	Olympic (with current NOA)
HD Insul-Fixx Fastener	various	PA 114	Fastener for use in steel and concrete decks	SFS Stadler (with current NOA)
Insul-Fixx Fastener	various	PA 114	Insulation fastener for steel and wood decks	SFS Stadler (with current NOA)
Isofast Fasteners	various	PA 114	Insulation fastener for steel and wood decks	SFS Stadler (with current NOA)
Insul-Fixx S	3" round	PA 114	Galvalume AZ55 stress plate	SFS Stadler (with current NOA)
Insul-Fixx P	3" round	PA 114	Polyethylene stress plate	SFS Stadler (with current NOA)
Isofast Plate	various	PA 114	Square or oblong galvalume steel plates for use with Isofast fasteners	SFS Stadler (with current NOA)
Roofing Nails	Minimum 11 ga.	PA 114	Corrosion resistant annular ring shank nails	generic
Tin Caps	Min. 32 ga. x 1 5/8"	PA 114	Corrosion resistant circular discs.	generic
Red Rosin	various		Rosin paper for barrier layer on wood decks	generic
Asphalt	n/a	ASTM D 312	Type III or IV Hot asphalt bitumen adhesive	generic
Asphalt Primer	n/a	ASTM D 41	Asphalt Primer	generic
GEO #902	n/a		Cold Adhesive	GEO Industries, Inc. (with current NOA)
GEO #903	n/a		Aluminum Coating	GEO Industries, Inc. (with current NOA)
20 F-AF Emulsion	n/a	ASTM D 1227	Roof coating	Grundy (with current NOA)
Fibered Aluminum Roof Coating	n/a	ASTM D 2824	Fibrated aluminum coating.	Grundy (with current NOA)
Henry 520	n/a	PA 121	Aluminum roof coating	Henry Co. (with current NOA)
Karnak 97 AF	n/a	PA 121	Roof coating	Karnak (with current NOA)
Karnak 81	n/a		Cold adhesive	Karnak (with current NOA)
Asbestos Fibered Asphalt Emulsion	n/a	ASTM D 1227	Roof coating	Monsey Products (with current NOA)
Emulsion Roof Coating - Fibered	n/a	ASTM D 1227	Roof coating	Monsey Products (with current NOA)
Endure Emulsion Mastic	n/a	PA 121	Asphalt emulsion	Monsey Asphalt Products (with current NOA)
Endure Premium Aluminum	n/a	ASTM D 2824	Aluminum coating	Monsey Products (with current NOA)
Premium Long Life Aluminum Roof Coating	n/a	PA 121	Aluminum roof coating	Monsey Asphalt Products (with current NOA)
Asbestos Free Pro-Grade Aluminum	n/a	PA 121	Aluminum roof coating	Monsey Asphalt Products (with current NOA)


 Frank Zuloaga, RRC
 Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Weather-Chek Aluminum	n/a	ASTM D 2824	Aluminum roof coating	Monsey Asphalt Products (with current NOA)

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corporation	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
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
ITS / Warnock Hersey		ASTM D 5147 Physical Property Testing	05.27.93



APPROVED ASSEMBLIES:

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type A: One or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

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

Approved Type(s): AC Foam II Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): E'NRG'Y-2 Minimum: 1.4" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Base or Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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One or more layers of the following:

Approved Type(s): Toprox Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): BP High Strength, FM-90 Traffic Top/High Density, GAFTEMP High Density, Roof Insulation Board, High Density Fiberboard, Fiber Base HD1, HD6, Structodek Minimum: 1/2" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): Celotherm, Conperl, GAFTEMP Permalite, Fesco Board Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): Dens Deck Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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Approved Type(s): Fireguard, type X gypsum Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A
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Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier or insulation. All insulation shall be adhered to the vapor barrier or primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² or in Henry III Insulbond at 2.0-2.5 gallons/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used

only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: (Optional) One or two plies of Sopra-G, Modified Sopra-G, Sopraglass 100, Sopra-IV, Elastobase, GAFGLAS #75, Celotex Vaporbar, Johns Manville Glasbase, or Johns Manville Glasply IV adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./.

