



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

**NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

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Soprema, Inc.  
310 Quadral Drive  
Wadsworth, OH 44281

**SCOPE:**

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

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

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

**DESCRIPTION: Soprema Modified Bitumen Roofing Systems over Concrete Decks.**

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

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

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

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

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

This NOA renews and revises NOA No. 11-0119.04 and consists of pages 1 through 140.  
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0603.07  
Expiration Date: 03/01/16  
Approval Date: 12/31/14  
Page 1 of 140

## ROOFING SYSTEM APPROVAL

Category: Roofing  
Sub-Category: Modified Bitumen  
Material: SBS  
Deck Type: Concrete  
Maximum Design Pressure: -525 psf.

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced oxidized asphalt base sheet for bonding or mechanically attaching to substrate. <b>For use as a base/ply sheet only.</b>
Modified Sopra G	39" x 108' (3.5 sq.)	ASTM D4601	Fiberglass reinforced modified asphalt base sheet for bonding or mechanically attaching to substrate. <b>For use as a base/ply sheet only.</b>
Soprabase	39" x 99' (3 sq.)	ASTM D4601	Oxidized asphalt, polyester reinforced, sand-surfaced base sheet. <b>For use as a base/ply sheet only.</b>
Soprabase S	39" x 65' (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, sand-surfaced base sheet. <b>For use as a base/ply sheet only.</b>
Sopra IV	36" x 180' (5 sq.)	ASTM D2178 Type IV	Type IV fiberglass reinforced, smooth surfaced plysheet used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Sopra VI	36" x 180' (5 sq.)	ASTM D2178 Type VI	Type VI fiberglass reinforced, smooth surfaced plysheet used in multi-ply systems and complies with ASTM and UL Standards. Applied in hot asphalt or cold adhesive.
Colvent TG	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied heat weldable strips on back side.
Colvent 180 TG	39" x 33' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side.
Colvent Flam TG	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side and a plastic burn-off film surface.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Colvent Flam 180 TG	39" x 33' (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1" wide factory applied heat weld strips on back side and a plastic burn-off film surface.
Elastophene Sanded	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Colphene Sanded	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Sanded 3.0	39" x 33' (1sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripped.
Elastophene HS	39" x 66' (2 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants and sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS	39" x 49' (1.5sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene PS 3.0	39" x 49' (1.5sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene SP 2.2	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Colphene SP 2.2	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene SP 3.0	39" x 49' (1 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Colphene SP 3.0	39" x 49' (1 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Elastophene Flam	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam 2.2	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Elastophene Flam HS	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with fire retardants and plastic burn-off film on both sides. Applied by heat welding.
Elastophene HS 62	39" x 33' (1 sq.)	ASTM D6162	Woven fiberglass/polyester composite reinforced modified bitumen membrane with sanded surface on both sides. Applied in hot asphalt, cold adhesive.
Elastophene 180 Sanded	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Colphene 180 Sanded	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene 180 PS	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Colphene 180 PS	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Elastophene FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Elastophene Flam GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam LS FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Elastophene Flam FR+ GR	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Sopralene 180 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 250 Sanded	39" x 33' (1 sq.) 39" x 26' (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Sopralene 180 Sanded 2.2	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt or cold adhesive.
Sopralene 180 PS	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the top and sanded on the bottom.
Sopralene 180 PS 2.2	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene 180 SP 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Colphene 180 SP 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 SP 3.0	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top.
Sopralene 250 SP	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top.
Soprafix Base 610	39" x 30' (1 sq.)	ASTM D6162	Composite reinforced modified bitumen membrane with a film surface. Applied by mechanical attachment.
Soprafix Base 611	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a film surface. Applied by mechanical attachment.
Soprafix Base 630	39" x 33' (1 sq.)	ASTM D6162	Composite reinforced modified membrane with a film surface. Applied by mechanical attachment.
Soprafix [S]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 612	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix [F]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 613	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix [X]	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Soprafix Base 614	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Soprafix	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.
Soprafix Base 622	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.
Soprafix-e	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Soprafix Base 641	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Soprafix Cap FR-651	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Sopralene Flam 180	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Colphene Flam 180	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Colphene 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 180 Ultra FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Colphene 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 250 Ultra FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Sopralene 250 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Sopralene Flam 180 GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Colphene Flam 180 GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 GR 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Colphene Flam 180 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR GR 3.5	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 Ultra FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Colphene Flam 250 FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 Ultra FR GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 180 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam 250 FR+ GR	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Sopralene Flam Antirock	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding.
Sopralast 50 TV Alu	various	ASTM D6298	Fiberglass reinforced modified bitumen sheeting faced with aluminum foil. Applied by heat welding of ribbon stripping (after removal of plastic burn-off film).
Sopralast 50 TV Alu Sanded	various	ASTM D6298	Fiberglass reinforced modified bitumen sheeting sanded on the bottom and faced with aluminum foil. Applied in hot asphalt, cold adhesive or ribbon stripping.
Soprastar Flam	39" x 33' (1 sq.)	ASTM D6162	Polyester reinforced SBS modified bitumen membrane with a plastic burn-off film on the bottom side and a reflective white top surface. Applied by heat welding.
Soprastar Sanded	39" x 33' (1 sq.)	ASTM D6162	Stabilized polyester mat reinforced SBS modified bitumen membrane with a sanded bottom side and a reflective white top surface. Applied by hot asphalt or cold adhesive.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
UNILAY	39" x 33' (1 sq.)	ASTM D6164	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).
Elastocol 500	various	ASTM D41	Asphalt primer.
Elastocol Stick	various	ASTM D41	Asphalt primer.
Elastocol Stick Zero	Various	ASTM D41	Asphalt primer.
ALSAN Flashing™	1.25 gallon pail or 3.75 gallon pail	Proprietary	One part polyurethane/bitumen resin, moisture cure compound.
ALSAN Polyfleece	4", 8" or 39" wide by 50' long	Proprietary	Non-woven polyester reinforcement used in the ALSAN Flashing system.
COLPLY Flashing Cement	5 gallon pail	Proprietary	Elastomeric bitumen based mastic compound.
Soprawalk	39" x 26' (3/4 sq.)	Proprietary	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and mineral granules on the top. Applied by hot asphalt, cold adhesive or ribbon stripping.
High Velocity® Insulation Adhesive III (HVIA-III)	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity® Insulation Adhesive III – Green	4 dual cartridges per carton	Proprietary	Two part elastomeric urethane foam adhesive.
High Velocity Insulation Adhesive PG	5 gal. or 50 gal.	Proprietary	Two part elastomeric urethane foam adhesive.
FM Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Plastomeric bitumen based cold adhesive.
Duotack	5, 50 gallon pail	Proprietary	Two part elastomeric urethane foam adhesive.
Duotack Neo	5, 50 gallon pail	Proprietary	Two part polyurethane foam adhesive.
FM Adhesive Trowel Grade	5 gallon pail	Proprietary	Plastomeric bitumen based cold adhesive.
FM Adhesive (VOC)	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
COLPLY Adhesive	5 gallon pail or 55 gallon drum	Proprietary	Polymer modified cold process membrane adhesive.

<b><u>Product</u></b>	<b><u>Dimensions</u></b>	<b><u>Test Specification</u></b>	<b><u>Product Description</u></b>
COLPLY Modified Adhesive	5 gallon pail, 55 gallon drum or 350 gallon tote	Proprietary	Elastomeric bitumen based cold adhesive.
COLPLY EF Adhesive	5 gallon pail	Proprietary	Solvent free, polymeric adhesive.
Soprastar Adhesive	5 gallon pail or 55 gallon drum	Proprietary	SBS modified bitumen based cold adhesive.
Sopravap'r	45" x 133'	Various	Self-adhering air/vapor barrier membrane.

**APPROVED INSULATIONS:**

**TABLE 2**

<b>Product Name</b>	<b>Product Description</b>	<b>Manufacturer (With Current NOA)</b>
ACFoam-II, ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam Composite	Composite polyisocyanurate insulation board	Atlas Roofing Corporation
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
EnergyGuard Polyiso Insulation	Composite polyisocyanurate insulation	GAF
EPS	Type IX 1.8 pcf. Polystyrene Insulation	Generic
XPS	Type IV 1.6 pcf. Polystyrene Insulation	Generic
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Perlite Insulation	Perlite insulation board	Generic
DensDeck, DensDeck Prime, DensDeck DuraGuard Overlayment Board	Water resistant gypsum board	Georgia Pacific Gypsum LLC
Sopra-ISO s, Sopra-ISO+ s	Polyisocyanurate foam insulation	Soprema, Inc.
M-Shield, M-Shield CG	Polyisocyanurate foam insulation	Soprema, Inc.
Sopra-ISO r, Sopra-ISO+ r	Polyisocyanurate foam insulation	Soprema, Inc.
Sopra-ISO x	Polyisocyanurate foam insulation	Soprema, Inc.
H-Shield, H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, LLC
ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 AGF, ENRGY 3 CGF	Polyisocyanurate foam insulation	Johns Manville Corp.
Multi-Max-3, Multi-Max FA-3	Polyisocyanurate foam insulation	RMax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	USG Corp.
Structodek High Density Fiberboard Roof Insulation	High Density wood fiber insulation board	Blue Ridge Fiberboard, Inc.
Fesco Board	Expanded mineral fiber insulation	Johns Manville Corp.
Sopraboard	Mineral fortified asphaltic cored coverboard	Soprema, Inc.



