



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

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
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[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**NOTICE OF ACCEPTANCE (NOA)**

**Mule-Hide Products Co., Inc.**  
**1195 Prince Hall Dr.**  
**Beloit, WI 53511**

**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: Mule-Hide Self-Adhered Roof System over Concrete Deck**

**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# 15-0921.06 and consists of pages 1 through 28.  
The submitted documentation was reviewed by Alex Tigera.



**NOA No.: 17-0824.12**  
**Expiration Date: 11/22/22**  
**Approval Date: 11/02/17**  
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## ROOFING ASSEMBLY APPROVAL

<b>Category:</b>	Roofing
<b>Sub-Category:</b>	Modified Bitumen
<b>Materials</b>	SBS/APP
<b>Deck Type:</b>	Concrete
<b>Maximum Design Pressure</b>	-545 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>
APP Torch Base	65' 8" x 3' 3-3/8"	ASTM D 6509 Type I	APP modified asphalt coated fiberglass reinforced base sheet.
Nail Base	65' 8" x 3' 3-3/8"	ASTM D 6163, Type I	SBS modified asphalt coated fiberglass reinforced base sheet.
Nail Base P	65' 8" x 3' 3-3/8"	ASTM D 6164, Type I	SBS modified asphalt coated polyester reinforced base sheet.
SA Base Sheet FR	66' 8" x 3' 3-3/8"	ASTM D 6163, Type I	Self-adhered, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
SA Base Sheet	66' 8" x 3' 3-3/8"	ASTM D 6163, Type I	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
SA-SBS Cap Sheet FR	32' 10" x 3' 3-3/8"	ASTM D 6164, Type I	Self-adhered, fire-rated, polyester reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
SA-SBS Cap Sheet	32' 10" x 3' 3-3/8"	ASTM D 6164, Type I	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
SA-APP Cap Sheet	32' 10" x 3' 3-3/8"	ASTM D 6222, Type I	Self-adhered, polyester reinforced, APP modified bitumen membrane with a self-adhering back face and a granule top surface.
SA-APP Cap Sheet FR	32' 10" x 3' 3-3/8"	ASTM D 6222, Type I	Self-adhered, fire-rated, polyester reinforced, APP modified bitumen membrane with a self-adhering back face and a granule top surface.
SA-SBS KoolCap®	32' 10" x 3' 3-3/8"	ASTM D 6164, Type I	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
SA-SBS KoolCap® FR	32' 10" x 3' 3-3/8"	ASTM D 6164, Type I	Self-adhered, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a granule top surface.
APP Torch G	32' 10" x 3' 3-3/8"	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.



PG100 Asphalt Primer	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	ASTM D41	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.
PG350 Mod Bit Adhesive	1, 3, 5, 50, 55 gal. or tube	ASTM D3019 Type III	A fibered rubberized adhesive designed for use with modified bitumen membranes.
PG400 Plastic Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586 ASTM D3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.
PG425 Wet/Dry Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586 ASTM D3409	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.
PG450 Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement.
Polyplus 50 Premium MB Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.
Polyplus 55 Premium Modified Flashing Cement	1, 3, 5, 50, 55 gal. or tube	ASTM D4586	A mastic compound for use as a roof flashing adhesive.

**APPROVED INSULATIONS:**

**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
Mule-Hide Poly ISO 1	Polyisocyanurate foam insulation	Mule-Hide Products Co., Inc.
Poly ISO 2	Polyisocyanurate foam insulation	Mule-Hide Products Co., Inc.
ISO 95+GL	Polyisocyanurate foam insulation	Firestone Bldg. Pro. Co.
Insulfoam EPS	Expanded Polystyrene Board	Insulfoam, a Div. of Carlisle Const. Materials
Structodek High Density Fiberboard Roof Insulation	High Density Wood Fiber insulation board.	Blue Ridge Fiberboard, Inc.
DensDeck	Gypsum insulation board	Georgia-Pacific Gypsum LLC
DensDeck Prime	Gypsum insulation board	Georgia-Pacific Gypsum LLC
SECUROCK Gypsum-Fiber Roof Board	Fiber reinforced insulation board	United States Gypsum Corporation
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corp.
ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corp.
H-Shield	Polyisocyanurate foam insulation	Hunter Panels, LLC
H-Shield CG	Polyisocyanurate foam insulation	Hunter Panels, LLC
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC.