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

Maximum Design Pressure:

- 345 psf; (for min. 1.5" thick Approved polyisocyanurate in asphalt followed by min. ½" thick High Density Fiberboard or ¾" thick GAFTEMP Permalite in asphalt.)
- 177 psf; (for min. 1.5" thick Approved polyisocyanurate in asphalt followed by min. ¼" thick Georgia Pacific Dens Deck in asphalt.)
- 237 psf; (for min. ¼" thick Georgia Pacific Dens Deck in asphalt only.)
- 130 psf; (for min. 1.5" thick Approved polyisocyanurate in Henry III Insulbond at a rate of 2.0-2.5 gal./sq., followed by min. ½" thick High Density Fiberboard or ¾" thick GAFTEMP Permalite in Henry III Insulbond.)
- 60 psf; (for all other applications)
(See General Limitation #9.)

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



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

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System Limitations apply.

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

Approved Type(s): **AC Foam II**

Minimum: 1.5" x 4' x 4'	CF #14 Dekfast S/P	[3]	8	1:2 ft ²
Minimum: 1.5" x 4' x 4'	SFS HD Insulfixx S/P	[3]	8	1:2 ft ²
	SFS #14 System ES-1			
Minimum: 1.5" x 4' x 4'	Bldx #14 Roofgrip S/P	[3]	8	1:2 ft ²
Minimum: 1.5" x 4' x 4'	Olympic HD S/P	[3]	8	1:2 ft ²
	Olympic CD-10 S/P			
	Olympic Fluted Nail S/P			
Minimum: 1.5" x 4' x 4'	SOPREMA HD S/P	[3]	8	1:2 ft ²
Minimum: 1.5" x 4' x 4'	Tru-Fast S/P	[3]	8	1:2 ft ²

Approved Type(s): **E'NRG'Y-2, PSI-25**

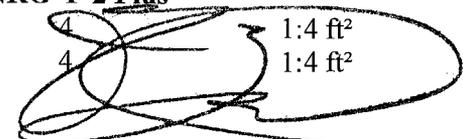
Minimum: 1.4" x 4' x 4'	CF #14 Dekfast S/P	[3]	6	1:2.67 ft ²
Minimum: 1.4" x 4' x 4'	SFS HD Insulfixx S/P	[3]	6	1:2.67 ft ²
	SFS #14 System ES-1			
Minimum: 1.4" x 4' x 4'	Bldx #14 Roofgrip S/P	[3]	6	1:2.67 ft ²
Minimum: 1.4" x 4' x 4'	Olympic HD S/P	[3]	6	1:2.67 ft ²
	Olympic CD-10 S/P			
	Olympic Fluted Nail S/P			
Minimum: 1.4" x 4' x 4'	SOPREMA HD S/P	[3]	6	1:2.67 ft ²
Minimum: 1.4" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft ²

Approved Type(s): **ACFoam II, E'NRG'Y-2, PSI-25**

Minimum: 2.0" x 4' x 4'	CF #14 Dekfast S/P	[3]	4	1:4 ft ²
Minimum: 2.0" x 4' x 4'	SFS HD Insulfixx S/P	[3]	4	1:4 ft ²
	SFS #14 System ES-1			
Minimum: 2.0" x 4' x 4'	Bldx #14 Roofgrip S/P	[3]	4	1:4 ft ²
Minimum: 2.0" x 4' x 4'	Olympic HD S/P	[3]	4	1:4 ft ²
	Olympic CD-10 S/P			
	Olympic Fluted Nail S/P			
Minimum: 2.0" x 4' x 4'	SOPREMA HD S/P	[3]	4	1:4 ft ²
Minimum: 2.0" x 4' x 4'	Tru-Fast S/P	[3]	4	1:4 ft ²