**APPROVED FASTENERS:**

**Table 3**

<b>Fastener Number</b>	<b>Product Name</b>	<b>Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
1.	Soprema #12, #14 & #15 Fastener	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.		Soprema, Inc.
2.	Dekfast 12, 14 & 15 HS	Insulation fastener		SFS Intec, Inc.
3.	Dekfast Galvalume Steel Hex	Galvalume AZ50 steel plate	2 7/8" x 3 1/4"	SFS Intec, Inc.
4.	Dekfast DekFlat Round Plastic Lock Plate	Polypropylene locking plate.	3" x 3 1/4"	SFS Intec, Inc.
5.	AccuTrac Hextra	Insulation fastener for wood and steel.		OMG, Inc.
6.	OMG 3" Galvalume Steel Plate	Galvalume stress plate.	3" diameter	OMG, Inc.
7.	OMG Flat Bottom Metal Plate	Galvalume stress plate.	3" square	OMG, Inc.
8.	#12 Standard Roofgrip, #14 Roofgrip & #15 Roofgrip	Insulation fastener.		OMG, Inc.
9.	CD-10	Insulation fastener.		OMG, Inc.
10.	Fluted Nail	Insulation fastener.		OMG, Inc.
11.	3 in. Round Metal Plate	Galvalume AZ50 steel plate	3" diameter	OMG, Inc.
12.	OMG Plastic Plate	Polypropylene stress plate	3.25" diameter	OMG, Inc.
13.	Trufast #14 HD Fastener	Insulation fastener for wood, steel and concrete.		Altenloh, Brinck & Co. U.S., Inc.
14.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete.		Altenloh, Brinck & Co. U.S., Inc.
15.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 steel plate	3" diameter	Altenloh, Brinck & Co. U.S., Inc.
16.	OMG Polymer Batten Strip	Modified polymer batten bar		OMG, Inc.
17.	Dekfast Galvalume Steel 3" Round	Galvalume AZ50 steel plate	3" diameter	SFS Intec, Inc.
18.	Dekfast Coiled Batten Strip	Batten bar		SFS Intec, Inc.
19.	Dekfast 2" Round Barbed Seam Plate	Stress plate	2" diameter	SFS Intec, Inc.
20.	Soprema 3" Round Insulation Plate	Stress plate	3" diameter	Soprema, Inc.
21.	Soprafix 2" SB Stress Plate	Stress plate	2" diameter	Soprema, Inc.



**APPROVED FASTENERS:**

**Table 3**

<b>Fastener Number</b>	<b>Product Name</b>	<b>Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
22.	Soprafix 2-3/8" SB Stress Plate	Stress plate	2-3/8" diameter	Soprema, Inc.
23.	Soprafix MBB-R	Metal Batten Bar		Soprema, Inc.
24.	Soprema #12 DP, #14 MP, #15 HD Fastener	Insulation and membrane fasteners		Soprema, Inc.
25.	Trufast Flat Batten Bar	Galvalume AZ55 steel batten bar		Altenloh, Brinck & Co. U.S., Inc.
26.	Trufast Recessed Batten Bar	Galvalume AZ55 steel batten bar with recessed holes		Altenloh, Brinck & Co. U.S., Inc.
27.	#15 Roofgrip Large Head	Carbon steel fasteners used in steel, wood and concrete decks	Various	OMG, Inc.
28.	Dekfast Galvalume Steel Round 2-3/8" 20 ga. Barbed Plate	Galvalume AZ55 steel barbed plate	2-3/8" diameter	SFS Intec, Inc.
29.	Trufast 2" Barbed Metal Seam Plate	Galvalume steel barbed plate	2" diameter	Altenloh, Brinck & Co. U.S., Inc.
30.	Trufast 2.4" Barbed Metal Seam Plate	Galvalume steel barbed plate	2.4" diameter	Altenloh, Brinck & Co. U.S., Inc.
31.	Dekfast IF-2-SB	Galvalume AZ55 steel plate	2" diameter	SFS Intec, Inc.
32.	Soprema 2" Seam Plate	Stress plate	2" diameter	Soprema, Inc.
33.	Soprema 3" Metal Installation Plate	Stress plate	3" diameter	Soprema, Inc.
34.	Trufast 3" Recessed Metal Insulation Plate	Galvalume AZ50 steel plate	3" diameter	Altenloh, Brinck & Co. U.S., Inc.
35.	OMG Heavy Duty	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.	Various	OMG, Inc.
36.	OMG 2-3/8" Barbed XHD Plates	Galvanized steel stress plate	2-3/8" round	OMG, Inc.



**APPROVED SURFACING/COATING OPTIONS:**

**TABLE 4**

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

<b>System Number</b>	<b>Manufacturer</b>	<b>Application</b>
1.	Generic	Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
2.	Soprema, Inc.	Gravel applied at 400 lbs./sq., adhered with FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive, COLPLY EF Adhesive or Soprapstar Adhesive at 4 gal./sq.
3.	Karnak Corporation	Karnak #97 Fibrated Aluminum Roof Coating applied at an application rate of 1.5 gal./sq.
4.	Soprema, Inc.	Cural Aluminizer applied at an application rate of 2 gal./sq.
5.	Thermo Manufacturing Systems, LLC	Super Prep Roof Coating applied in two coats at an application rate of 1.5 gal./sq./coat.
6.	Quest Construction Products LLC dba United Coatings	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.
7.	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.
8.	Henry Company	HE280DC White Elastomeric Roof Coating applied in two coats at an application rate of 1 gal./sq./coat.
9.	National Coating Corp.	Acryshield <sup>®</sup> A500 applied in two coats at an application rate of 1 gal./sq./coat.
10.	Soprema, Inc.	R-Nova Roof Coating
11.	Generic	Semi-ceramic coated colored granules.



**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>	
Florida Testing Engineering & Consulting Inc. Factory Mutual Research Corp.	TAS 114-D	GL0904-02	05/01/09	
	TAS 114-D	GL0409-03	05/01/09	
	1W8A1.AM	FM 4470	07/15/93	
	1Z3A6.AM	FM 4470	04/27/95	
	3000507	FM 4450	02/16/00	
	3009610	FM 4450	10/22/01	
	3008869	FM 4470	03/19/01	
	3002351	FM 4470	02/28/03	
	3017614	FM 4470	02/27/06	
	3025860	FM 4470	04/17/06	
	3029098	FM 4470	10/25/07	
	3032109	FM 4470	07/21/08	
	3026128	FM 4470	08/04/06	
	3024311	FM 4470	11/01/06	
	3036182	FM 4470	07/31/09	
	3014751	FM 4470	08/27/03	
	3023458	FM 4470	07/18/06	
	3031818	FM 4470	02/20/09	
	3X3A7.AM	FM 4470	09/08/94	
	3045101	FM 4470	11/05/12	
	3037437	FM 4470	11/09/09	
	3008441	FM 4470	10/17/00	
	3044630	FM 4470	02/10/12	
	3042559	FM4470	10/18/11	
	3047439	FM 4470	07/22/13	
	3045734	FM 4470	04/04/12	
	3046765	FM 4470	02/15/13	
	3047351	FM 4470	10/09/14	
	Underwriters Laboratories	R11436	UL 790	06/18/13
	Dynatech Engineering Corp.	10.94.27	TAS 114	10/27/94
		2491-04.95	TAS 114	01/04/95
		2003.02.97-1	TAS 114	02/15/97
	Exterior Research & Design, LLC	2003-2.04.97-1	TAS 114	04/15/97
2002.07.97-1		TAS 114	08/15/97	
2755.09.02		TAS 114	10/19/02	
2760.01.05-3		TAS 114	02/22/05	
2761.09.03		TAS 114	09/02/03	
2777.09.05-R2		TAS 114	05/24/02	
2774.04.05-R1		TAS 114	04/18/07	
S12370.03.09-1		ASTM D6164	03/06/09	
S12370.03.09-2		ASTM D6164	03/06/09	
S12370.03.09-3		ASTM D6162	03/06/09	
Trinity   ERD	C8500SC.11.07-R1	TAS 117(B) ASTM D6862	08/07/09	
	S11440.06.10	ASTM D4798 TAS 110	06/01/10	
	S32840.06.10-R1	TAS 117 (B)	12/11/14	
	S11440.01.11-R1	ASTM D6164	06/07/12	
	S11440.11.10-4	ASTM D2178	11/17/10	