**APPROVED FASTENERS/ADHESIVES:**

**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 14	Insulation fastener for wood, steel and concrete decks	Various	SFS Intec, Inc.
2.	Dekfast 15 HS	Insulation fastener for wood, steel and concrete decks	Various	SFS Intec, Inc.
3.	Dekfast Isofast IFC/IW-70x70	Galvalume 19 ga. steel insulation and membrane attachment stress plate	2 3/4" x 2 3/4"	SFS Intec, Inc.
4.	Mule-Hide EHD Fastener	Insulation fastener for wood, steel and concrete decks.	Various	Mule-Hide Products Co., Inc.
5.	Mule-Hide 3" Insulation Plate	A2-SS aluminized steel plate	3" square	Mule-Hide Products Co., Inc.
6.	Dekfast Galvalume Steel 3" . Round	3" round galvalume AZ50 steel plate	3" round	SFS Intec, Inc.
7.	Mule-Hide HDP Fastener	Insulation fastener for wood, steel and concrete decks	Various	Mule-Hide Products Co., Inc.
8.	PG325 Cold Process Adhesive	A fibered cold process adhesive for use with roll or BUR roofing.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
9.	XtraFlex 10 Asphalt Primer	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	Polyglass USA, Inc.
10.	PG500 MB Flashing Cement	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
11.	Polyplus 35 Premium Mod Bit Adhesive	A fibered rubberized adhesive designed for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
12.	XtraFlex 35 Premium Mod Bit Adhesive	A fibered rubberized adhesive designed for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
13.	Polyplus 45 Premium Flashing Cement	A thick, fibered, rubberized flashing cement.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
14.	XtraFlex 50 Premium Modified Wet/Dry Cement	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
15.	Insta Stik Quik Set Insulation Adhesive	Single component moisture curing urethane foam adhesive	Various	The Dow Chemical Company
16.	OMG OlyBond 500	Spray Polyurethane Foam adhesive	Various	OMG, Inc.



**APPROVED FASTENERS/ADHESIVES:**

**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
17.	Millennium One Step Foamable Adhesive	Insulation Adhesive	Various	Adco Products d.b.a. Royal Adhesives & Sealants, Inc.
18.	ICP Adhesives CR-20	A dual component urethane adhesive	Various	ICP Adhesives and Sealants, Inc.

**APPROVED SURFACING:**

**TABLE 4**

<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
PG200 Non-Fibered Roof Coating	A non fibered asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Polyglass USA, Inc.
XtraFlex 20 Bituminous Roof Coating	A non fibered asphaltic coating used to add life and rejuvenate existing BUR roofing substrates.	1½-2 gal/sq	TAS 140	Polyglass USA, Inc.
PG300 Fibered Roof Coating	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
XtraFlex Bituminous Roof Coating Fibered	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
PG600 Non-Fibered Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
PG650 Fibered Aluminum Roof Coating	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
PG700 Elastomeric Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
PG800 Non-Fibered Asphalt Emulsion Roof Coating	An asphalt base, un-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
XtraFlex 80 Emulsion Roof Coating	An asphalt base, un-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
Polyplus 65 Premium Fibered Aluminum Roof Coating	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
XtraFlex 65 Aluminum Roof Coating Fibered	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.



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**APPROVED SURFACING:**

**TABLE 4**

<u>Product Name</u>	<u>Product Description</u>	<u>Application Rate</u>	<u>Specification</u>	<u>Manufacturer</u>
Polyplus 60 Premium Non-Fibered Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
XtraFlex 60 Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
Polybrite 70 Premium GradeElastomeric Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
XtraFlex 70 Premium Acrylic FR Roof Coating	A premium white elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
Polybrite 90 High Solids Silicone Roof Coating	A premium grade high solids, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
XtraFlex SRC 9600 High Solids Silicone Roof Coating	A premium grade high solids, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
Polybrite 95 Silicone Roof Coating	A single component, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
XtraFlex SRC 8000 Silicone Roof Coating	A single component, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
Gravel	To be installed in a flood coat of approved asphalt at 60 lbs/sq	400 lbs/sq	N/A	Generic
Slag	To be installed in a flood coat of approved asphalt at 60 lbs/sq	300 lbs/sq	N/A	Generic