Approved Type(s): **ACFoam Composite, E'NRG'Y-2 Composite, E'NRG'Y-2 Plus**

Minimum: 1.5" x 4' x 4'	CF #14 Dekfast S/P	[3]	4	1:4 ft ²
Minimum: 1.5" x 4' x 4'	SFS HD Insulfixx S/P	[3]	4	1:4 ft ²



	SFS #14 System ES-1			
Minimum: 1.5" x 4' x 4'	Bldx. Roofgrip S/P	[3]	4	1:4 ft ²
Minimum: 1.5" x 4' x 4'	Olympic S/P	[3]	4	1:4 ft ²
	Olympic CD-10 S/P			
	Olympic Fluted Nail S/P			
Minimum: 1.5" x 4' x 4'	SOPREMA HD S/P	[3]	4	1:4 ft ²
Minimum: 1.5" x 4' x 4'	Tru-Fast S/P	[3]	4	1:4 ft ²

Approved Type(s): Toprox

Minimum: 1" x 3' x 4'	Olympic HD S	[2]	5	1:2.4 ft ²
Minimum: 1" x 3' x 4'	SOPREMA HD S	[2]	5	1:2.4 ft ²

Approved Type(s): Dens Deck

Minimum: ¼" x 4' x 8'	CF #14 Dekfast S	[4]	8	1:4 ft ²
Minimum: ¼" x 4' x 8'	SFS HD Insulfixx S	[4]	8	1:4 ft ²
Minimum: ¼" x 4' x 8'	Olympic HD S	[4]	8	1:4 ft ²
Minimum: ¼" x 4' x 8'	SOPREMA HD S	[4]	8	1:4 ft ²

Approved Type(s): Fireguard

Minimum: 5/8" x 4' x 8'	CF #14 Dekfast S	[4]	8	1:4 ft ²
Minimum: 5/8" x 4' x 8'	SFS HD Insulfixx S	[4]	8	1:4 ft ²
Minimum: 5/8" x 4' x 8'	Olympic HD S	[4]	8	1:4 ft ²
Minimum: ¼" x 4' x 8'	SOPREMA HD S	[4]	8	1:4 ft ²

Approved Type(s): Celotherm, Conperl, GAFTEMP Permalite, Fesco Board

Minimum: ¾" x 2' x 4'	CF #14 Dekfast S/P	[1]	4	1:2 ft ²
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Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Insulation</u> <u>(Optional) Middle Layer</u>	<u>Fastener</u> <u>Type</u>	<u>Fastening</u> <u>Detail No.</u>	<u>Fasteners</u> <u>Per Board</u>	<u>Fastener</u> <u>Density</u>
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Approved Type(s): EPS Board - For use between Dens Deck or Fireguard base layer and Approved wood fiber top layer only.

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation</u> <u>Top Layer</u>	<u>Fastener</u> <u>Type</u>	<u>Fastening</u> <u>Detail No.</u>	<u>Fasteners</u> <u>Per Board</u>	<u>Fastener</u> <u>Density</u>
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Approved Type(s): BP High Strength, FM-90 Traffic Top/High Density, GAFTEMP High Density, Roof Insulation Board, High Density Fiberboard, Fiber Base HD1, HD6, Structodek

Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): Celotherm, Conperl, GAFTEMP Permalite, Fesco Board

Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): Dens Deck



Frank Zuloaga, RRC
Roofing Product Control Examiner

SOPREMA ROOFING AND WATERPROOFING SYSTEMS

Acceptance No.: 01-0116.02

Minimum: ¼" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): Fireguard, type X gypsum				
Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): Toprox				
Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A

Note: Apply optional top layer of insulation shall be adhered with approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (Optional) One or two plies of Sopra-G, Modified Sopra-G, Sopraglass 100, Sopra-IV, Elastobase, GAFGLAS #75, Celotex Vaporbar, Johns Manville Glasbase, or Johns Manville Glasply IV adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

Maximum Design Pressure: -52.5 psf; (See General Limitation #9.)