**EVIDENCE SUBMITTED: (CONT.)**

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Name</u>	<u>Date</u>	
Trinity   ERD	S11440.12.10-1-R1	ASTM D6163	06/07/12	
	S43210.11.14	ASTM D1876	11/10/14	
	S45520.11.13-R2	Physical Properties	03/26/14	
	S39500.12.12-R1	Physical Properties	12/27/12	
	S39320.01.12-R1	FM 4474 & TAS 114	05/24/12	
	S47170.11.14	FM 4474 & TAS 114	11/10/14	
	S32700.12.10-R2	ASTM D6162	07/07/14	
	S35860.12.11-1-R1	ASTM D2178	12/12/14	
	S35860.12.11-2	ASTM D4601	12/12/11	
	S35860.05.12-1-R2	ASTM D6163	02/14/13	
	S35860.05.12-2-R3	ASTM D6164	08/28/14	
	S35860.05.12-3	ASTM D6164	05/08/12	
	S35860.09.12-R2	ASTM D6163	12/12/14	
	S14000.08.09-R2	TAS 114	10/09/09	
	S39970.07.12-2	ASTM D6164	07/12/12	
	S39970.07.12-R1	ASTM D6162	12/12/14	
	S47160.01.14-R1	FM 4470 & TAS 114 (H)	12/11/14	
	S45010.02.14	ASTM D6506	02/07/14	
	S43400.08.14-5	ASTM D6163	08/26/14	
	S43400.08.14-6	ASTM D6164	08/26/14	
	S43400.08.14-7-R1	ASTM D6164	11/20/14	
	S43400.09.14-9	ASTM D6164	09/02/14	
	S43400.09.14-10	ASTM D6298	09/08/14	
	S45010.02.14	ASTM D6506	02/07/14	
	S43400.08.14-4-R1	ASTM D6163	10/24/14	
	S44110.09.14-3	ASTM D6163	09/08/14	
	S44110.09.14-7C	ASTM D6164	09/02/14	
	S44220.09.14-1	ASTM D6162	09/08/14	
	S44220.09.14-7A	ASTM D4601	09/08/14	
	S11440.11.10-3-R2	ASTM D4601/TAS 117(B)	08/26/14	
	S43210.11.14	ASTM D1876	11/20/14	
	PRI Construction Materials Technologies, LLC	SOP-049-02-01	ASTM D1644 / D2196	05/31/12
		SOP-043-02-01	ASTM D4601	02/27/12
		SOP-042-02-01	ASTM D4601	02/27/12
		SOP-041-02-01	ASTM D2178	02/27/12
		SOP-040-02-01	ASTM D2178	02/27/12
		SOP-010-02-01.03	TAS-138	07/26/11
		SOP-050-02-01	ASTM D3019	07/12/12
	SOP-056-02-01	Various	09/12/12	



**APPROVED ASSEMBLIES:**

**Membrane Type:** SBS

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

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

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

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ENRGY 3, ACFoam-II, Sopra-ISO s, H-Shield, Sopra-ISO r, M-Shield, ISO 95+ GL, Multi-Max FA-3, Sopra-ISO x Minimum 1.4” thick	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous 3/4” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded, 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Soprabase, Sopralene 180 Sanded 2.2, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered with in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 Ultra FR GR, Sopralene 180 FR+ GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 Ultra FR GR, Sopralene 250 FR+ GR, Sopralast 50 TV Alu Sanded, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

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

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



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Deck, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(2):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All insulation shall be adhered with High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” wide ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

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

**Base Sheet:** One layer of Sopra G, Modified Sopra G, Soprabase, Soprabase S, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprarstar Adhesive at 1.5 – 2.0 gallon / square.

\*Requires torch-applied ply or cap membrane.



**Ply Sheet:** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Soprabase, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\* or Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallon / square.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 Ultra FR GR, Sopralene 180 FR+ GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 Ultra FR GR, Sopralene 250 FR+ GR, Sopralast 50 TV Alu Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or Colply Adhesive, Colply Modified Adhesive or FM Adhesive at 1.5 – 2.0 gallon / square to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -60 psf. (See General Limitation #9.)



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

**All General and System Limitations apply.**  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Tapered ENRGY 3, Tapered ACFoam-II, Tapered ACFoam-III, Sopra-ISO s Tapered, Tapered H-Shield, M-Shield Tapered, Sopra-ISO r Tapered Minimum ½” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Minimum ¼” thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity<sup>®</sup> Insulation III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
 \*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

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

**Maximum Design Pressure:** -60 psf. (for all other insulations) (See General Limitation #9.)  
-82.5 psf. (for tapered ACFoam-II, ACFoam-III) (See General Limitation #9.)

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

**All General and System Limitations apply.**  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, H-Shield, M-Shield, Sopra-ISO r Minimum 1.4” thick	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
Approved High Density Wood Fiberboard, Structodek High Density Fiberboard Roof Insulation Minimum ½” thick	N/A	N/A
Fesco Board Minimum ¾” thick	N/A	N/A
DensDeck Minimum ¼” thick	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. 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:** One or more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI,  
**(Optional)** Soprabase, Soprabase S adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Ply Sheet:** **(Required if no base sheet used)** One or more layers of Elastophene Flam\*,  
**(Optional)** Elastophene Flam 2.2\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied (not allowed on perlite insulations or wood fiberboard coverboards)



**Ply Sheet:  
(Optional)  
(Cont.)**

Or  
One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
\*Requires torch-applied cap membrane.

**Membrane:**

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Elastophene GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Surfacing:**

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

**Maximum Design  
Pressure:**

-420 psf. (for min. 1.5" thick Approved polyisocyanurate in asphalt followed by min. 3/4" FescoBoard in asphalt.) (See General Limitation #9.)  
-60 psf. (for all other applications) (See General Limitation #9.)



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

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Tapered ACFoam-II, Tapered ACFoam-III, Sopra-ISO s Tapered, Tapered H-Shield, M-Shield Tapered, Sopra-ISO r Tapered</b>		
<b>Minimum ½” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam Composite</b>		
<b>Minimum 2” thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
 \*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR or Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

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

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



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(6):** One or more layers of insulation adhered with approved adhesive or asphalt.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or Insta-Stik Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.**

**Base Sheet: (Optional)** One or more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI, Soprabase, Soprabase S, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

**Ply Sheet: (Optional)** **(Required if no base sheet used)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied.

Or

One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design Pressure:** -90 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(7):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All insulation shall be adhered to the primed or unprimed deck with Insta-Stik Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 18” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

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

**Base Sheet:** One layer of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied ply membrane.

**Ply Sheet:** One or two layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.

Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied (not permitted if base membrane is used)

Or



**Ply Sheet:  
(Cont.)** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of Sopra IV or Sopra VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -90 psf. (See General Limitation #9.)

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

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r, ENRGY 3 or Multi-Max-3 Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the deck with 0.75” wide beads of High Velocity<sup>®</sup> Insulation III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive spaced maximum 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet: (Optional)** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, fully adhered in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallon / square.

**Ply Sheet: (Optional)** **(Required if no Base Sheet used)** One or more layers Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, fully adhered in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallon / square.

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded fully adhered in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallon / square.



**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:** -97.5 psf. (for systems in FM Adhesive) (See General Limitation #9)  
-135 psf. (for all other membrane adhesives) (See General Limitation #9)



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

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, ENRGY 3, M-Shield, Sopra-ISO r Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or 0.75” wide beads of Insta-Stik, OlyBond 500, TITSEET Roofing Adhesive, 3M Polyurethane Foam Insulation Adhesive CR-20, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive, High Velocity Insulation Adhesive III (HVIA-III), High Velocity Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack or Duotack Neo spaced maximum 12” o.c. or Permastic applied at a rate of 1.5 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or SopraStar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied ply membrane.

**Ply Sheet:  
(Optional)** One or two layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or



**Ply Sheet:  
(Optional)  
(Cont.)** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of Sopra IV or Sopra VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or SopraStar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced base membrane

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, SopraStar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or SopraStar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced base or ply membrane

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

**Maximum Design Pressure:** -105 psf (See General Limitation #9)



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

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+GL, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or 0.75” wide beads of Insta-Stik, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive, High Velocity Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack or Duotack Neo spaced maximum 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied ply membrane.

**Ply Sheet:  
(Optional)** One or two layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or



**Ply Sheet:  
(Optional)  
(Cont.)**

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of Sopra IV or Sopra VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced base membrane

\*Requires torch-applied cap membrane.

**Membrane:**

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY EF Adhesive, COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced base or ply membrane.

**Surfacing:**

Surfacing is Optional on granular surfaced field cap membranes.

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

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

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

**Maximum Design  
Pressure:**

-105 psf (See General Limitation #9)



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

**All General and System Limitations apply.**

**Vapor Barrier:** An optional base layer of Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Sopralene Flam 180, Sopralene Flam 250 or Colvent Flam 180 TG may be applied over primed deck. One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 250 SP, torched-applied.

