



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

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

Commercial Innovations, Inc.
9105 Way Ave.
Cleveland, OH 44105

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: Solar Brite Single Ply Roof 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 NOA# 12-1102.06 and consists of pages 1 through 18.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 15-1007.13
Expiration Date: 01/05/21
Approval Date: 12/31/15
Page 1 of 18

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	KEE
Deck Type:	Lightweight Concrete
Maximum Design Pressure	-405 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Solar Brite EV, Solar Brite	Various	ASTM D 6754	KEE, polyester reinforced, single ply membrane
Solar Brite EVFB, Solar Brite FB	Various	ASTM D 6754	KEE, fleece-backed, polyester reinforced, single ply membrane
LA432 Bonding Adhesive		Proprietary	Two side "contact" bonding adhesive
LA432M Bonding Adhesive		Proprietary	Solvent based bonding adhesive
FA561M Water Borne Adhesive		Proprietary	One side "substrate only" fleece back solvent based adhesive
FA636 Water Borne Adhesive		Proprietary	One side "substrate only" fleece backed water based adhesive
Millennium One Step™ Foamable Adhesive		Proprietary	Elastomeric, One step foamable adhesive
Tuff Trac	0.080" x 28" or 56" x 43" 1/4" x 24" x 48"	N/A	Vinyl walk way Vinyl protection pad

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
ACFoam-II	Isocyanurate Insulation	Atlas Roofing Corporation
DensDeck, DensDeck Prime	Silicon treated gypsum	Georgia-Pacific Gypsum LLC
H-Shield	Polyisocyanurate Insulation	Hunter Panels, LLC
ENRGY 3	Isocyanurate Insulation	Johns Manville Corporation



APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
XPS	Type IV Extruded polystyrene with a minimum density of 1.6 pcf	Generic
EPS	Type IX Expanded polystyrene with a minimum density of 1.8 pcf	Generic
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum Coverboard	United States Gypsum Corporation



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast 1.5" x 2.5" Oval Barbed Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	SFS Intec, Inc.
2.	Dekfast Galvalume Steel Round 2-3/8 in. 20-Ga. Barbed Plate	Barbed, Galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.
3.	Dekfast Isofast IF-2.375-AT Membrane Plate	Galvalume AZ50 stress plate, #15 belted fastener system	2-3/8" Dia.	SFS Intec, Inc.
4.	Dekfast Fasteners	Insulation and membrane fasteners.	Various	SFS Intec, Inc.
5.	Dekfast Galvalume Steel Hex	Galvalume AZ50 steel plate	2-7/8" x 3 1/4"	SFS Intec, Inc.
6.	OMG ASAP Fastener	Preassembled fastener and plate.	3" round	OMG, Inc.
7.	CD-10	Membrane and Insulation Fastener.	Various	OMG, Inc.
8.	OMG Fasteners	Membrane and Insulation fasteners	Various	OMG, Inc.
9.	Dekfast 15 HS	Carbon steel fastener for concrete, steel and wood decks	Various	SFS Intec, Inc.
10.	Dekfast 1.5" x 2.75" Oval Barbed Plate	Oval stress plate	1 1/2" x 2 3/4"	SFS Intec, Inc.



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	FM 4470	J.I. 1Z3A8.AM	08/13/97
	FM 4470	J.I. 4D5A4.AM	10/05/99
	FM 4470	3036192	11/23/09
	FM 4470	3028651	04/17/08
	FM 4470	3033396	09/04/09
	FM 4470	3013068	09/23/03
	Underwriters Laboratories	UL 790	95NK20862
94NK40647			10/15/94
Exterior Research & Design, LLC.	TAS 114	4015.10.96-1-R1	07/20/10
	TAS 114	4006.07.97-1-R1	07/15/10
	TAS 114	02767.09.05-S2	09/27/05
	FM 4470 / TAS 114	S6220.03.07-R1	05/13/11
	FM 4470 / TAS 114	S32410.09.10	09/21/10
	TAS 114	4006.07.97-1-R2	11/25/15
Trinity ERD	ASTM D 6754	S47410.12.14	12/15/14
PRI Construction Materials Technologies LLC	ASTM D 3747	HGC-142-02-03	02/09/12

