MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786)315-2590 F (786) 31525-99
www.miamidade.gov/economy

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

NOTICE OF ACCEPTANCE (NOA)

SOPREMA, Inc.
310 Quadral Drive
Wadsworth, OH 44281

SCOPE:

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

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

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

DESCRIPTION: SOPREMA Alsan RS Roofing Systems over Lightweight 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. 15-0707.08 and consists of pages 1 through 53.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Liquid Applied Roof Systems
Material: PMMA
Deck Type: Lightweight Insulating Concrete
Maximum Design Pressure: -307.5 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Alsan RS 230 Field	Various	Proprietary	A two component, rapid curing, PMMA liquid membrane.
Alsan RS 260 LO Field	Various	Proprietary	Low odor, rapid curing, PMMA liquid membrane.
Alsan RS 230 Flash	Various	Proprietary	A two component, rapid curing, PMMA liquid membrane.
Alsan RS 260 LO Flash	Various	Proprietary	Low odor, rapid curing, PMMA liquid membrane.
Alsan RS Fleece	Various	Proprietary	Non-woven, needle-punched polyester fabric reinforcement used as fabric reinforcement in Alsan RS systems
Modified Sopra G	39” x 108’ (3.5 sq.)	ASTM D4601	Fiberglass reinforced modified asphalt base sheet for bonding or mechanically attaching to substrate. **For use as a base/ply sheet only.**
Soprabase	39” x 99’ (3 sq.)	ASTM D4601	Oxidized asphalt, polyester reinforced, sand-surfaced base sheet. **For use as a base/ply sheet only.**
Soprabase S	39” x 65’ (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, sand-surfaced base sheet. **For use as a base/ply sheet only.**
Soprabase TG	39” x 65’ (2 sq.)	ASTM D4601	SBS modified bitumen, polyester reinforced, film-surfaced base sheet. **For use as a base/ply sheet only.**
Sopra IV	36” x 180’ (5 sq.)	ASTM D2178 Type IV	Type IV, fiberglass reinforced, smooth surfaced ply sheet 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.

Product	Dimensions	Test Specification	Product Description
Sopra 4897	39” x 41’	ASTM D4897	Fiberglass reinforced, smooth surfaced, modified bitumen venting base sheet for mechanically attaching to substrate.
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.
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' (1.5 sq.)	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).

Product	Dimensions	Test Specification	Product Description
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.
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.
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.
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.
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).

Product	Dimensions	Test Specification	Product Description
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 612	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 Base 614	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
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 Base 641	39” x 33’ (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Sopralene Flam 180	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
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).

Product	Dimensions	Test Specification	Product Description
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).
Alsan RS 222 Primer	Various	Proprietary	Two-component, rapid curing PMMA acrylic primer
Alsan RS 276 Primer	Various	Proprietary	Two-component, rapid curing PMMA acrylic primer
Alsan RS 233 Self-Leveling Mortar	Various	Proprietary	Two-component surfacing composed of Alsan RS 223 Powder and Alsan RS 210 Low Odor Resin.
Alsan RS 263 LO Self Leveling Mortar	Various	Proprietary	Two-component surfacing composed of Alsan RS 223 Powder and Alsan RS 240 LO resin.
Alsan RS 281 Finish	Various	Proprietary	Two-component, rapid curing, PMMA acrylic clear finish resin.
Alsan RS 287 Color Finish Base	Various	Proprietary	Rapid curing, PMMA base resin.
Alsan RS 289 Textured Base	Various	Proprietary	Rapid curing, PMMA aggregated trafficable surface finish resin.
Alsan RS Deco Chips	Various	Proprietary	Polymer flat, pigmented, flakes used as a textured and decorative surfacing finish.
Elastocol 500	Various	ASTM D41	Asphalt primers.
Elastocol Stick	Various	ASTM D41	Asphalt primers.
Elastocol Stick Zero	Various	ASTM D41	Asphalt primers.
COLPLY Adhesive	5 gallon, 55 gallon, 350 gallon tote	Proprietary	Polymer modified cold process membrane adhesive.
COLPLY EF Adhesive	5 gallon pail	Proprietary	Solvent free, polymeric adhesive.
DUOTACK	Dual cartridges, 5 gallon, 50 gallon	Proprietary	Two part elastomeric urethane foam adhesive.
DUOTACK NEO	Dual cartridges, 5 gallon, 50 gallon	Proprietary	Two part polyurethane foam adhesive.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam-II, ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
EnergyGuard Polyiso Insulation	Composite polyisocyanurate insulation	GAF
DensDeck	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, Sopra-ISO+ x	Polyisocyanurate foam insulation	SOPREMA, Inc.
Sopraboard	Mineral fortified asphaltic cored coverboard	SOPREMA, Inc.
H-Shield, H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, a div. of Carlisle Const. Materials, LLC
ENRGY 3, ENRGY 3 AGF, ENRGY 3 CGF	Polyisocyanurate foam insulation	Johns Manville Corp.
Ultra-Max, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax, A Business Unit of Sika Corporation
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	USG Corp.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Tri-Fix Fastening System	Fastening system for base sheet attachment to lightweight concrete, gypsum or cementitious wood fiber decks.	3” diameter plate with various length fasteners	SOPREMA, Inc.
2.	SOPREMA #14 & #15 Fasteners	Fasteners for membrane or insulation attachment to wood, steel or concrete decks.	Various	SOPREMA, Inc.
3.	Dekfast DF-#14-PH3 & Dekfast DF-#15-PH3	Insulation fastener	Various	SFS Group USA, Inc.
4.	Trufast Twin Loc-Nail Assembled Fasteners	Base ply fastening systems for lightweight concrete, gypsum or cementitious wood fiber decks	Various	Altenloh, Brinck & Co. U.S., Inc.
5.	Trufast FM-90 Base Sheet Fastener	Base ply fastening systems for lightweight concrete decks	2.7” head 1.7” long	Altenloh, Brinck & Co. U.S., Inc.
6.	CR Assembled Base Sheet Fastener (1.2”) or (1.7”)	Base ply fastening assembly	Various	OMG, Inc.
7.	OMG Heavy Duty	Insulation fastener	Various	OMG, Inc.
8.	Dekfast PLT-R-3	Galvalume AZ50 steel plate	3” round	SFS Group USA, Inc.
9.	SOPREMA 3” Round Insulation Plate	Stress plate	3” diameter	SOPREMA, Inc.
10.	Soprafix 2-3/8” SB Stress Plate	Stress plate	2-$^{3}/_{8}$” diameter	SOPREMA, Inc.
11.	Soprafix MBB-R	Metal Batten Bar		SOPREMA, Inc.
12.	SOPREMA #14 MP, #15 HD Fastener	Insulation and membrane fasteners	Various	SOPREMA, Inc.
13.	Trufast 3” Metal Insulation Plate	Galvalume steel plate	3” round	Altenloh, Brinck & Co. U.S., Inc.
14.	Trufast #14 HD Fastener	Insulation fastener fro wood, steel and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
15.	Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete.	Various	Altenloh, Brinck & Co. U.S., Inc.
16.	Trufast Twin Loc Coiled Batten Bar	Batten bar	100’ long	Altenloh, Brinck & Co. U.S., Inc.
17.	Dekfast PLT-R-2-3/8-6B	Galvalume AZ55 steel barbed plate	2.37” Round	SFS Group USA, Inc.
18.	Dekfast PLT-H-2-7/8	Galvalume steel plate	2 $^{7}/_{8}$” x 3 ¼”	SFS Group USA, Inc.
19.	OMG XHD	Insulation fastener	Various	OMG, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
20.	OMG 3” Galvalume Steel Plate	Galvalume stress plate	3” round	OMG, Inc.
21.	SOPREMA 3" Metal Insulation Plate	Stress plate	3” diameter	SOPREMA, Inc.
22.	SOPREMA 1.7 in. Base Sheet Fastener	Base ply fastening systems for lightweight concrete decks		SOPREMA, Inc.
23.	SOPREMA Twin Loc-Nail	Base ply fastening systems for lightweight concrete, gypsum or cementitious wood fiber decks		SOPREMA, 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.