Or

One layer of Elastophene 180 Sanded, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Elastophene HS, Elastophene HS 62, Elastophene Sanded, Elastophene Sanded 3.0, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded, adhered to deck in COLPY Adhesive, COLPLY Modified Adhesive or FM Adhesive (VOC) at 1.5 – 2.0 gallon/square.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ENRGY 3, ENRGY 3 25 PSI, ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, Multi-Max FA-3, Sopra-ISO x, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier. All insulation shall be adhered to the vapor barrier in High Velocity Insulation Adhesive PG, Duotack or Duotack Neo applied in continuous ½” wide ribbons maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** One layer of Colvent Flam TG, Colvent Flam 180 TG, Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250 or Sopralene 250 SP, torch-applied with minimum 3” wide laps.



<b>Ply Sheet (Optional):</b>	Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250 or Sopralene 250 SP, torch-applied with minimum 3” wide laps.
<b>Membrane:</b>	Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied with minimum 3” wide laps.
<b>Surfacing:</b>	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.
<b>Maximum Design Pressure:</b>	-120 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(12):** One or more layers of insulation adhered with approved adhesive or asphalt.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Minimum ¼" thick</b>	N/A	N/A
<b>Approved High Density Wood Fiberboard Minimum ½" thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8" thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾" to 1" wide ribbons at a maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** One or more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI, Soprabase, Soprabase S 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 or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied (not permitted as first layer on wood fiber)

Or

One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -105 psf. (using High Density Wood Fiberboard) (See General Limitation #9.)  
-127.5 psf. (using DensDeck or Sopraboard) (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(13):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, Sopra-ISO r, M-Shield or H-Shield</b>		
<b>Minimum 1.4” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum ¼” thick</b>	N/A	N/A
<b>Approved High Density Wood Fiberboard</b>		
<b>Minimum ½” thick</b>	N/A	N/A
<b>Sopraboard</b>		
<b>Minimum 1/8” thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the deck with High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

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

**Base Sheet: (Optional)** One layer of Sopra G, Modified Sopra G, Soprabase, Soprabase S, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallon / square.

\*Requires torch-applied ply membrane.



**Ply Sheet:** Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied. (not permitted as first layer on wood fiberboard)

Or

Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied (not permitted if base membrane is used) (not permitted as first layer on wood fiberboard)

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded\*, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or SopraStar Adhesive at 1.5 – 2.0 gallon / square.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, SopraStar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or SopraStar Adhesive at 1.5 – 2.0 gallon / square to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -105 psf. (using High Density Wood Fiberboard) (See General Limitation #9.)  
-127.5 psf. (using DensDeck or SopraBoard) (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(14):** One or more layers of insulation adhered with approved adhesive or asphalt.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Minimum ¼" thick</b>	N/A	N/A
<b>Approved High Density Wood Fiberboard (requires two coat application of OlyBond) Minimum ½" thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or OlyBond Insulation Adhesive applied at a rate of 1 gal./100 ft<sup>2</sup>. 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:** One or more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI,  
**(Optional)** Soprabase, Soprabase S 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 or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied (not permitted as first layer on wood fiberboard)

Or

One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Elastophene GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -105 psf. (using High Density Wood Fiberboard) (See General Limitation #9.)  
-232.5 psf. (using DensDeck) (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(15):** One or more layers of insulation adhered with approved asphalt.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
 \*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.  
*(Maximum Design Pressure –120 psf, See General Limitation #9.)*

Or



**Membrane:** Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded  
**(Cont.)** adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

*(Maximum Design Pressure –112.5 psf, See General Limitation #9.)*

**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 Membrane Options Above.



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(16):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Vapor Barrier:** Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0,  
**(Optional)** Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torched applied to ASTM D 41 primed concrete deck.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional):</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>H-Shield, M-Shield, Sopra-ISO r, ACFoam-II, Sopra-ISO s, ISO 95+ GL, Multi-Max FA-3, Sopra-ISO x, ENRGY 3 Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the vapor barrier or deck in Duotack or Duotack Neo applied in continuous ½” wide ribbons maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene PS\*, Elastophene PS 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS, Sopralene 250 Sanded adhered in COLPLY Adhesive, COLPLY Modified Adhesive, COLPLY EF Adhesive, FM Adhesive (VOC) or Soprastar Adhesive at a rate of 1.5 gal./sq. or adhered in hot asphalt at 25 lbs./sq.

Or

Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Elastophene Flam HS\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.



**Membrane:** Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 Ultra FR GR, Sopralene 180 FR+ GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 Ultra FR GR, Sopralene 250 FR+ GR, Soprastar Sanded, Sopralast 50 TV Alu Sanded adhered in COLPLY Adhesive, COLPLY Modified Adhesive, COLPLY EF Adhesive, FM Adhesive (VOC) or Soprastar Adhesive at a rate of 1.5 gal./sq. or adhered in hot asphalt at 25 lbs./sq.

Or

Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -150 psf. with DensDeck Prime (See General Limitation #9.)  
-337.5 psf. with SECUROCK (See General Limitation #9.)



**Membrane Type:** SBS

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

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

**System Type A(17):** 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.

**Primer:** Substrate primed with approved ASTM D41 primer

**Vapor Barrier (Optional):** One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene 250 SP, torch-applied.

Or

One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved EPS Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/4" thick</b>	N/A	N/A

**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 mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./10ft<sup>2</sup> or High Velocity Insulation Adhesive-III (HVIA III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive-PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive in 3/4" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

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



- Base Sheet:** One layer of Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.  
Or  
Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. \*Requires torch-applied ply or cap membrane.
- Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.  
Or  
Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.  
\*Requires torch-applied cap membrane.
- Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.  
Or  
Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, SopraStar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.
- Surfacing:** Surfacing is Optional on granular surfaced field cap membranes.  
Surfacing is Required for smooth or sanded surfaced field cap membranes.  
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.  
Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
- Maximum Design Pressure:** -152.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(18):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Vapor Barrier:** Colvent TG or Colvent 180 TG, torched-applied.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+ GL, Multi-Max FA-3, Sopra-ISO x, ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note:** Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier. All insulation shall be adhered to the vapor barrier in full moppings of approved hot asphalt within the EVT range and at a rate of 20-25 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** One layer of Sopra G adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq.

**Ply Sheet:** Elastophene 180 PS, Colphene 180 PS, Sopralene 180 PS 2.2, Elastophene PS, Elastophene PS 3.0 adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with minimum 3" wide side lap.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, torched-applied.

**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:** -195 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(19):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Insulfoam EPS, Type IX Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8" thick</b>	N/A	N/A
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the deck with High Velocity® Insulation Adhesive-III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive-PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous 1/2" – 3/4" wide ribbons at a maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

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

**Base Sheet:** One layer of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

Or

One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprapstar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied ply or cap membrane.



**Ply Sheet:  
(Optional)** Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced ply membrane.

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

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



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(20):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Vapor Barrier:** One or two plies of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torched applied to ASTM D 41 primed concrete deck.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r, ENRGY 3, ISO 95+ GL, Multi-Max FA-3, Sopra-ISO x (flat or tapered) Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board, DensDeck, DensDeck Prime, DensDeck DuraGuard Overlayment Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered in High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive or OlyBond 500 applied in ½” to ¾” wide ribbons spaced 3” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Colvent Flam TG, Colvent Flam 180 TG, Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250 or Sopralene 250 SP, torch-applied.

**Ply Sheet (Optional):** Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250 or Sopralene 250 SP, torch-applied.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torched-applied.

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

**Maximum Design Pressure:** -187.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(21)** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.  
 or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Cap.



**Membrane:** Soprastar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

Soprastar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

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

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

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

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

**Maximum Design Pressure:**

-187.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(22):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

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

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

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

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

**Maximum**

**Design Pressure:** -187.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(23):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

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

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

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

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

**Maximum**

**Design Pressure:** -187.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(24):** One or more layers of insulation adhered with approved adhesive or asphalt.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved EPS Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck Prime Minimum ½” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered to the primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive or Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ¾” to 1” wide ribbons at a maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base / Ply Sheet:** One layer of Elastophene Flam 3.0, Elastophene Flam, Elastophene Flam 2.2, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Elastophene Flam HS, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 180, Colphene Flam 180, Sopralene Flam 250 or Sopralene 250 SP, torch-applied.

Or

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



**Membrane:** Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Soprastar Flam, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied with minimum 3” wide lap.

Or

Elastophene FR GR, Elastophene LS FR GR, Elastophene GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 Ultra FR GR, Sopralene 180 FR+ GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 Ultra FR GR, Sopralene 250 FR+ GR, Soprastar Sanded adhered in COLPLY Adhesive, COLPLY Modified Adhesive, COLPLY EF Adhesive, FM Adhesive (VOC) or Soprastar Adhesive at a rate of 1.5 gal./sq. or adhered in hot asphalt at 25 lbs./sq.

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

**Maximum Design Pressure:** -195 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(25):** One or more layers of insulation adhered with approved adhesive  
**All General and System Limitations apply.**  
**Primer:** Substrate primed with approved ASTM D41 primer.  
**Dry In Sheet:** One layer of Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 20-25 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Sopraboard Minimum 1/8" thick	N/A	N/A

**Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of dry in sheet. All insulation shall be adhered to the dry in sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. 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:** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. adhered in hot asphalt at 25 lbs./sq.  
**(Optional)**

**Ply Sheet:** **(Required if no Base Sheet used)** One or more layers Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.  
**(Optional)**

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design Pressure:** -210 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(26):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 6" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

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

**Base Sheet:** One layer of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

Or

One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied ply or cap membrane.