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

<u>Engineer/Agency</u>	<u>Identifier</u>	<u>Assemblies</u>	<u>Date</u>
Robert Nieminen, P.E.	Signed/Sealed Calculations	E(5), E(6), F(1)	11/11/15
Factory Mutual Research Corp.	RoofNav Listings	E(2), E(3), E(4)	11/23/15



APPROVED ASSEMBLIES

- Membrane Type:** Single Ply, KEE
- Deck Type 4I:** Lightweight Concrete, Insulated
- Deck Description:** Min. 272 psi Mearlcrete, or min. 240 psi Elastizell LWIC cast over structural concrete
- System Type A(1):** One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

- Membrane:** Solar Brite EVFB or Solar Brite FB roof cover adhered with FM 561M adhesive at 1 gal/sq or FM 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -105 psf (See General Limitation #9)
Or
Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -117 psf (See General Limitation #9)

Maximum Design Pressure: See Membrane Options above.



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 272 psi Mearlcrete, or min 240 psi Elastizell LWIC cast over structural concrete
System Type A(2): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5 ” thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulatino Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12” o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered with FM 561M adhesive at 1 gal/sq or FM 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld
Maximum Design Pressure: -105 psf (See General Limitation #9)

Or

Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld
Maximum Design Pressure: -180 psf for Elastizell (See General Limitation #9)
Maximum Design Pressure: -210 psf for Celcore or Mearlcrete (See General Limitation #9)

Maximum Design Pressure: See Membrane Options Above



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 272 psi Mearlcrete, or min 240 psi Elastizell LWIC cast over steel deck
System Type A(3): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq., with FM 561M adhesive at 1 gal/sq. or FM 636 water based adhesive at 100 ft²/gal.. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -105.0 psf (See General Limitation #9)

Or

Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.
Maximum Design Pressure: -117.0 psf (See General Limitation #9)

Maximum Design Pressure: Roof Cover/Insulation Maximum Pressure per Membrane Option Above.
 (See General Limitation #9)
 Refer to LWIC Deck manufacturer's current NOA for maximum design pressure in steel deck applications.



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 272 psi Mearlcrete, or min 240 psi Elastizell LWIC cast over structural concrete
System Type A(4): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Approved EPS or XPS Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum: ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.
 Or
 Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq. or FM 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: -180 psf (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 272 psi Mearlcrete, or min 240 psi Elastizell LWIC cast over structural concrete
System Type A(5): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3 or Approved EPS or XPS (min. 2.0 pcf) Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum: ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.

Or

Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq. or FM 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure:
 -180.0 psf for Elastizell (See General Limitation #9)
 -222.5 psf for Celcore (See General Limitation #9)
 -240.0 psf for Mearlcrete (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 240 psi Elastizell LWIC cast over steel deck
System Type A(6): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, Multi-Max FA-3, H-Shield, ENRGY 3, Approved EPS or XPS Minimum: 1.5" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum: ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive or 3M Polyurethane Foam Insulation Adhesive CR-20 applied in continuous 3-inch ribbons spaced 12" o.c. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Membrane: Solar Brite EV or Solar Brite roof cover adhered with LA 432 Bonding Adhesive or LA 432M Bonding Adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate. Laps are sealed with 1.5-inch heat weld.
 Or
 Solar Brite EVFB or Solar Brite FB roof cover adhered with hot asphalt at 25 lbs/sq. or FM 636 water based adhesive at 100 ft²/gal. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressure: Roof Cover/Insulation Maximum Pressure
 -180.0 psf for Elastizell (See General Limitation #9)
 -225.0 psf for Celcore (See General Limitation #9)
 Refer to LWIC Deck manufacturer's current NOA for maximum design pressure in steel deck applications.



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Minimum 200 psi, Elastizell cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional minimum 1" thick Holey Board and a minimum 2" thick top coat.
System Type E(1): Membrane mechanically attached to steel deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Deck: Minimum 18-22 ga. Type B, Grade 80 steel decking placed over minimum 0.25" thick structural supports having maximum 5 ft spans. Deck shall be anchored with min. 5/8" puddle welds or ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.