System Number	Manufacturer	Application
1.	SOPREMA, Inc.	Alsan RS 281 Finish applied at a rate of 0.74 gal. per 100 ft^2 for smooth surfaced or 1.23 gal./sq. for aggregated surfaces.
2.	SOPREMA, Inc.	Alsan RS 233 Self-Leveling Mortar applied at a rate of 1.8 gal. per 100 ft^2. Optional dried quartz aggregate applied at a rate of 100 lbs. per 100 ft^2 into wet Alsan RS 233 Self-Leveling Mortar. Optional finish coat of Alsan RS 281 Finish applied at a rate of 0.74 gal. per 100 ft^2.
3.	SOPREMA, Inc.	Alsan RS 263 LO Self Leveling Mortar applied at a rate of 1.8 gal. per 100 ft^2. Optional dried quartz aggregate applied at a rate of 100 lbs. per 100 ft^2 into wet Alsan RS 263 LO Self-Leveling Mortar. Optional finish coat of Alsan RS 281 Finish applied at a rate of 0.74 gal. per 100 ft^2.
4.	SOPREMA, Inc.	Alsan RS 230 Field applied at 2.6 gal. per 100 ft^2. Finish coat of Alsan RS 287 Color Finish Base applied at 1.2 gal. per 100 ft^2 with optional Alsan RS Deco Chips applied at 1.3 lbs. per 100 ft^2 embedded into wet top coat
5.	SOPREMA, Inc.	Alsan RS 233 Self-Leveling Mortar applied at 8.7 gal. per 100 ft^2. Finish coat of Alsan RS 287 Color Finish Base applied at 1.2 gal. per 100 ft^2 with optional Alsan RS Deco Chips applied at 1.3 lbs. per 100 ft^2 embedded into wet top coat.
6.	SOPREMA, Inc.	Alsan RS 260 LO Field applied at 2.6 gal. per 100 ft^2. Finish coat of Alsan RS 287 Color Finish Base applied at 1.2 gal. per 100 ft^2 with optional Alsan RS Deco Chips applied at 1.3 lbs. per 100 ft^2 embedded into wet top coat.
7.	SOPREMA, Inc.	Alsan RS 263 LO Self-Leveling Mortar applied at 8.7 gal. per 100 ft^2. Optional finish coat of Alsan RS 287 Color Finish Base applied at 1.2 gal. per 100 ft^2 with optional Alsan RS Deco Chips applied at 1.3 lbs. per 100 ft^2 embedded into wet top coat.
8.	SOPREMA, Inc.	Alsan RS 233 Self-Leveling Mortar applied at 8.7 gal. per 100 ft^2. Optional finish coat of Alsan RS 289 Textured Base applied at 3.2 gal. per 100 ft^2.
9.	SOPREMA, Inc.	Alsan RS 230 Field applied at 2.6 gal. per 100 ft^2. Finish coat of Alsan RS 289 Textured Base applied at 3.2 gal. per 100 ft^2. with optional Alsan RS Deco Chips applied at 1.3 lbs. per 100 ft^2 embedded into wet top coat.
10.	SOPREMA, Inc.	Alsan RS 287 Color Finish Base applied at 1.2 gal. per 100 ft^2.
11.	SOPREMA, Inc.	Alsan RS 289 Textured Base applied at 3.2 gal. per 100 ft^2.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Atlantic & Caribbean Roof Consulting	ACRC 15-032	TAS 114	12/15/15
	ACRC 15-033	TAS 114	12/15/15
	ACRC 15-034	TAS 114	12/16/15
	ACRC 15-036	TAS 114	12/17/15
	ACRC 15-049	TAS 114	01/08/16
UL LLC	R11436	UL 790	06/17/21
FM Approvals	1Z3A6.AM	FM 4470	04/27/95
	2B8A4.AM	FM 4470	07/02/97
	2D0A0.AM	FM 4470	08/15/97
	3007895	FM 4470	01/11/00
	3002351	FM 4470	02/28/03
	3022038	FM 4470	04/05/06
	3024594	FM 4470	05/19/06
	3023749	FM 4470	09/28/06
	3025185	FM 4470	05/22/07
	3032109	FM 4470	07/21/08
	3035625	FM 4470	09/17/10
	3042559	FM 4470	10/18/11
	3046765	FM 4470	02/15/13
	3047439	FM 4470	07/22/13
	3046941	FM 4470	12/19/13
	3047351	FM 4470	10/09/14
	3053841	FM 4470	03/27/15
	RR202234	FM 4470	08/13/15
	RR202938	FM 4470	10/20/15
	3054633	FM 4470	12/18/15
	RR203157	FM 4470	01/19/16
Trinity | ERD	2109.08.02	TAS 114	08/06/02
	S39970.07.12-2	ASTM D6164	07/12/12
	S35860.05.12-1-R2	ASTM D6163	03/14/13
	S35860.05.12-3-R1	ASTM D6164	03/14/13
	S45010.02.14	ASTM D6506	02/07/14
	S43400.08.14-6	ASTM D6164	08/26/14
	S11440.11.10-3-R2	ASTM D4601/TAS 117(B)	08/26/14
	S35860.05.12-2-R3	ASTM D6164	08/28/14
	S44110.09.14-7C	ASTM D6164	09/02/14
	S43400.09.14-10	ASTM D6298	09/08/14
	S43400.08.14-4-R1	ASTM D6163	10/24/14
	S47170.11.14	FM 4474 & TAS 114	11/10/14
	S43210.11.14	ASTM D1876	11/20/14
	S32840.06.10-R1	TAS 117 (B)	12/11/14
	M45560.10.13-1-R2	ASTM D4897/TAS 117	12/11/14
	S47160.01.14-R1	TAS 114	12/11/14
	S39970.07.12-1B-R1	ASTM D6162	12/12/14
	S44110.01.15-4A-R3	ASTM D6164	05/01/15