**Ply Sheet:  
(Optional)** Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced ply membrane.

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

**Maximum Design  
Pressure:** -215 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(27):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ISO 95+GL, H-Shield, M-Shield, Sopra-ISO r Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or 0.75” wide beads of Pliodeck Insulation Adhesive, Insta-Stik, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive, High Velocity Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack or Duotack Neo spaced maximum 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design**

**Pressure:** -217.5 psf. (for insulation adhered with Pliodeck Insulation Adhesive)  
(See General Limitation #9)  
-225 psf. (for insulation adhered with all other adhesives)  
(See General Limitation #9)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(28):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, ENRGY 3, M-Shield, Sopra-ISO r Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulation shall be adhered to the deck with full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup> or 0.75” wide beads of Insta-Stik, OlyBond 500, TITSEET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive, High Velocity Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green or High Velocity Insulation Adhesive PG, Duotack or Duotack Neo spaced maximum 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design Pressure:** -225 psf (See General Limitation #9)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(29):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r, ENRGY 3, ISO 95+ GL, Multi-Max FA-3, Sopra-ISO x (flat or tapered) Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered in with hot asphalt at 25 lbs./sq. or in High Velocity<sup>®</sup> Insulation Adhesive III (HVIA-III), High Velocity<sup>®</sup> Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive or OlyBond 500 applied in ½” to ¾” wide ribbons spaced 3” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\* Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene Sanded\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet (Optional):** Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.



Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\* Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene Sanded\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Membrane:**

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torched-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

**Surfacing:**

Surfacing is Optional on granular surfaced field cap membranes.

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

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

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

**Maximum Design Pressure:**

-232.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(30):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

Or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -232.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(31):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

**(Optional)**

or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** Soprastar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

or

Soprastar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -232.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(32):** One or more layers of insulation adhered with approved adhesive  
**All General and System Limitations apply.**  
**Vapor Barrier:** Colvent TG or Colvent 180 TG, torched-applied.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ENRGY 3, H-Shield, H-Shield CG, Sopra-ISO s, M-Shield, Sopra-ISO r, M-Shield CG, Sopra-ISO+ r Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8" thick</b>	N/A	N/A

**Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier. All insulation shall be adhered to the vapor barrier in full moppings of approved hot asphalt within the EVT range and at a rate of 20-25 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** One layer of Sopra G adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq.

**Ply Sheet:** Elastophene 180 PS, Colphene 180 PS, Sopralene 180 PS 2.2, Elastophene PS, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with minimum 3" wide side lap.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torched-applied.

**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:** -240 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(33):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, Multi-Max FA3, SOPRA-ISO x, H-Shield, M-Shield, SOPRA-ISO r</b>		
<b>Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with hot asphalt at 25 lbs./sq. or Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -225 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(34):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield AGF, H-Shield CGF, SOPRA-ISO PLUS r, Multi-Max FA-3, SOPRA-ISO x Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
 or  
 Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

**Ply Sheet: (Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

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

**Maximum Design Pressure:** -225 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(35):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All insulation shall be adhered to the deck with OlyBond Adhesive Fastener at 1 gallon/square. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

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

**Base Sheet:** One layer of Sopra G, Modified Sopra G, Sopra IV, Sopra VI, Soprabase, Soprabase S, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.  
**(Optional)**

\*Requires torch-applied ply membrane.

**Ply Sheet:** One or two layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or



**Ply Sheet:  
(Continued)**

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to three plies of Sopra IV or Sopra VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square.

\*Requires torch-applied cap membrane.

**Membrane:**

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FM Adhesive, FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons / square. to sand surfaced ply membrane.

**Surfacing:**

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

**Maximum Design  
Pressure:**

-255 psf. (using ENRGY 3, H-Shield, Sopra-ISO r , M-Shield)  
(See General Limitation #9.)  
-270 psf. (using AC Foam-II, AC Foam-III, Sopra-ISO s, Sopra-ISO+ s)  
(See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(36):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** (Use only if Vapor Barrier installed) Elastocol 500 or ASTM D41 at 0.75 gal./sq.  
**Vapor Barrier:** Elastophene SP 2.2, Elastophene SP 3.0, Sopralene 180 SP, Sopralene 180 SP  
**(Optional)** 3.5, torched

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r, Multi-Max FA-3, SOPRA-ISO x</b>		
<b>Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard</b>		
<b>Minimum 0.125” thick</b>	N/A	N/A
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.  
 or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.



**Ply Sheet:  
(Optional)**

Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.

**Membrane:**

Soprastar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

or

Soprastar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -260 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(37):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

**Primer:** (Use only if Vapor Barrier installed) Elastocol 500 or ASTM D41 at 0.75 gal./sq.  
**Vapor Barrier:** Elastophene SP 2.2, Elastophene SP 3.0, Sopralene 180 SP, Sopralene 180 SP  
**(Optional)** 3.5, torched

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYSIO Insulation, ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield, SOPRA-ISO r, M-Shield, H-Shield CG, SOPRA-ISO PLUS r, Multi-Max FA-3, SOPRA-ISO x</b>		
<b>Minimum 2" thick</b>	N/A	N/A

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note:** All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

or

Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

**Ply Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
**(Optional)**

**Membrane:** Soprastar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.



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

**Maximum  
Design Pressure:** -260 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(38):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield CG, SOPRA-ISO PLUS r</b>		
<b>Minimum 2" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard</b>		
<b>Minimum 0.125" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.  
 or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.  
 or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -277.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(39):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield CG, SOPRA-ISO PLUS r</b>		
<b>Minimum 2" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.  
 Or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.  
 Or  
 Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.  
 \*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -285 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(40):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft2</b>
<b>ACFoam II, SOPRA-ISO s, ACFoam III, SOPRA-ISO PLUS s, EnergyGuard POLYISO Insulation, ENRGY 3 AGF, ENRGY 3 CGF, H-Shield CG, SOPRA-ISO PLUS r Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft2</b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
 Or  
 Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

**Ply Sheet: (Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

**Membrane:** Soprastar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

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

**Maximum Design Pressure:** -285 psf. (See General Limitation #9.)



**Membrane Type:** SBS

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

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

**System Type A(41):** 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.

**Primer:** Substrate primed with approved ASTM D41 primer

**Vapor Barrier:** One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied.

**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 <sup>2</sup>
ACFoam-II, Sopra-ISO s, Multi-Max FA-3, Sopra-ISO x, ACFoam-III, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r, ENRGY 3, ENRGY 3 25 PSI (flat or tapered) Minimum 1.5” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Sopraboard Minimum 1/8” thick	N/A	N/A

**Note: All insulation shall be adhered to the vapor barrier in High Velocity Insulation Adhesive PG applied in continuous ½” wide ribbons maximum spacing of 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** One layer of Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250 or Sopralene 250 SP, Colvent Flam 180 TG, torch-applied.

**Ply Sheet:** One or more layers of Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR or Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.



**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:** -315 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(42):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft2</b>
ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield, Multi-Max FA3, SOPRA-ISO x		
Minimum 1.5" thick	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft2</b>
SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

**Note:** All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
 or  
 Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

**Ply Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
**(Optional):**

**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

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

**Maximum Design Pressure:** -337.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(43):** One or more layers of insulation adhered with approved adhesive.  
**All General and System Limitations apply.**

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
<b>SECUROCK Gypsum-Fiber Roof Board</b> Minimum 0.25" thick	N/A	N/A

**Note: All insulations shall be adhered with Duotack or Duotack Neo applied in continuous ribbons maximum spacing of 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

Or

Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

**Ply Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded or Sopralene 250 Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.  
**(Optional)**

**Membrane:** Sopraplast Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in COLPLY EF Adhesive at 1.5-2.0 gal./sq.

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

**Maximum Design Pressure:** -337.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(44):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard</b>		
<b>Minimum 0.125” thick</b>	N/A	N/A

**Note: All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** Sopraplast Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

Or

Sopraplast Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Sopraplast Cap FR 651, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam Ultra FR GR, Sopralene Flam Antirock, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam 250 Ultra FR GR or Sopralast 50 TV ALU, torch-applied.

**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:** -365 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type A(45):** One or more layers of insulation adhered with approved adhesive

**All General and System Limitations apply.**

**Vapor Barrier:** One or two plies of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torched applied to ASTM D 41 primed concrete deck.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r, ENRGY 3, Multi-Max FA-3, Sopra-ISO x (flat or tapered) Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A

**Note:** All insulation shall be adhered in High Velocity® Insulation Adhesive III (HVIA-III), High Velocity® Insulation Adhesive III – Green, High Velocity Insulation Adhesive PG, Duotack, Duotack Neo, Millennium One Step Foamable Adhesive, Millennium One Step Green Foamable Adhesive, Millennium PG-1 Low Viscosity Insulation Adhesive or OlyBond 500 applied in ½” to ¾” wide ribbons spaced 3” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

**Base Sheet:** Colvent Flam TG, Colvent Flam 180 TG, Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250, Sopralene 250 SP, torch-applied.