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



Frank Zuloaga, RRC
Roofing Product Control Examiner

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type C: All layers of insulation simultaneously attached.

All General and System Limitations apply.

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

Approved Type(s): **AC Foam II, E'NRG'Y-2, PSI-25**

Minimum: 1.0" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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Approved Type(s): **Fireguard, type X gypsum**

Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A
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Approved Type(s): **Toprox**

Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
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Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **AC Foam II**

Minimum: 1.5" x 4' x 4'	CF #14 Dekfast S/P	[3]	8	1:2 ft ²
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Minimum: 1.5" x 4' x 4'	SFS HD Insulfixx S/P	[3]	8	1:2 ft ²
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	SFS #14 System ES-1			
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Minimum: 1.5" x 4' x 4'	Bldx. #14 Roofgrip S/P	[3]	8	1:2 ft ²
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Minimum: 1.5" x 4' x 4'	Olympic HD S/P	[3]	8	1:2 ft ²
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	Olympic CD-10 S/P			
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	Olympic Fluted Nail S/P			
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Minimum: 1.5" x 4' x 4'	SOPREMA HD S/P	[3]	8	1:2 ft ²
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Minimum: 1.5" x 4' x 4'	Tru-Fast S/P	[3]	8	1:2 ft ²
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Approved Type(s): **E'NRG'Y-2, PSI-25**

Minimum: 1.4" x 4' x 4'	CF #14 Dekfast S/P	[3]	6	1:2.67 ft ²
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Minimum: 1.4" x 4' x 4'	SFS HD Insulfixx S/P	[3]	6	1:2.67 ft ²
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	SFS #14 System ES-1			
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Minimum: 1.4" x 4' x 4'	Bldx. #14 Roofgrip S/P	[3]	6	1:2.67 ft ²
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Minimum: 1.4" x 4' x 4'	Olympic HD S/P	[3]	6	1:2.67 ft ²
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	Olympic CD-10 S/P			
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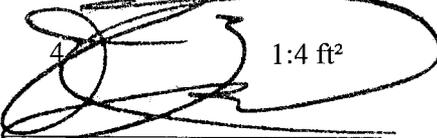
	Olympic Fluted Nail S/P			
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Minimum: 1.4" x 4' x 4'	SOPREMA HD S/P	[3]	6	1:2.67 ft ²
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Minimum: 1.4" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft ²
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Approved Type(s): **ACFoam II, E'NRG'Y-2, PSI-25**

Minimum: 2.0" x 4' x 4'	CF #14 Dekfast S/P	[3]	4	1:4 ft ²
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SOPREMA ROOFING AND WATERPROOFING SYSTEMS

Acceptance No.: 01-0116.02

Minimum: 2.0" x 4' x 4'	SFS HD Insulfixx S/P [3]	4	1:4 ft ²
	SFS #14 System ES-1		
Minimum: 2.0" x 4' x 4'	Bldx. #14 Roofgrip S/P [3]	4	1:4 ft ²
Minimum: 2.0" x 4' x 4'	Olympic HD S/P [3]	4	1:4 ft ²
	Olympic CD-10 S/P		
	Olympic Fluted Nail S/P		
Minimum: 2.0" x 4' x 4'	SOPREMA HD S/P [3]	4	1:4 ft ²
Minimum: 2.0" x 4' x 4'	Tru-Fast S/P [3]	4	1:4 ft ²