EVIDENCE SUBMITTED: (CONTINUED)

Test Agency/Identifier	Name	Report	Date
Trinity | ERD	SOPC-S42600.08.15-R2	Physical Properties	03/21/16
	S41370.07.12-R1	TAS 114	04/02/16
PRI Construction Materials Technologies, LLC	SOP-012-02-01	TAS 114-J	08/29/11
	SOP-041-02-01	ASTM D2178	02/27/12
	SOP-040-02-01	ASTM D2178	02/27/12
	SOP-012-02-02	TAS 114-J	05/08/12
	SOP-049-02-01	ASTM D1644/D2196	05/31/12
	SOP-050-02-01	ASTM D3019	07/12/12
	SOP-056-02-01	Physical Properties	09/12/12
	SOP-071-02-01	Physical Properties	02/12/16
	SOP-074-02-01	TAS 114	04/19/16
Certified Testing Laboratories	CTLA 101R	TAS 114-J	09/23/08
	CTLA 101R-A	TAS 114-J	09/23/08
NEMO ETC, LLC	4S-SOP-18-002.02.19	Physical Properties	02/04/19
	4q-SOP-19-SSMBB-01.A	ASTM D4601	03/11/19
	4q-SOP-19-SSMBB-01.B	ASTM D4601	03/11/19
	4q-SOP-19-SSMBB-01.C	ASTM D4601	03/11/19
	4q-SOP-20-SSMBB-01.A	ASTM D6163	11/05/20
	4q-SOP-20-SSMBB-01.B	ASTM D6164	11/05/20
	4q-SOP-20-SSMBB-01.C	ASTM D6164	11/05/20

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Robert Nieminen, P.E.	Signed/Sealed Calculations	E(2), E(6), E(12), E(14), E(18), E(19), E(20)	02/10/16
FM Approval Deck Limitations	N/A	E(1), E(3), E(4), E(7), E(8), E(9), E(10), E(11), E(15)	01/01/13
Randall E. Fowler, P.E.	Signed/Sealed Calculations	E(17)	01/15/16

APPROVED ASSEMBLIES:

Membrane Type: Liquid Applied Membrane

Deck Type 4I: Lightweight Concrete, Insulated

Deck Description: Min. 2" thick, min. 350 psi, Cellular Lightweight Concrete over structural concrete. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 100.9 lbf when tested with SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fasteners (1.7") in accordance with TAS 105

System Type A(1): Vapor barrier adhered, all layers of insulation adhered with approved adhesive

All General and System Limitations apply.

Secondary Roof/ 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, Colvent TG, Colvent 180 TG, torch-applied over structural concrete deck primed with Elastocol 500 primer.

LWC Deck: Min. 2" thick, min. 350 psi, Cellular Lightweight Concrete listed above cast over unprimed structural concrete deck or over optional Vapor Barrier listed above applied over primed structural concrete deck.

Vapor Barrier: (Required) One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied in ½" to ¾" wide ribbons spaced 12" o.c. to lightweight insulating concrete.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
H-Shield, M-Shield, Sopra-ISO r, Multi-Max FA-3, Ultra-Max, Sopra-ISO x, Sopra-ISO+ x, ENRGY 3, H-Shield CG, Sopra-ISO+ r, M-Shield CG, ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3 AGF, ENRGY 3 CGF, EnergyGuard Polyiso Insulation (flat or tapered)		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Sopraboard		
Minimum 1/8" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the vapor barrier in DUOTACK or DUOTACK NEO in ½" to ¾" wide ribbons spaced 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 a final membrane substrate.

Base Layer:	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied at a rate of 1.5 – 2 gal./sq. Or One layer of Elastophene Flam*, Elastophene Flam 2.2*, 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 Flam 180*, Colphene Flam 180*, Sopralene Flam 250*, Colvent Flam 180 TG*, torch-applied. Or One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, Elastophene Flam Stick* or Sopralene Flam Stick*, self-adhered to substrate primed with Elastocol Stick Zero. *Requires torch-applied ply membrane
Ply Sheet: (Optional)	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied at a rate of 1.5 – 2 gal./sq. Or 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 or Sopralene 250 SP torch-applied. Or One layer of Elastophene Stick, Sopralene Stick or Colphene Stick, self- adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-63.0 psf. (See General Limitation #9.)

Membrane Type: Liquid Applied Membrane

Deck Type 4I: Lightweight Concrete, Insulated

Deck Description: Min. 2" thick, min. 300 psi, Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 300 ft^2/gal.

System Type A(2): All layers of insulation adhered with approved adhesive.

All General and System Limitations apply.

Structural Deck: Structural concrete deck.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Sopraboard Minimum 1/8" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, DensDeck Minimum 1/4" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in DUOTACK or DUOTACK NEO in ½" to ¾" wide ribbons spaced 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 a final membrane substrate.

Base Layer: One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive, COLPLY Adhesive, applied at a rate of 1.5 – 2 gal./sq.

Or

One layer of Elastophene Flam*, Elastophene Flam 2.2*, 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 Flam 180*, Colphene Flam 180*, Sopralene Flam 250*, Colvent Flam 180 TG*, torch-applied.

Or

One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, Elastophene Flam Stick* or Sopralene Flam Stick*, self-adhered to substrate primed with Elastocol Stick Zero.
*Requires torch-applied ply membrane

Ply Sheet: (Optional)	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied at a rate of 1.5 – 2 gal./sq. Or 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 or Sopralene 250 SP torch-applied. Or One layer of Elastophene Stick, Sopralene Stick or Colphene Stick self-adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-97.5 psf. (See General Limitation #9.)