**Ply Sheet (Optional):** Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene Flam 250 or Sopralene 250 SP, torch-applied.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torched-applied.



**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:** -375 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(46):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield, Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV Alu Sanded, applied in hot asphalt at 25 lbs./sq.

or

Soprastar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -375 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(47):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>SECUROCK Gypsum-Fiber Roof Board</b>		
<b>Minimum 0.25" thick</b>	N/A	N/A

**Note: All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** SopraStar Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopralast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -397.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(48):** One or more layers of insulation adhered with approved adhesive.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
 One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam II, SOPRA-ISO s, ENRGY 3, H-Shield, SOPRA-ISO r, M-Shield or Multi-Max FA3, SOPRA-ISO x</b>		
<b>Minimum 1.5” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>DensDeck</b>		
<b>Minimum 0.25” thick</b>	N/A	N/A

**Note: All insulations shall be adhered with hot asphalt at 25 lbs./sq. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\*, applied in hot asphalt at 25 lbs./sq.

\*Requires torch-applied Ply or Cap.

**Ply Sheet:  
(Optional)** Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Sopralene 180 Sanded 2.2, Colphene 180 Sanded, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene PS\*, Elastophene PS 3.0\*, Sopralene 180 PS 2.2\*, Colphene 180 PS\* or Sopralene 180 PS\* applied in hot asphalt at 25 lbs./sq.

or

Elastophene Flam HS\*, Elastophene Flam 2.2\*, Elastophene Flam\*, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene Flam 250\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5 or Sopralene 250 SP, torch-applied.

\*Requires torch-applied Cap.



**Membrane:** Sopraplast Sanded, Elastophene GR, Elastophene LS FR GR, Elastophene FR GR, Elastophene FR+ GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR or Sopraplast 50 TV ALU Sanded, applied in hot asphalt at 25 lbs./sq.

or

Sopraplast Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Sopraplast Cap FR 651, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam Ultra FR GR, Sopralene Flam Antirock, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam 250 Ultra FR GR or Sopraplast 50 TV ALU, torch-applied.

**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:** -452.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(49):** 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.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer  
**Vapor Barrier (Optional):** One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, Colvent TG, Colvent 180 TG, torch-applied.  
 Or  
 One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.  
**Leveling Agent (Optional):** Poly Patch

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r or any approved polyisocyanurate listed in Table 2 Minimum 2" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8" thick</b>	N/A	N/A

**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 mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. 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.

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



**Base Sheet:** One layer of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\* Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene Sanded\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to five plies of Sopra G, Modified Sopra G, Type IV or Type VI ply sheet adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design Pressure:** -502.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(50):** 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.

**All General and System Limitations apply.**

**Primer:** Substrate primed with approved ASTM D41 primer.  
**Vapor Barrier (Optional):** One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, Colvent TG, Colvent 180 TG, torch-applied.  
 Or  
 One layer of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Soprabase, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq.  
**Leveling Agent (Optional):** Vinyl Patch

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, H-Shield, M-Shield, Sopra-ISO r or any approved polyisocyanurate listed in Table 2 Minimum 2” thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A

**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 mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. 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.

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

**Base Sheet:** One layer of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.  
 Or



**Base Sheet:** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, or one to five plies of Sopra G, Modified Sopra G, Type IV or Type VI ply sheet adhered in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surface base or ply membrane.

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

**Maximum Design Pressure:** -525 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type B:** Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, ENRGY 3 25 PSI, H-Shield, M-Shield, Sopra-ISO r (flat or tapered) Minimum 1.5" thick</b>	<b>1, 2, 5, 8, 10, 13 or 14</b>	<b>1:1.33 ft<sup>2</sup></b>

**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).**

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved High Density Wood Fiberboard, Structodek High Density Fiberboard Roof Insulation Minimum 1/2" thick</b>	<b>N/A</b>	<b>N/A</b>
<b>Fesco Board Minimum 3/4" thick</b>	<b>N/A</b>	<b>N/A</b>

**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 ft<sup>2</sup>. 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 more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI, Soprabase, Soprabase S 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 or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Soprabase, Sopralene 180 PS\*, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

\*Requires torch-applied cap membrane.



**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Elastophene GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced ply membrane.

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

**Maximum Design Pressure:** -67.5 psf. (Perlite Insulation in asphalt) (See General Limitation #7.)  
-75 psf. (High Density Wood Fiberboard in asphalt)  
(See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi structural concrete or concrete plank  
**System Type C:** All layers of insulation simultaneously attached.

**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 <sup>2</sup>
ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r, ISO 95+ GL, ENRGY 3 Minimum 2” thick	N/A	N/A

**Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
SECUROCK Gypsum-Fiber Roof Board Minimum ½” thick	8	1:1.78

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

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

**Base Sheet:** One or more layers of Sopra G, Modified Sopra G, Sopra-IV, Sopra-VI, Soprabase, Soprabase S, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt, applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

\*Requires torch-applied ply or cap membrane.



**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

Or

Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt, applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

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

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

**Maximum Design Pressure:** -60 psf. (See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**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.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3, Multi-Max FA-3, Sopra-ISO x, H-Shield, M-Shield, Sopra-ISO r (flat or tapered) Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved High Density Wood Fiberboard, Structodek High Density Fiberboard Roof Insulation Minimum ½" thick</b>	N/A	N/A
<b>Fesco Board Minimum ¾" thick</b>	N/A	N/A
<b>DensDeck, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8" thick</b>	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. Refer to Roofing Application Standard RAS 117 for insulation attachment.

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix [S], Soprafix Base 612, Soprafix [X], Soprafix Base 614, Soprafix-e, Soprafix Base 641, Soprafix [F], Soprafix Base 613, Soprafix Base 610\*, Soprafix Base 611\*, Soprafix Base 630\*, Sopralene Flam 180, Colphene Flam 180 or Sopralene Flam 250 fastened to the deck as described below:

\*For use only when using 2 in. diameter plates.

**Fastening:** Attach base sheet using Dekfast 14 fasteners with Dekfast 2" Round Barbed Seam Plates or Dekfast Galvalume Steel Round 2-3/8" 20 ga. Barbed Plates or Soprema #14 fasteners with Soprafix 2" SB Stress Plates or Soprafix 2-3/8" SB Stress Plates or Trufast #15 EHD Fasteners with Trufast 2" Barbed Metal Seam Plates or Trufast 2.4" Scoop Seam Plates or Soprema #15 HD Fasteners with Soprema 2" Seam Plates or Soprema 2.4" Seam Plates 12" o.c. in a 5" torch-applied lap.



**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam, Elastophene Flam 2.2, Sopralene Flam 180, Colphene Flam 180, Sopralene Flam 250, Sopralene 180 SP 3.0, Sopralene 250 SP, torch-applied.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Colphene Flam 180 FR GR, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied.

**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:** -60 psf. (See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(2):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r (flat or tapered) Minimum 1.5” thick</b>	N/A	N/A
<b>DensDeck, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A
<b>Fesco Board, or Approved Perlite Insulation Minimum 0.75” thick</b>	N/A	N/A

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix [S], Soprafix Base 612, Soprafix [F], Soprafix Base 613, Soprafix Base [X], Soprafix Base 614, Soprafix-e or Soprafix Base 641, fastened to the deck as described below:

**Fastening:** Attach base sheet using Trufast Recessed Batten Bar with Trufast #14 HD Fastener or Soprafix MBB-R with Soprema #14 MP Fasteners spaced 12” o.c. in the minimum 5” wide lap.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam, Elastophene Flam 2.2, Sopralene Flam 180, Colphene Flam 180, Sopralene Flam 250, Sopralene 180 SP 3.0, Sopralene 250 SP, torch-applied.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, SopraStar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied.



**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. (General Limitation #7)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(3):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r (flat or tapered) Minimum 1.5” thick</b>	N/A	N/A
<b>DensDeck, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25” thick</b>	N/A	N/A
<b>Sopraboard Minimum 1/8” thick</b>	N/A	N/A
<b>Fesco Board, Approved Perlite Insulation Minimum 0.75” thick</b>	N/A	N/A

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix-e or Soprafix Base 641, fastened to the deck as described below:

**Fastening:** Attach base sheet using OMG Polymer Batten Strip with OMG #15 Roofgrip Large Head fasteners or Trufast Recessed Batten Bar with Trufast #14 HD Fastener or Soprafix MBB-R with Soprema #14 MP Fasteners, spaced 12” o.c. in the minimum 5” wide lap.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Type IV or Type VI ply sheets adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

**Membrane:** Elastophene FR GR, Elastophene FR+ GR, Elastophene LS FR GR, Elastophene GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base or ply membrane.