Approved Type(s): AC Foam Composite, E'NRG'Y-2 Composite, E'NRG'Y-2 Plus

Minimum: 1.5" x 4' x 4'	CF HD Dekfast S/P [3]	4	1:4 ft ²
Minimum: 1.5" x 4' x 4'	SFS HD Insulfixx S/P [3]	6	1:4 ft ²
	SFS #14 System ES-1		
Minimum: 1.5" x 4' x 4'	Bldx. Roofgrip S/P [3]	6	1:4 ft ²
Minimum: 1.5" x 4' x 4'	Olympic HD S/P [3]	6	1:4 ft ²
	Olympic CD-10 S/P		
	Olympic Fluted Nail S/P		
Minimum: 1.5" x 4' x 4'	SOPREMA HD S/P [3]	6	1:4 ft ²
Minimum: 1.5" x 4' x 4'	Tru-Fast S/P [3]	6	1:4 ft ²

Approved Type(s): Toprox

Minimum: 1" x 3' x 4'	Olympic HD S [2]	5	1:2.4 ft ²
Minimum: 1" x 3' x 4'	SOPREMA HD S [2]	5	1:2.4 ft ²

Approved Type(s): Celotherm, Conperl, GAFTEMP Permalite, Fesco Board

Minimum: 3/4" x 2' x 4'	CF #14 Dekfast S/P [1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	SFS HD Insulfixx S/P [1]	4	1:2 ft ²
	SFS #14 System ES-1		
Minimum: 3/4" x 2' x 4'	Bldx. #14 Roofgrip S/P [1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	Olympic HD S/P [1]	4	1:2 ft ²
	Olympic CD-10 S/P		
	Olympic Fluted Nail S/P		
Minimum: 3/4" x 2' x 4'	SOPREMA HD S/P [1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	Tru-Fast S/P [1]	4	1:2 ft ²

Approved Type(s): Esgard, High Density Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard

Minimum: 1" x 4' x 4'	CF #14 Dekfast S/P [3]	4	1:4 ft ²
Minimum: 1" x 4' x 4'	SFS HD Insulfixx S/P [3]	4	1:4 ft ²
	SFS #14 System ES-1		
Minimum: 1" x 4' x 4'	Bldx. #14 Roofgrip S/P [3]	4	1:4 ft ²
Minimum: 1" x 4' x 4'	Olympic HD S/P [3]	4	1:4 ft ²
	Olympic CD-10 S/P		
	Olympic Fluted Nail S/P		
Minimum: 1" x 4' x 4'	SOPREMA HD S/P [3]	4	1:4 ft ²
Minimum: 1" x 4' x 4'	Tru-Fast S/P [3]	4	1:4 ft ²

Approved Type(s): Dens Deck

Minimum: 1/4" x 4' x 8'	CF #14 Dekfast S [4]	8	1:4 ft ²
Minimum: 1/4" x 4' x 8'	SFS HD Insulfixx S [4]	8	1:4 ft ²
Minimum: 1/4" x 4' x 8'	Olympic HD S [4]	8	1:4 ft ²
	Olympic CD-10 S/P		



Minimum: ¼" x 4' x 8'	Olympic Fluted Nail S/P SOPREMA HD S [4]	8	1:4 ft²
Approved Type(s): Fireguard			
Minimum: 5/8" x 4' x 8'	CF #14 Dekfast S [4]	8	1:4 ft²
Minimum: 5/8" x 4' x 8'	SFS HD Insulfixx S [4]	8	1:4 ft²
Minimum: 5/8" x 4' x 8'	Olympic HD S [4]	8	1:4 ft²
	Olympic CD-10 S/P		
	Olympic Fluted Nail S/P		
Minimum: ¼" x 4' x 8'	SOPREMA HD S [4]	8	1:4 ft²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. (See Metro-Dade County Roofing Application Standard PA 117 for fastening details.)

Base Sheet: (Optional) One or two plies of Sopra-G, Modified Sopra-G, Sopraglass 100, Sopra-IV, Elastobase, GAFGLAS #75, Celotex Vaporbar, Johns Manville Glasbase, or Johns Manville Glasply IV adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

Maximum Design Pressure: -52.5 psf; (See General Limitation #9.)

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



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

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System Limitations apply.