Membrane Type: Liquid Applied Membrane

Deck Type 4I: Lightweight Concrete, Insulated

Deck Description: Min. 2" thick, min. 300 psi, Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture. Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 300 ft^2/gal.

System Type A(3): All layers of insulation adhered with approved adhesive.

All General and System Limitations apply.

Structural Deck: Structural concrete deck.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Ultra-Max, ENRGY 3, H-Shield CG, Sopra-ISO+ x, Sopra-ISO+ r, M-Shield CG, ACFoam-II, ACFoam-III, Sopra-ISO s, Sopra-ISO+ s, ENRGY 3 AGF, ENRGY 3 CGF, EnergyGuard Polyiso Insulation		
Minimum 2.0" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Sopraboard		
Minimum 1/8" thick	**N/A**	**N/A**
SECUROCK Gypsum-Fiber Roof Board, DensDeck		
Minimum 1/4" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in DUOTACK or DUOTACK NEO in ½" to ¾" wide ribbons spaced 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 a final membrane substrate.

Base Layer: One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied at a rate of 1.5 – 2 gal./sq.
Or
One layer of Elastophene Flam*, Elastophene Flam 2.2*, 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 Flam 180*, Colphene Flam 180*, Sopralene Flam 250*, Colvent Flam 180 TG*, torch-applied.
Or
One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, Elastophene Flam Stick* or Sopralene Flam Stick*, self-adhered to substrate primed with Elastocol Stick Zero.
*Requires torch-applied ply membrane

Ply Sheet: (Optional)	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive applied at a rate of 1.5 – 2 gal./sq. Or 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 or Sopralene 250 SP torch-applied. Or One layer of Elastophene Stick, Sopralene Stick or Colphene Stick self-adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-170 psf. (See General Limitation #9.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Insulting Concrete, Min. 200 psi, cast over deck with min. 1" EPS Holey Board embedded in 1/8" slurry. Followed by a min. 2" top coat of Mearlcrete Lightweight Insulting Concrete. Cast over structural concrete or steel deck.
System Type E(1):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga., Grade 33, Type BV vented steel decking attached to supports spaced 5' o.c. maximum using min. 3/8" welds with washers (every 6" o.c.). Steel deck side laps are attached with Traxx 1 #10 evenly spaced 20" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
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.
Base Sheet:	One layer of Modified Sopra G, Sopra 4897, Soprabase, Soprabase S fastened to the deck as described. Attach base sheet using Trufast FM-90 Base Sheet Fastener, SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fasteners (1.7") spaced 7" o.c. in a 4" lap and 7" o.c. in two staggered rows in the center of the sheet.
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 or Sopralene 250 SP, torch-applied. Or Colphene Sanded, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-45 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Concrete, min. 225 psi. with 1" EPS board embedded in 1/8" slurry. Followed by 3" top coat of Mearlcrete Lightweight Concrete. Cast over structural concrete or steel deck.
System Type E(2):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga., Type B, Grade 33 vented steel decking washed with a weak acid solution attached to supports spaced 6' o.c. maximum using 5/8" puddle welds spaced 6" o.c. Steel deck side laps are attached with #1/4-14 x 7/8", DP1, HWH self-drilling screws with ¼" washers evenly spaced 12" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One layer of Modified Sopra G, Soprabase*, Soprabase S*, Sopra 4897 fastened to the deck as described below: *Requires asphalt applied or cold applied ply sheets.
Fastening:	Attach base sheet using Trufast FM-90 Base Sheet Fastener, SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Base Ply Fasteners (1.7") spaced 7" o.c. in a 4" lap and 7" o.c. in two staggered rows in the field of the sheet.
Ply Sheet:	Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Sopra IV or Sopra 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. or in COLPLY EF Adhesive at 1.5 – 2.0 gallons/square to sand surfaced base membrane. 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 or Colphene 180 SP 3.5 torch-applied.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-45 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Insulating Concrete, min. 200 psi, wet cast density 40 pcf, min. 2" thick top coat. Over 1/8" slurry and an optional minimum 1" thick EPS Holey Board. Cast over structural concrete or steel deck.
System Type E(3):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga., Grade 33, Type BV steel decking attached to support spaced at 5' o.c. maximum using min. 3/8" puddle welds with washer (every 6" o.c.). Steel deck side laps are attached Traxx 1 #10 evenly spaced 20" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
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
Base Sheet:	One layer of Soprafix Base 612*, Soprafix Base 613*, Soprafix Base 614*, Soprafix, Soprafix Base 622, or Soprafix Base 641 fastened to the deck as described below. *Requires torch-applied ply membrane.
Fastening #1:	Attach base sheet using Tri-Fix Fastening System spaced 9" o.c. in a 5" lap. The side lap fastener row is encapsulated in the torch-applied lap. ***(Maximum Design Pressure –45 psf. See General Limitation #7.)***
Fastening #2:	Attach base sheet using Tri-Fix Fastening System spaced 8" o.c. in a 5" lap and 8" o.c. in one center row. The side lap fastener row is encapsulated in the torch-applied lap and the center row is stripped-in with a min. 6" wide strip of torch-applied membrane. ***(Maximum Design Pressure –67.5 psf. See General Limitation #7.)***
Ply Sheet: (Optional)	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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	See Fastening Requirements above.