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

**Maximum Design Pressure:** -75 psf. (General Limitation #7)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(4):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>ACFoam-II, Sopra-ISO s, H-Shield, M-Shield, Sopra-ISO r Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Approved High Density Wood Fiberboard, Structodek High Density Fiberboard Roof Insulation Minimum ½" thick</b>	N/A	N/A
<b>DensDeck Minimum ¼" thick</b>	N/A	N/A

**Note: Insulation layer shall have preliminary attachment, prior to the installation of the base 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 sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet (Optional):** Sopra G, Sopra IV or Sopra VI presecured to the deck with approved fasteners and plates spaced 24" o.c. in the minimum 3" wide lap.

**Membrane:** One ply of UNILAY membrane fastened through the insulation to the deck using Dekfast 15 HS Fasteners or Soprema #15 Fasteners with Dekfast Isofast IF-2.375-AT Plates spaced 12" o.c. in a 5" wide lap. The side lap fastener row is encapsulated in the torch-applied 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:** -82.5 psf. (See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type D(5):** Base Sheet mechanically attached over preliminarily secured insulation

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved insulation board listed in Table 2</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved coverboard board listed in Table 2</b>		
<b>Minimum 1/4" thick</b>	N/A	N/A

**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.**

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

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix [S], Soprafix Base 612, Soprafix [F], Soprafix Base 613, Soprafix-e or Soprafix Base 641, mechanically attached with OMG Polymer Batten Strip and OMG #15 Roofgrip Large Head fasteners, Trufast Flat Batten Bar and Trufast #15 EHD Fastener, Soprema Soprafix MBB-R and Soprema #15 fasteners or SFS Dekfast Coiled Batten Strip and Dekfast #15 HS fasteners, spaced 12" o.c. in the min. 5" self-adhered lap

**Ply Sheet:** One or more layers of Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

\*Requires torch-applied cap membrane.

**Membrane:** Soprapstar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied.

**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:** -97.5 psf. (See General Limitation #7.)



**Membrane Type:** SBS

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

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

**System Type D(6):** Base Sheet mechanically attached over preliminarily secured insulation

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved insulation board listed in Table 2 Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved coverboard board listed in Table 2 Minimum 1/4" thick</b>	N/A	N/A

**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.**

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

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix [S], Soprafix Base 612, Soprafix [F], Soprafix Base 613, Soprafix Base [X], Soprafix Base 614 mechanically attached with OMG Polymer Batten Strip and OMG #15 Roofgrip Large Head fasteners, Trufast Flat Batten Bar and Trufast #15 EHD Fastener, Soprema Soprafix MBB-R and Soprema #15 fasteners or SFS Dekfast Batten Bar and Dekfast #15 HS fasteners, spaced 12" o.c. in the min. 4" torch-applied lap.

**Ply Sheet:** One or more layers of Sopralene Flam 180, Colphene Flam 180, Sopralene 180 SP  
**(Optional)** 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250, Sopralene 250 SP, torch-applied.

**Membrane:** Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied.

**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:** -105 psf. (See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type D(7):** Base Sheet mechanically attached over preliminarily secured insulation

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved insulation board listed in Table 2</b>		
<b>Minimum 1.5" thick</b>	N/A	N/A
<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any approved coverboard board listed in Table 2</b>		
<b>Minimum 1/4" thick</b>	N/A	N/A

**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.**

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

**Base Sheet:** One layer of Soprafix, Soprafix Base 622, Soprafix [S], Soprafix Base 612, Soprafix [F], Soprafix Base 613, Soprafix Base [X], Soprafix Base 614, mechanically attached with OMG Polymer Batten Strip and OMG #15 Roofgrip Large Head fasteners, Trufast Flat Batten Bar and Trufast #15 EHD Fastener Soprema Soprafix MBB-R and Soprema #15 fasteners or SFS Dekfast Coiled Batten Strip and Dekfast 15 HS, spaced 6" o.c. in every other minimum 4" torch-applied lap. Intermediate, non-fastened laps are 3" wide and torch-applied.

**Ply Sheet:** One or more layers of Sopralene Flam 180, Colphene Flam 180, Sopralene 250  
**(Optional)** Flam, torch-applied.

**Membrane:** Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied.

**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:** -120 psf. (See General Limitation #7.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(8):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.**

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
SECUROCK Gypsum-Fiber Roof Board, DensDeck, DensDeck Prime, DensDeck DuraGuard Roof Board Minimum 0.5” thick	1, 24, 2, 13, 14	1:4 ft <sup>2</sup>

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Primer:** Coverboard is primed with an approved ASTM D41 asphalt primer at a rate of 100-150 ft<sup>2</sup>/gal.  
**(Optional)**

**Base Sheet:** One layer of Sopralene Flam 180, Colphene Flam 180, Sopralene Flam 250, Soprafix, Soprafix Base 622, Soprafix [F], Soprafix Base 613, Soprafix [S], Soprafix Base 612, Soprafix [X], Soprafix Base 614, Soprafix-e, Soprafix Base 641, Soprafix Base 610\*, Soprafix Base 611\*, Soprafix Base 630\* fastened as specified below:

\*For use only when using 2 in. diameter plates.

**Fastening #1:** Torch-applied base membrane to the coverboard with minimum 3” laps. Mechanically attach torch-applied base sheet with Soprema #14 fasteners or Soprema #15 fasteners and Soprema Soprafix 2” SB Stress Plates or Soprafix 2-3/8 in. SB Stress Plates,, Dekfast 14 Dekfast 15 HS fasteners with Dekfast IF-2-SB or Dekfast Galvalume Steel Round 2-3/8” 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2” Barbed Metal Stress Plates or Trufast 2.4” Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2” Seam Plates spaced maximum 12” o.c. through the side laps and two equally spaced staggered rows in the field of the membrane.

*(Maximum Design Pressures –165 psf. See General Limitation #7.)*



**Fastening #2:** Mechanically attach base sheet with Soprema #14 fasteners or Soprema #15 fasteners Soprema Soprafix 2" SB Stress Plates or Soprafix 2-3/8 in. SB Stress Plates, Dekfast 14 Dekfast 15 HS fasteners with Dekfast IF-2-SB or Dekfast Galvalume Steel Round 2-3/8" 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2" Barbed Metal Stress Plates or Trufast 2.4" Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2" Seam Plates spaced maximum 12" o.c. through the minimum 3" wide side lap and two equally spaced staggered rows in the field of the membrane.  
*(Maximum Design Pressures –150 psf. See General Limitation #7.)*

**Ply Sheet:** Elastophene Flam, Elastophene Flam 2.2, Elastophene Flam HS, Sopralene Flam 180, Colphene Flam 180, Sopralene Flam 250, torch-applied with minimum 3" laps.

**Membrane:** Elastophene Flam FR GR, Elastophene Flam GR, Elastophene Flam LS FR GR, Sopralast 50 TV Alu, Soprastar Flam, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, Soprafix Cap FR-651, torch-applied with minimum 3" laps.

**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 Options Above

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(9):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.**

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
SECUROCK Gypsum-Fiber Roof Board, DensDeck, DensDeck Prime, DensDeck DuraGuard Roof Board Minimum 0.5” thick	1, 2, 13, 14 or 24	1:4 ft <sup>2</sup>

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Primer:** Coverboard is primed with an approved ASTM D41 asphalt primer at a rate of 100-150 ft<sup>2</sup>/gal.  
**(Optional)**

**Base Sheet:** One layer of Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, fastened as specified below:

**Fastening #1:** Torch-applied base sheet to coverboard with minimum 3” wide side lap. Mechanically attach torch-applied base sheet with Soprema #14 or Soprema #15 fasteners and Soprema Soprafix 2” SB Stress plates, Dekfast 14 or Dekfast 15 HS fasteners with Dekfast IF-2-SB, Dekfast Galvalume Steel Round 2-3/8” 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2” Barbed Metal Stress Plates or Trufast 2.4” Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2” Seam Plates or Soprafix 2-3/8”-SB Stress Plates, spaced maximum 12” o.c. through the side laps and two equally spaced staggered rows in the field of the membrane.  
*(Maximum Design Pressures –165 psf. See General Limitation #7.)*



**Fastening #2:** Mechanically attach base sheet with Soprema #14 or Soprema #15 fasteners and Soprema Soprafix 2” SB Stress plates, Dekfast 14 or Dekfast 15 HS fasteners with Dekfast IF-2-SB, Dekfast Galvalume Steel Round 2-3/8” 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2” Barbed Metal Stress Plates or Trufast 2.4” Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2” Seam Plates or Soprafix 2-3/8” –SB Stress Plates, spaced maximum 12” o.c. through the minimum 3” wide side lap and two equally spaced staggered rows in the field of the membrane.

*(Maximum Design Pressures –150 psf. See General Limitation #7.)*

**Ply Sheet:** Elastophene 180 PS, Colphene 180 PS, Sopralene 180 PS 2.2, Elastophene PS, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with minimum 3” wide side lap.