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

Approved Type(s): AC Foam II				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): E'NRG'Y-2				
Minimum: 1.4" x 4' x 4'	N/A	N/A	N/A	N/A

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

Approved Type(s): Toprox				
Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A

<u>Insulation (Optional) Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): BP High Strength, FM-90 Traffic Top/High Density, GAFTEMP High Density, Roof Insulation Board, High Density Fiberboard, Fiber Base HD1, HD6, Structodek				
Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): Celotherm, Conperl, GAFTEMP Permalite, Fesco Board				
Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A

Approved Type(s): Dens Deck				
Minimum: ¼" x 4' x 8'	N/A	N/A	N/A	N/A

Approved Type(s): Fireguard, type X gypsum				
Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A

Note: Top 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 Sopra-G, Modified Sopra-G, Sopraglass 100, GAFGLAS #75, Celotex Vaporbar, or Johns Manville Glasbase fastened to the deck as described below:
- Fastening: Attach base sheet using CF #14 Dekfast with Hex Plates or SFS HD Insulfixx S spaced 9" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.
- Ply Sheet: (Optional) One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
- Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..
- Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..
- Maximum Design Pressure: -60 psf; (See General Limitation #9.)
- Maximum Fire Classification: See General Limitation #1
- Maximum Slope: See General Limitation #1



Frank Zuloaga, RRC
Roofing Product Control Examiner

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

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System Limitations apply.

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

Approved Type(s): **AC Foam II, E'NRG'Y-2**

Minimum: 1.4" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Toprox**

Minimum: 2.0" x 3' x 4'	N/A	N/A	N/A	N/A
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<u>Insulation (Optional) Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **BP High Strength, FM-90 Traffic Top/High Density, GAFTEMP High Density, Roof Insulation Board, High Density Fiberboard, Fiber Base HD1, HD6, Structodek**

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

Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Dens Deck**

Minimum: 1/4" x 4' x 8'	N/A	N/A	N/A	N/A
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Approved Type(s): **Fireguard, type X gypsum**

Minimum: 5/8" x 4' x 8'	N/A	N/A	N/A	N/A
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Note: Top 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 Membrane, Soprafix-T Membrane, Sopralene 180 Flam or Elastophene 180 Flam 2.5 mm fastened to the deck as described below:

Fastening #1: Attach base sheet using HD Insulfixx or SOPREMA #14 fasteners with Soprafix 2" Round Barbed Plates spaced 18" o.c. in a 4" wide heat welded or bituminous taped seam.
(meets -45 psf - See General Limitation #9.)



- Fastening #2: Attach base sheet using HD Insulfixx or SOPREMA #14 fasteners with Soprafix 2” Round Barbed Plates spaced 12” o.c. in a 4” wide heat welded or bituminous taped seam.
(meets –77.5 psf – See General Limitation #9.)
- Fastening #3: Attach base sheet using HD Insulfixx S fasteners spaced 24” o.c. in the center of the sheet. Laps are heat fused. Fastener rows are stripped in with a 7” wide section of torch applied base sheet membrane.
(meets –45 psf – See General Limitation #9.)
- Ply Sheet: (Optional) One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
- Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied or Colphene FR Granule or Colphene HR FR Granule self adhered to base sheet or to Flam or SP ply sheets.
- Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..
- Maximum Design Pressure: See Fastening Requirements above.
- Maximum Fire Classification: See General Limitation #1
- Maximum Slope: See General Limitation #1



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

Deck Description: 2500 psi structural concrete or concrete plank

System Type E(1): Base sheet mechanically fastened.

All General and System Limitations apply.

Barrier: (Optional) Roctex Rocroof, loose laid

Base Sheet: One ply of Sopra-G, Modified Sopra-G, Sopraglass 100, GAFGLAS #75, Celotex Vaporbar, or Johns Manville Glasbase fastened to the deck as described below:

Fastening: Attach base sheet using CF #14 Dekfast with Hex Plates or SFS HD Insulfixx S spaced 9" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.