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Insulting Concrete, min. 200 psi., wet cast density 40 pcf, with 1.5" EPS board embedded in 1/8" slurry. Followed by, wet cast density 40 pcf, min. 2" thick top coat. Cast over structural concrete or steel deck.
System Type E(4):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga., Grade 33, Type BV steel decking attached to support spaced at 5' o.c. maximum using min. 3/8" puddle welds with washer (every 6" o.c.). Steel deck side laps are secured with Traxx 1 #10 evenly spaced 20" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One layer of Modified Sopra G, Soprabase*, Soprabase S*, Sopra 4897 fastened to the deck as described below: *Requires asphalt applied or cold applied ply sheets.
Fastening:	Attach anchor sheet using OMG CR Assembled Base Sheet Fasteners, Trufast FM-90 Base Sheet Fastener or SOPREMA 1.7 in. Base Sheet Fastener spaced 7" o.c. in a 4" lap and 7" o.c. in two staggered rows in the center of the sheet.
Ply Sheet:	Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Sopra IV or Sopra 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. 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 or Colphene 180 SP 3.5 torch-applied.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-52.5 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Elastizell Range II Cellular Lightweight Insulating Concrete with Vermiculite Additive, Min. 200 psi, wet cast density 36 pcf, min. 2½" thick top coat. Over an optional minimum 2" thick EPS Holey Board. Cast over structural concrete deck.
System Type E(5):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Structural concrete deck.
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.
Base Sheet:	Modified Sopra G, Sopra 4897, Soprabase, Soprabase S fastened to the deck as described. Attach base sheet using Trufast FM-90 Base Sheet Fastener, SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fasteners (1.7") spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet.
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 or Sopralene 250 SP, torch-applied. Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square to sand surfaced base membrane.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-52.5 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Aggregate Lightweight Concrete, min. 360 psi, wet cast density of 65 pcf. LWC shall consist of a minimum 2" EPS board with minimum 3" top coat. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 88 lbf. When tested with Trufast Twin Loc-Nail Assembled Fasteners or SOPREMA Twin Loc-Nails in accordance with TAS 105.
System Type E(6):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., Type B, Grade 33, vented steel deck fastened 6" o.c. with Traxx/5 fasteners to supports spaced 5 ft. o.c. Deck side laps fastened with Traxx/1 fasteners spaced at 20" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	Soprabase, Soprabase S, Soprabase TG* or Sopra 4897 fastened to the deck as described. Attach base sheet using Trufast Twin Loc-Nail Assembled Fastener or SOPREMA Twin Loc-Nails spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet. * Requires torch-applied cap membrane.
Ply Sheet: (Optional)	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. Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Sopra IV or Sopra 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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore HS Cellular Concrete; minimum wet cast density of 38 lbs./ft^3, 350 psi, over 18-22 ga. steel decking or structural concrete deck.
System Type E(7):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., Grade 33, Type B steel decking attached to supports spaced maximum 6' o.c. using 0.5" puddle welds and washers 6" o.c. Steel deck side laps are attached with three Traxx/1 fasteners spaced maximum 12" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
LWC Deck:	Celcore HS Cellular Concrete with a minimum wet cast density of 38 lbs./ft^3, minimum 2" thick top coat. Over a minimum 1" thick EPS Holey Board.
LWC Deck Preparation:	Celcore PVA Curing Compound spray applied to lightweight concrete at a rate of 0.33 gal./sq.
Base Sheet:	Soprafix Base 622, Soprafix Base 612*, Soprafix Base 613*, Soprafix Base 614*, or Soprafix Base 641 mechanically attached through lightweight concrete to steel decking with Dekfast PLT-R-2-3/8-6B and Dekfast DF-#15-PH3 fasteners or SOPREMA #15 Fasteners with Soprafix 2-3/8" –SB Stress Plates space maximum 12" o.c. through minimum 5" wide laps and maximum 12" o.c. in one central row in the field. A minimum 6" wide strip of Sopralene Flam 180 or Colphene Flam 180 is torch-applied over field fasteners. *Requires torch-applied ply membrane.
Ply Sheet: (Optional)	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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete; min. wet cast density of 38 lbs./ft^3, min. 350 psi, over 18-22 ga steel decking or structural concrete.
System Type E(8):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Structural concrete or 18-22 ga., Grade 33, Type B steel deck installed and welded to minimum 0.25 in. thick steel structural supports spaced maximum 6' o.c. using 3/8" diameter weld and washers 6" o.c. at each bearing. The deck side laps are fastened at 30" o.c. using Traxx/1 fasteners. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Thermal Barrier: (Optional)	(*With steel deck only*) Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board mechanically attached with OMG Heavy-Duty fasteners and OMG 3" Galvalume Steel Plates at 1.6 ft^2.
Vapor Barrier: (Optional)	Elastophene SP 2.2, Elastophene SP 3.0, Colphene SP 2.2, Colphene SP 3.0, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5, Colphene 180 SP 3.5, Sopralene 250 SP, torch-applied over substrate primed with Elastocol 500, Elastocol Stick or ASTM D41 primer.
LWC Deck:	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq. and allowed to dry for 48 hours.
Base Sheet:	Colphene 180 Sanded, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Modified Sopra G, Sopra IV, Sopra VI, Soprafix Base 622, Sopra 4897, Soprabase*, Soprabase S* mechanically attached with Trufast FM-90 Base Sheet Fastener or SOPREMA 1.7 in. Base Sheet Fastener spaced 9" o.c. at the 4" laps and 12" o.c. in two equally spaced, staggered rows. *Requires asphalt applied or cold applied ply sheets.
Ply Sheet: (Optional)	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 with minimum 3" wide lap.
Ply Sheet: (Optional) (continued)	Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.

Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7)

Membrane Type: Liquid Applied Membrane

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; minimum wet cast density of 38 lbs./ft^3, minimum 350 psi, over 18-22 ga steel decking or structural concrete.

System Type E(9): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: 22 ga., Grade 33, Type B vented or non-vented galvanized steel deck installed and welded to minimum 0.25 in. thick steel structural supports spaced maximum 6' o.c. using min. 3/8" diameter weld and washers 6" o.c. at each bearing. The deck side laps are fastened at 24" o.c. (three evenly spaced fasteners between supports) using Teks 1 or Traxx/1 fasteners between supports or structural concrete deck.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3.

LWC Deck Preparation: After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq.

Base Sheet: Colphene 180 Sanded, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Modified Sopra G, Sopra IV, Sopra VI, Soprafix Base 622, Sopra 4897, Soprabase*, Soprabase S* mechanically attached with Trufast FM-90 Base Sheet Fastener or SOPREMA 1.7 in. Base Sheet Fastener spaced 7" o.c. at the 3" laps and 7" o.c. in two equally spaced, staggered rows.
*Requires asphalt applied or cold applied ply sheets.

Ply Sheet: (Optional) 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 with minimum 3" wide lap.

Or

Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.

Primer: (Optional) Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.

Base Coat: Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.

Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7)

Membrane Type: Liquid Applied Membrane

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; minimum wet cast density of 38 lbs./ft^3, minimum 350 psi, over 18-22 ga steel decking or structural concrete deck.

System Type E(10): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: 18-22 ga., Grade 33, Type WR steel deck installed and welded to minimum 0.25 in. thick steel structural supports spaced maximum 6' o.c. using min. 3/8" diameter weld and washers 6" o.c. at each bearing. The deck side laps are fastened at 24" o.c. (three evenly spaced fasteners between supports) using Teks 1 or Traxx/1 fasteners between supports. Or structural concrete deck.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Thermal Barrier: (*With steel deck only*) One layer of 5/8" SECUROCK Gypsum-Fiber Roof Board mechanically attached with OMG 3" Galvalume Steel Plates and OMG Heavy Duty fasteners, Dekfast PLT-H-2-7/8 plates or Dekfast PLT-R-3 plates and Dekfast DF-#14-PH3 fasteners or SOPREMA 3" Round Insulation Plates and SOPREMA #14 Fasteners or Trufast 3" Metal Insulation Plates and Trufast #14 HD Fasteners or SOPREMA 3" Metal Insulation Plates and SOPREMA #14 MP Fasteners at a rate of 1.6 ft^2 per fastener.