**Membrane:** Elastophene Flam FR GR, Elastophene Flam GR, Elastophene Flam LS FR GR, Sopralast 50 TV Alu, Soprastar Flam, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralene Flam Antirock, torch-applied with minimum 3” wide side 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 Options Above

**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** Min. 2500 psi concrete or concrete plank  
**System Type D(10):** All layers of insulation and base sheet simultaneously attached.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

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

**Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.**

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
SECUROCK Gypsum-Fiber Roof Board, DensDeck, DensDeck Prime, DensDeck DuraGuard Roof Board Minimum 0.5” thick	1, 2, 13, 14 or 24	1:4 ft <sup>2</sup>

**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. Refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Primer:** Coverboard is primed with an approved ASTM D41 asphalt primer at a rate of 100-150 ft<sup>2</sup>/gal.  
**(Optional)**

**Base Sheet:** One layer of Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, Soprafix [F]\*, Soprafix Base 613\*, Soprafix [S]\*, Soprafix Base 612\*, Soprafix [X]\*, Soprafix Base 614\*, Soprafix\*, Soprafix Base 622\*, Soprafix-e, Soprafix Base 641, Soprafix Base 610\*\*, Soprafix Base 611\*\* fastened as specified below:

\*Requires torch-applied cap membrane.

\*\* For use only when using 2 in. diameter plates and requires torch-applied cap membrane.

**Fastening #1:** Torch-applied base sheet to coverboard with minimum 3” wide side lap. Mechanically attach base sheet with Soprema #14 fasteners or Soprema #15 fasteners Soprema Soprafix 2” SB Stress Plates or Soprafix 2-3/8 in. SB Stress Plates, Dekfast 14 Dekfast 15 HS fasteners with Dekfast IF-2-SB, Dekfast Galvalume Steel Round 2-3/8” 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2” Barbed Metal Stress Plates or Trufast 2.4” Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2” Seam Plates spaced maximum 12” o.c. through the side laps and two equally spaced staggered rows in the field of the membrane.

*(Maximum Design Pressures –165 psf. See General Limitation #7.)*



**Fastening #2:** Mechanically attach base sheet with Soprema #14 fasteners or Soprema #15 fasteners Soprema Soprafix 2" SB Stress Plates or Soprafix 2-3/8 in. SB Stress Plates, Dekfast 14 Dekfast 15 HS fasteners with Dekfast IF-2-SB, Dekfast Galvalume Steel Round 2-3/8" 20 ga. Barbed plates, Trufast #15 EHD Fasteners with Trufast 2" Barbed Metal Stress Plates or Trufast 2.4" Barbed Seam Plates, Soprema #15 HD Fasteners with Soprema 2" Seam Plates spaced maximum 12" o.c. through the minimum 3" wide side lap and two equally spaced staggered rows in the field of the membrane.  
*(Maximum Design Pressures –150 psf. See General Limitation #7.)*

**Ply Sheet:** Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied with minimum 3" wide side lap.

Or

Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene HS, Elastophene HS 62, Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Sopralene 180 Sanded, Sopralene 250 Sanded, or 1-2 plies of Sopra IV or Sopra VI, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with minimum 3" wide side lap.

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene GR, Elastophene LS FR GR, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, SopraStar Sanded, Sopralast 50 TV Alu Sanded adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. with minimum 3" wide side 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 Options Above

**Membrane Type:** SBS  
**Deck Type 3:** Concrete Decks, Non-Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(1):** Base sheet adhered to primed substrate.

**All General and System Limitations apply.**

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

**Base Sheet:** One layer of Sopra G, Modified Sopra G, Soprabase, Soprabase S, Elastophene  
**(Optional)** Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive, COLPLY Adhesive or COLPLY Modified Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive, COLPLY Adhesive or COLPLY Modified Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq.

Or

Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in FM Adhesive, COLPLY Adhesive or COLPLY Modified Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq. to sand surfaced ply membrane.

Or

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -82.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3:** Concrete Decks, Non-insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(2):** Base sheet torch-applied to primed deck.

**All General and System Limitations apply.**

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

**Base Sheet:** One ply of Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet:  
(Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\* or Sopralene 250 SP, torch-applied.

Or

One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base membrane.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

Or

Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced base or ply membrane.

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

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

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

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

**Maximum Design  
Pressure:**

-187.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3:** Concrete Decks, Non-Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(3):** Base sheet adhered to primed substrate.

**All General and System Limitations apply.**

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

**Base Sheet:** One layer of Sopra G, Modified Sopra G, Soprabase, Soprabase S, Elastophene  
**(Optional)** Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq.

Requires torch-applied ply or cap membrane.

**Ply Sheet:** Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene PS\*, Elastophene PS 3.0\*, Elastophene 180 Sanded, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Elastophene 180 PS\*, Colphene 180 PS\*, Sopralene 180 PS 2.2\*, Sopralene 180 Sanded, Sopralene 180 PS\*, Sopralene 250 Sanded, adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq.

Or

Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

\*Requires torch-applied cap membrane.

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in FM Adhesive (VOC), COLPLY Adhesive, COLPLY Modified Adhesive or Soprastar Adhesive at 1.5 – 2.0 gallons/square or in hot asphalt at 25 lbs./sq. to sand surfaced ply membrane

Or

Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Elastophene Flam LS FR GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

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

**Maximum Design Pressure:** -187.5 psf. (See General Limitation #9.)

**Membrane Type:** SBS  
**Deck Type 3:** Concrete Decks, Non-Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(4):** Membranes adhered to primed 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.

**Primer:** Elastocol 500, Elastocol Stick, Elastocol Stick Zero at an application rate of 100 ft<sup>2</sup>/gallon.

**Base Sheet:** One layer of Colvent TG or Colvent 180 TG, torch-applied.

**Ply Sheet: (Optional)** One or more layers of Elastophene Sanded, Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Elastophene HS 62, Elastophene 180 Sanded, Colphene 180 Sanded, Soprabase, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane.

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

**Membrane:** Elastophene GR, Elastophene FR GR, Elastophene LS FR GR, Elastophene FR+ GR, Soprastar Sanded, Sopralene 180 FR GR, Colphene 180 FR GR, Sopralene 180 FR+ GR, Sopralene 180 Ultra FR GR, Sopralene 250 FR GR, Colphene 250 FR GR, Sopralene 250 FR+ GR, Sopralene 250 Ultra FR GR, Sopralast 50 TV Alu Sanded adhered in hot asphalt at 25 lbs./sq. to sand surfaced base or ply membrane.

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

**Maximum Design Pressure:** -267.5 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3:** Concrete Decks, Non-Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(5):** Membranes adhered to primed 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.

**Primer:** Elastocol 500, Elastocol Stick, Elastocol Stick Zero at an application rate of 100 ft<sup>2</sup>/gallon.

**Base Sheet:** One layer of Colvent TG, Colvent 180 TG, Colvent Flam TG\*, Colvent Flam 180 TG\*, torch-applied.

\*Requires torch-applied ply or cap membrane.

**Ply Sheet: (Optional)** One or more layers of Elastophene Flam\*, Elastophene Flam 2.2\*, Elastophene Flam HS\*, Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene Flam 180\*, Colphene Flam 180\*, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Soprafix, Soprafix Base 622, Sopralene Flam 250\*, Sopralene 250 SP, torch-applied.

\*Requires torch-applied cap membrane.

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

**Membrane:** Elastophene Flam GR, Elastophene Flam FR GR, Elastophene Flam LS FR GR, Elastophene Flam FR+ GR, Soprastar Flam, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -295 psf. (See General Limitation #9.)



**Membrane Type:** SBS  
**Deck Type 3I:** Concrete Decks, Non-Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(6):** Non-Insulated, Roof cover to concrete

**All General and System Limitations apply.**

**Primer:** ASTM D41 or Elastocol 500 primer applied at a rate of 0.75 gal./sq.  
**Base Sheet:** Elastophene Flam HS, Elastophene Flam 2.2, Elastophene Flam, Sopralene Flam 180, Colphene Flam 180 or Sopralene Flam 250, torch-applied.  
**Ply Sheet:** Elastophene Flam HS, Elastophene Flam 2.2, Elastophene Flam, Sopralene Flam 180, Colphene Flam 180 or Sopralene Flam 250, torch-applied.  
**(Optional)**  
**Membrane:** SopraStar Flam, Elastophene Flam GR, Elastophene Flam LS FR GR, Elastophene Flam FR GR, Elastophene Flam FR+ GR, Soprafix Cap FR 651, Sopralene Flam 180 GR, Colphene Flam 180 GR, Sopralene Flam 180 GR 3.5, Sopralene Flam 180 FR GR, Colphene Flam 180 FR GR, Sopralene Flam 180 FR GR 3.5, Sopralene Flam 180 Ultra FR GR, Sopralene Flam 180 FR+ GR, Sopralene Flam 250 FR GR, Colphene Flam 250 FR GR, Sopralene Flam 250 Ultra FR GR, Sopralene Flam 250 FR+ GR, Sopralast 50 TV Alu, Sopralene Flam Antirock, torch-applied.

**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:** -367.5 psf. (See General Limitation #9.)



## CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.

## GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.  
**Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

## END OF THIS ACCEPTANCE