Ply Sheet: One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

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

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



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

Deck Description: 2500 psi structural concrete or concrete plank

System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply.

Barrier: (Optional) Roctex Rocroof, loose laid

Base Sheet: One ply of Soprafix Membrane, Soprafix-T Membrane, Sopralene 180 Flam or Elastophene 180 Flam 2.5 mm fastened to the deck as described below:

Fastening #1: Attach base sheet using HD Insulfixx or SOPREMA #14 fasteners with Soprafix 2” Round Barbed Plates spaced 18” o.c. in a 4” wide heat welded or bituminous taped seam.
(meets –45 psf – See General Limitation #9.)

Fastening #2: Attach base sheet using HD Insulfixx or SOPREMA #14 fasteners with Soprafix 2” Round Barbed Plates spaced 12” o.c. in a 4” wide heat welded or bituminous taped seam.
(meets –77.5 psf – See General Limitation #9.)

Fastening #3: Attach base sheet using HD Insulfixx S fasteners spaced 24” o.c. in the center of the sheet. Laps are heat fused. Fastener rows are stripped in with a 7” wide section of torch applied base sheet membrane.
(meets –45 psf – See General Limitation #9.)

Ply Sheet: (Optional) One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied

Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied or Colphene FR Granule or Colphene HR FR Granule self adhered to base sheet or to Flam or SP ply sheets.

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

Maximum Design Pressure: See Fastening Requirements above

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



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

Deck Description: 2500 psi structural concrete or concrete plank

System Type F: Base sheet adhered to primed substrate.

All General and System Limitations apply.

Base Sheet: (Optional) One or two plies of Sopra-G, Modified Sopra-G, Sopraglass 100, Sopra-IV, Elastobase, GAFGLAS #75, Celotex Vaporbar, Johns Manville Glasbase, or Johns Manville Glasply IV adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Ply Sheet: One ply of Elastophene Flam, Elastophene Flam 2.2, Sopralene (180, 250 or 350) Flam, or Sopralene (180, 250 or 350) SP torch applied
or
One ply of Elastophene Sanded, Elastophene 180 Sanded, Elastophene PS, Elastophene 180 PS, Sopralene (180, 250 or 350) PS, or Sopralene (180, 250 or 350) Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

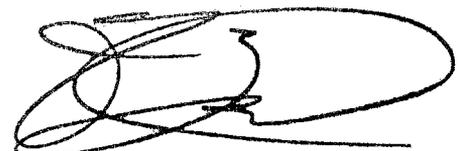
Membrane: Elastophene Flam, Elastophene 180 Flam, Elastophene SP, Elastophene Flam Granule, Elastophene Flam Granule FR, Sopralene (180, 250, 350) Flam Granule, Sopralene (180, 250, 350) Flam Granule FR, or Sopralast 50 TV Alu torch applied
or
Elastophene Sanded, Elastophene 180 Sanded, Sopralene (180, 250, 350) Sanded, Elastophene Granule FR, Elastophene Granule, Sopralene (180, 250, 350) Granule, or Sopralene (180, 250, 350) Granular FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: (Optional) Install one of the following to an approved non-granule surfaced membrane. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
1. Gravel or slag at 400 lbs. or 300 lbs./sq., respectively, adhered with approved asphalt at an application rate of 60 lbs./sq.
2. Karnak 97 aluminum roof coating applied at an application rate of 1½ gal./sq..

Maximum Design Pressure: -620 psf; (See General Limitation #9.)

Maximum Fire Classification: See General Limitation #1

Maximum Slope: See General Limitation #1



CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered 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 sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered 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 with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**



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NOTICE OF ACCEPTANCE STANDARD CONDITIONS

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
 - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
 - b) The product is no longer the same product (identical) as the one originally approved;
 - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
 - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
 - a) Unsatisfactory performance of this product or process;
 - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 23.

END OF THIS ACCEPTANCE



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