Vapor Barrier: One layer of Colphene 180 Sanded, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Sopralene 180 Sanded or Sopralene 250 Sanded, hot asphalt applied to substrate primed with ASTM D41 primer.
Or

One layer of Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 250 SP, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5 or Colphene 180 SP 3.5, torch-applied to a layer of Colvent Flam 180 TG, torched-applied over primed with ASTM D41 primer.

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3.

LWC Deck Preparation: After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq.

Base Sheet: Modified Sopra G, Sopra VI, Sopra 4897, Soprabase, Soprabase S mechanically attached with Trufast FM-90 Base Sheet Fastener or SOPREMA 1.7 in. Base Sheet Fastener spaced 7" o.c. at the 3" laps and 7" o.c. in two equally spaced, staggered rows.

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 or Sopralene 250 SP, torch-applied with minimum 3" wide lap. Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7) -75 psf. (with torch applied vapor barriers) (See General Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete, min. 350 psi. Cast over structural concrete or steel deck.
System Type E(11):	Base sheet mechanically fastened to primed substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., Grade 33, Type WR steel deck attached 6" o.c. with min. 3/8" weld and washers to steel supports spaced max 6 ft o.c. Deck side laps are attached with Traxx/1 screws spaced 24" o.c or min. 2,500 structural concrete. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Thermal Barrier: (Optional)	(*With steel deck only*) Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board mechanically fastened with OMG Heavy Duty fasteners, OMG 3" Galvalume Steel Plates, Dekfast PLT-H-2-7/8 plates, Dekfast PLT-R-3 plates, Dekfast DF-#14-PH3 fasteners, Trufast 3" Metal Insulation Plates and Trufast #14 Stainless Steel HD Fasteners, SOPREMA 3" Metal Insulation Plates and SOPREMA #14 MP Fasteners or SOPREMA 3" Round Insulation Plate and SOPREMA #14 Fasteners at a rate of 1 per 1.6 ft^2.
Vapor Barrier: (Optional)	Colphene 180 Sanded, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Sopralene 180 Sanded or Sopralene 250 Sanded, hot asphalt applied over substrate primed with ASTM D41 primer. Or Elastophene SP 2.2, Colphene SP 2.2, Elastophene SP 3.0, Colphene SP 3.0, Sopralene 250 SP, Sopralene 180 SP 3.0, Sopralene 180 SP 3.5 or Colphene 180 SP 3.5, torch-applied to a layer of Colvent Flam 180 TG, torch-applied over substrate primed with Elastocol 500, Elastocol Stick or ASTM D41 primer.
LWC Deck:	A 1/8" slurry coat of, min. 350 psi, Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with min. 1" thick Holy Board and a minimum 2" thick top coat. After setting to support foot traffic, Celcore PVA Curing Compound is applied at a rate of 0.33 gal./square.
Base Sheet:	One ply of Modified Sopra G, Sopra VI, Sopra 4897, Soprabase, Soprabase S mechanically attached with Trufast FM-90 Base Sheet Fastener, SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Base Ply Fasteners (1.7") spaced 7-inch o.c. at the 3-inch laps and 7-inch o.c. in two equally spaced, staggered center rows.
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 or Sopralene 250 SP, torch-applied with minimum 3" wide lap.
Ply Sheet: (continued)	Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, 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 COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.

Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-60 psf. (See General Limitation #7) -75 psf. (with torch applied vapor barriers) (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Cellular Lightweight Concrete, min. 427 psi with 1" holey board embedded in 1/8" slurry. Followed by 2" top coat of Cellular Lightweight Concrete. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 170 lbf when tested with fasteners, listed in this assembly, in accordance with TAS 105.
System Type E(12):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga. Type B, Grade 33 vented steel deck attached to supports spaced 5' o.c. with Tek/5 fasteners spaced 6" o.c. Side laps are secured with Tek/1 fasteners at 20" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One ply of Sopra 4897, Soprabase, Soprabase S or Soprabase TG fastened to the deck as described below:
Fastening:	Attach base sheet using Trufast Twin Loc-Nail Assembled Fasteners or SOPREMA Twin Loc-Nails spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet.
Ply Sheet:	One or more 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 or Sopralene 250 SP torch-applied.
Primer: (Optional)	Alsan RS 222 Primer at a rate of 1 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-67.5 psf. (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Elastizell Range II Cellular Lightweight Insulating Concrete, Min. 160 psi, min. 2½" thick top coat. Over 1/8" slurry and an optional minimum 2" thick EPS Holey Board. Cast over structural concrete.
System Type E(13):	Base sheet mechanically fastened to substrate.
All General and System Limitations apply.	
Structural Deck:	Structural concrete deck.
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
Base Sheet:	One layer of Soprafix Base 612*, Soprafix Base 613*, Soprafix Base 614*, Soprafix Base 622, or Soprafix Base 641 fastened to the deck as described below. *Requires torch-applied ply membrane.
Fastening:	Attach base sheet using Tri-Fix Fastening System spaced 8" o.c. in a 5" lap and 8" o.c. in one center row. The side lap fastener row is encapsulated in the torch-applied lap and the center row is stripped-in with a min. 6" wide strip of torch-applied membrane.
Ply Sheet: (Optional)	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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	–67.5 psf. See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Aggregate Lightweight Concrete, 360 psi. min. wet cast density of 65 pcf. LWC shall consist of a minimum 2" EPS board with minimum 3" top coat. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 110 lbf when tested with Trufast Twin Loc-Nail Assembled Fasteners or SOPREMA Twin Loc-Nails in accordance with TAS 105.
System Type E(14):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga. Type B, Grade 33, vented steel deck fastened 6" o.c. with Traxx/5 fasteners to supports spaced 5 ft o.c. Deck side laps fastened with Traxx/1 fasteners spaced at 20" o.c. or structural concrete. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One layer of Soprabase, Soprabase S fastened to the deck as described. Attach base sheet using Trufast Twin Loc-Nail Assembled Fasteners or SOPREMA Twin Loc-Nails spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet.
Ply Sheet:	Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded, Sopralene 250 Sanded or one or more plies of Sopra IV or Sopra 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. or in COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-75 psf. (See General Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete; minimum wet cast density of 42 lbs./ft^3, minimum 300 psi, over 18-22 ga. steel decking or min. 2,500 structural concrete
System Type E(15):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	22 ga., Grade 33, Type B steel deck secured to the structural supports 6" o.c. with ½" welds and washers spaced maximum 6' o.c. The deck side laps are fastened at 30" o.c. using Traxx/1 screws or min. 2,500 structural concrete. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Vapor Barrier (Optional):	(With concrete deck) UL or FM approved asphaltic vapor retarder may be installed over the deck.
LWC Deck: (Option 1)	Celcore MF Cellular Concrete, minimum wet cast density of 42 lbs./ft^3, with Celcore HS Rheology Modifying Admixture applied in a min. 1/8" slury. Minimum 1" thick Holey Boards are then immediately placed into the wet concrete and allowed to set overnight. The following day, a min. 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 300 ft^2/gal.
LWC Deck: (Option 2)	(Only with concrete deck) Min. 2" thick Celcore MF Cellular Concrete, minimum wet cast density of 42 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 300 ft^2/gal.
Base Sheet:	One ply of Modified Sopra G, Soprabase, Soprabase S, Sopra 4897 or Sopra VI mechanically attached with Trufast FM-90 Base Sheet Fastener, SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Base Ply Fasteners (1.7") spaced 7" o.c. at the 3" laps and 7" o.c. in two equally spaced, staggered center rows.
Ply Sheet: (Optional)	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 with minimum 3" wide lap. Or Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Sopralene 180 Sanded, Sopralene 250 Sanded, Elastophene HS adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in COLPLY EF Adhesive at 1.5 – 2.0 gallons/square.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.

Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-75 psf. (See General Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Insulting Concrete, wet cast density 35 pcf, min. 200 psi, with optional 1" EPS board embedded in 1/8" slurry. Min. 2" thick top coat.
System Type E(16):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	2500 psi, structural concrete deck.
Vapor Barrier: (Optional)	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.
Base Sheet:	One layer of Soprafix Base 612*, Soprafix Base 613*, Soprafix Base 614* or Soprafix Base 622 fastened to the deck as described below: *Requires torch-applied ply membrane
Fastening:	Attach base sheet using Tri-Fix Fasteners spaced 8" o.c. in 5" side laps and 8" o.c. in one center row. The side laps are torch-applied and the center row is covered with a 6" wide strip of Soprafix Base 622.
Ply Sheet: (Optional)	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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-75 psf. (See Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Min. 2" thick, min. 500 psi, Cellular Lightweight Concrete. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 291.3 lbf when tested with OMG Olylok Locking Impact Nails in accordance with TAS 105.
System Type E(17):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., WR Type B, minimum 48 ksi, vented steel deck attached to supports spaced maximum 6' o.c. using 5/8" puddle welds spaced 6" o.c. Steel deck side laps are attached with #12 SD screws spaced 12" o.c. or min. 2,500 structural concrete. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
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, torch-applied over structural concrete deck primed with Elastocol 500 primer.
Base Sheet:	One layer of Soprafix Base 613, Soprafix Base 614 fastened as described below:
Fastening:	Attach base sheet using Tri-Fix Fasteners spaced 8" o.c. in 5" side laps and 8" o.c. in one center row. The side laps are torch-applied and the center row is covered with a 8" wide strip of Soprafix Base 622.
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.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-82.5 psf. (See Limitation #7)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Concrecel Lightweight Concrete, min. 140 psi. cast over deck with 1" EPS board embedded in 1/8" slurry. Followed by 3" top coat of Concrecel Lightweight Concrete.
System Type E(18):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	1. Minimum 22 ga. Type B, Grade 33 vented steel decking washed with a weak acid solution attached to supports spaced 6' o.c. Or 2. Minimum 22 ga., Grade 80, Type B steel deck attached to supports spaced maximum 6' o.c. using 5/8" puddle welds spaced 6" o.c. Or 3. Structural Concrete Deck. All of the above steel deck options; panel side laps are attached with #1/4-14 x 7/8", DP1, HWH self-drilling screws with ¼" washers evenly spaced 12" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One layer of Soprafix Base 612, Soprafix Base 613, Soprafix Base 614 fastened to the deck as described below:
Fastening:	Attach base sheet using Trufast Low Profile Coiled Batten Bar, Trufast #15 EHD Fasteners, SOPREMA #15 HD Fasteners with spaced 6" o.c. in a 4" lap.
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 or Sopralene 250 SP, torch-applied with minimum 3" wide lap.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-82.5 psf. with Structural Deck Option #1 (See General Limitation #7.) -97.5 psf. with Structural Deck Option #2 or #3 (See General Limitation #7.)

Membrane Type: Liquid Applied Membrane

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; min. 340 psi, wet cast density of 38-42 lbs./ft^3.

System Type E(19): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:

1. Minimum 18-22 ga., Grade 33, Type B, BV steel deck attached to supports spaced maximum 6' o.c. Or
2. Minimum 18-22 ga., Grade 80, Type B steel deck attached to supports spaced maximum 6' o.c. Or
3. Structural Concrete Deck.

All of the above steel deck options are attached to supports using welds through weld washers at the bottom of each corrugation. Side laps are fastened 24" o.c. (three evenly spaced fasteners between supports) using ITW-Buildex fasteners between the deck supports.

This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a min. 340 psi, filling the corrugation with a minimum depth of 1/8". Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38-42 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.5 gal./sq.

Base Sheet: Soprafix Base 612, Soprafix Base 613, or Soprafix Base 614 mechanically attached through LWC into steel decking, perpendicular to the direction of the steel decking with Soprafix MBB-R batten bar placed center within a 3" wide lap and secured using OMG XHD or SOPREMA #15 fasteners spaced 12" o.c. Soprafix MBB-R batten bars are placed in the field of the sheet and secured with OMG XHD Fasteners or SOPREMA #15 fasteners spaced 12" o.c. Apply a 6" wide strip of Soprafix Base 612 torch-applied over the exposed center row of fasteners.

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 lap.

Primer: (Optional) Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.

Base Coat: Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.

Reinforcement: Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.

Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-90 psf. with Structural Deck Option #1 (See General Limitation #7.) -97.5 psf. with Structural Deck Option #2 or #3 (See General Limitation #7.)

Membrane Type: Liquid Applied Membrane

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; minimum wet cast density of 38-42 lbs./ft^3, min. 340 psi, over 18-22 ga steel decking or structural concrete deck.