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

Vapor Barrier: (Optional) Any UL or FM approved vapor barrier applied to the roof deck.

Fire Barrier: (Optional) Min. 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

Membrane: Solar Brite EV or Solar Brite roof cover attached through lightweight concrete to the steel deck using Dekfast 15 HS fasteners and plates spaced 12" o.c. through the tabs spaced 51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures: -75 psf (See General Limitation #7.)



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Minimum 200 psi, Elastizell cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional minimum 1" thick Holey Board and a minimum 2" thick top coat over steel or concrete deck.
System Type E(2): Membrane mechanically attached to steel/concrete deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Deck: Minimum 2500 psi structural concrete deck or minimum 22 ga., type B, Grade 80 steel decking placed over minimum 0.25" thick structural supports having maximum 5 ft spans. Deck shall be anchored with min. 5/8" puddle welds or ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Vapor Barrier: (Optional) Any UL or FM approved vapor barrier applied to the roof deck.

Fire Barrier: (Optional) Min. 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

Membrane: Solar Brite EV or Solar Brite roof cover attached through the presecured insulation to the deck using Dekfast 15 HS fasteners and plates spaced 6" o.c. through the tabs spaced a maximum of 51" o.c. Laps are sealed with 1.5-inch heat weld.

Maximum Design Pressures: -75 psf (See General Limitation #7)



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi, Mearlcrete cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional minimum 1" thick Apache Corrugated EPS Board and a minimum 2" thick top coat over steel deck.
System Type F(1): Membrane adhered to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Deck: Minimum 22 ga., type B, Grade 33 steel decking placed over minimum 0.25" thick structural supports having maximum 5 ft spans. Deck shall be anchored with min. 5/8" puddle welds or Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Treatment: Polyvinyl Alcohol (PVA) applied to the deck top surface when walkable.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FM 561M solvent adhesive at 1 gal. per 100 ft² or FM 636 water based adhesive at 100 ft²/gal. The outside 1.5" of the lap is heat welded.

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



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi approved Elastizell Cellular Lightweight Concrete over Structural Concrete Deck.
System Type F(2): Membrane adhered to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Treatment: Top surface of lightweight concrete shall be sealed with sodium silicate or PVA.
Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered to the sealed surface of the lightweight concrete in FM 636 water based adhesive at 100 ft²/gal. The outside 1.5” of the lap is heat welded.
Maximum Design Pressure: -272.5 psf; (See General Limitation #9.)



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi approved Elastizell Cellular Lightweight Concrete over Structural Concrete Deck.
System Type F(3): Membrane adhered to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Treatment: Top surface of lightweight concrete shall be sealed with sodium silicate or PVA.
Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered to the sealed surface of the lightweight concrete in FM 561M Adhesive at 1 gal./sq. or FM 636 water based adhesive at 100 ft²/gal. The outside 1.5” of the lap is heat welded.
Maximum Design Pressure: -302.5 psf; (See General Limitation #9.)



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi, Concrecel Lightweight Concrete applied with a minimum ¼” thick slurry coat followed by an optional minimum 1” thick Apache Holey Board and a minimum 2.25” thick top coat over Structural Concrete deck or plank.
System Type F(4): Membrane adhered to deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier: Any approved asphaltic vapor barrier.
(Optional)

Treatment: Concrecel Curing Compound applied to the deck top surface when walkable, at a rate of 600 ft²/gal.

Membrane: Solar Brite EVFB or Solar Brite FB roof cover adhered to the insulation with FM 561M solvent adhesive at 1 gal. per 75 ft² applied to substrate. Membrane rolled in with weighted roller. The outside 1.5” of the lap is heat welded.

Maximum Design Pressure: -375.0 psf; (with asphaltic vapor barrier) (See General Limitation #9)
-405.0 psf; (no asphaltic vapor barrier) (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 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered 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 referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. 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 sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, 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 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant
(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
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