System Type E(20): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:

1. Minimum 18-22 ga., Grade 33, Type B, BV steel deck attached to supports spaced max. 5' o.c. using ITW Buildex Driller Screw fasteners with nickel plated washers spaced maximum 6" o.c. Or
2. Minimum 18-22 ga., Grade 80, Type B steel deck attached to supports spaced max. 5' o.c. using ITW Buildex Driller Screw fasteners with nickel plated washers spaced maximum 6" o.c. Or
3. Structural Concrete Deck

All of the above steel deck options; panel side laps are attached with ITW Buildex Driller Screw fasteners spaced maximum 12" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38-42 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and is allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38-42 lbs./ft^3.

LWC Deck Preparation: After an overnight set, Celcore PVA Curing Compound is spray applied to lightweight concrete at a rate of 0.5 gal./sq.

Base Sheet: One layer of Soprafix Base 612, Soprafix Base 613, or Soprafix Base 614 mechanically attached through LWC into steel decking, perpendicular to the direction of the steel decking with Soprafix MBB-R batten bars and OMG XHD fasteners or SOPREMA #15 fasteners spaced in the following pattern: 6" x 12" x 6", repeated until end of batten is reached, within a torch-applied minimum 3" side lap and one row in the field of the sheet with Soprafix MBB-R batten bars and OMG XHD Fasteners or SOPREMA #15 fasteners spaced 12" o.c. Apply a 6" wide strip of Soprafix Base 612 torch-applied over the exposed center row of fasteners.

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 or Sopralene 250 SP, torch-applied with minimum 3" wide lap.

Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-135 psf. with Structural Deck Option #1 (See General Limitation #7.) -150 psf. with Structural Deck Option #2 or #3 (See General Limitation #7.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Min. 2” thick, min. 350 psi, Cellular Lightweight Concrete over structural concrete. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 100.9 lbf when tested with SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fasteners (1.7”) in accordance with TAS 105.
System Type F(1):	Base sheet adhered to substrate

All General and System Limitations apply.

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, torch-applied over structural concrete deck primed with Elastocol 500 primer.
LWC Deck:	Min. 2” thick, min. 350 psi, Cellular Lightweight Concrete
Base Layer:	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in in COLPLY EF Adhesive applied in ½” to ¾” wide ribbons spaced 12” o.c. to lightweight insulating concrete. *Requires torch-applied ply membrane
Ply Sheet: (Optional)	Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive at a rate of 1.5 – 2 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. Or One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, self-adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.

Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-130 psf. (See General Limitation #9.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete; min. 340 psi., over 22 ga steel decking or structural concrete.
System Type F(2):	All layers of insulation adhered with approved adhesive.

All General and System Limitations apply.

Structural Deck:	Structural concrete deck or min. 22 ga. steel deck. Steel deck is treated with Celcore S-1 broom applied to the deck in continuous film prior to application of Celcore MF Cellular Concrete.
LWC Deck:	A 1/8" slurry coat of, min. 340 psi, Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with min. 1" thick EPS Board and a minimum 2" thick top coat. After setting to support foot traffic, Celcore PVA Curing Compound is applied at a rate of 300 ft^2/gal.
Base Layer:	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in in COLPLY EF Adhesive applied in ½" to ¾" wide ribbons spaced 12" o.c. to lightweight insulating concrete. *Requires torch-applied ply membrane
Ply Sheet: (Optional)	Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive at a rate of 1.5 – 2 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. Or One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, self-adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.

Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-162.5 psf. (See General Limitation #9.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Min. 2" thick, min. 350 psi, Cellular Lightweight Concrete over structural concrete. *The deck shall record a Minimum Characteristic Resistance Force (MCRF) of 100.9 lbf when tested with SOPREMA 1.7 in. Base Sheet Fastener or OMG CR Assembled Base Sheet Fasteners (1.7") in accordance with TAS 105.
System Type F(3):	Base sheet adhered to substrate

All General and System Limitations apply.

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, torch-applied over structural concrete deck primed with Elastocol 500 primer.
LWC Deck:	Min. 2" thick, min. 350 psi, Cellular Lightweight Concrete
Base Layer:	One layer of Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Elastophene PS*, Elastophene PS 3.0*, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Colphene 180 PS*, Sopralene 180 PS 2.2*, Sopralene 180 Sanded, Sopralene 180 PS* or Sopralene 250 Sanded adhered in COLPLY EF Adhesive applied in ½" to ¾" wide ribbons spaced 6" o.c. to lightweight insulating concrete. *Requires torch-applied ply membrane.
Ply Sheet: (Optional)	Modified Sopra G, Soprabase, Colphene Sanded, Elastophene Sanded 2.2, Elastophene Sanded 3.0, Elastophene HS, Colphene 180 Sanded, Sopralene 180 Sanded 2.2, Soprabase, Sopralene 180 Sanded or Sopralene 250 Sanded adhered in hot asphalt at 25 lbs./sq. or applied in COLPLY EF Adhesive at a rate of 1.5 – 2 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. Or One layer of Elastophene Stick, Sopralene Stick, Colphene Stick, self-adhered to substrate primed with Elastocol Stick Zero.
Primer: (Optional)	Alsan RS 222 Primer applied at a rate of 1-1.5 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.

Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-167.5 psf. (See General Limitation #9.)

Membrane Type:	Liquid Applied Membrane
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete, min. wet cast density of 38 lbs./ft3, min. 361 psi over structural concrete deck.
System Type F(4):	Alsan RS Roof System applied directly to substrate

All General and System Limitations apply.

Vapor Barrier:	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, torched applied over ASTM D41 primed concrete deck.
LWC Deck:	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". Minimum 1" thick EPS Holey Board placed into wet LWC. The following day a minimum 2" thick top of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq. and allowed to dry for 48 hours.
Base Sheet:	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, torched applied.
Primer: (Optional)	Alsan RS 222 Primer at a rate of 1 gal./sq.
Base Coat:	Alsan RS 230 Field, Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 3.91 gal./sq.
Reinforcement:	Alsan RS Fleece is firmly applied and rolled into the base coat while still wet to ensure adhesion and remove air bubbles. Reinforcement shall be placed carefully to avoid wrinkles and maintain alignment.
Top Coat:	Alsan RS 230 Field , Alsan RS 260 LO Field, Alsan RS 230 Flash or Alsan RS 260 LO Flash applied at a rate of 1.95 gal./sq.
Surfacing: (Optional)	Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Maximum Design Pressure:	-307.5 psf. (See General Limitation #9.)

LIGHTWEIGHT INSULATING CONCRETE 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 Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

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