**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Name/Report</u>	<u>Report No.</u>	<u>Date</u>
Factory Mutual Research Corporation	4470	2W7A7.AM	08.04.94
	4450	2D5A9.AM	06.22.99
	4470	3000857	01.12.00
	4470	3004091	01.12.00
	4470	3001334	02.15.00
	4470	3014692	08.05.03
	4450	3014751	08.27.03
	4450	3019317	06.30.04
	4470	3012321	07.29.07
	4470	3032172	06.12.09
4470	3049631	04.21.14	
Trinity   ERD	TAS 114	11752.09.99-1	02.08.00
	TAS 117(B)-ASTM D903	020841.06.04	06.02.04
	TAS 114	02762.03.05	03.30.05
	TAS 114	02764.09.05	09.09.05
	TAS 114	P1738.02.07	02.05.07
	TAS 114	P1734.07.06-R1	02.27.07
	TAS 117(B)-ASTM D6862	C8500SC.11.07	11.30.07
	ASTM D6164 / ASTM D6222	P10490.08.08	08.13.08
	ASTM D6164 / ASTM D6222	P10490.10.08-R1	10.03.08
	ASTM D6222	P7400.03.08-R2	10.09.08
	TAS 114(D) – ASTM D1876	P10070.10.08	10.09.08
	ASTM D6222	P10490.10.08-2	10.30.08
	FM 4470 & TAS 114	P30550.12.09-1	12.02.09
	FM 4470 & TAS 114	P30550.12.09-2	12.02.09
	FM 4470 & TAS 114	P33970.03.11	03.15.11
	ASTM D6163 / ASTM D 4601	P33960.03.11	03.15.11
	TAS 114 (D) & FM 4470	P9060.09.11	09.12.11
	ASTM D6163	P37590.03.13-2-R1	02.05.13
	ASTM D6164	P37590.03.13-3A	03.06.13
	TAS 114	11757.04.01-1-R1	04.30.13
	ASTM D6164	P37590.07.13-1	07.02.13
	ASTM D6222	P37590.09.13	09.12.13
	ASTM D4601 / TAS 117	P45970.05.14	05.12.14
PRI Construction Materials	ASTM D6222	PUSA-061-02-02	01.28.08
	ASTM D6163	PUSA-064-02-02	02.27.08
Technologies	ASTM D6222	PUSA-062-02-02	12.04.08
	ASTM D6694	PUSA-134-02-01	05.16.14
	ASTM D6694	PUSA-135-02-01	05.16.14



**APPROVED ASSEMBLIES:**

- Membrane Type:** SBS/APP
- Deck Type 3I:** Concrete Decks, Insulated
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type A(1):** One or more layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation.

**All General and System limitations apply.**

**Primer:** (Optional) Concrete deck shall be primed with PG100 Asphalt Primer.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
Multi-Max FA-3, H-Shield, Mule-Hide Poly ISO 1 Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

**Note: Apply insulations in Insta Stik Quik Set Insulation Adhesive in continuous ¾ to 1” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with Insta Stik Quik Set Insulation Adhesive in continuous ¾ to 1” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

- Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.
- Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered  
Or  
One ply of APP Torch G, torch-applied.
- Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
- Maximum Design Pressure:** -67.5 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

**Vapor Barrier:** (Optional) Cold-applied base sheet approved for use with roof cover, adhered to concrete deck primed with PG100 Asphalt Primer.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, ENRGY 3, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A

**Note: Apply insulation in ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
<b>Insulfoam EPS (Requires Top Layer of Insulation) Minimum 2” thick</b>	N/A	N/A
<b>Structodeck High Density Fiberboard Roof Insulation Minimum ½” thick</b>	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
<b>Structodeck High Density Fiberboard Roof Insulation Minimum ½” thick</b>	N/A	N/A
<b>DensDeck, DensDeck Prime Minimum ¼” thick</b>	N/A	N/A

**Note: Apply insulation in OMG OlyBond 500 in continuous ¾” to 1” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with OMG OlyBond 500 in continuous ¾” to 1” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -120.0 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ENRGY-3, ISO 95+ GL, H-Shield, Mule-Hide Poly ISO 1 Minimum 1.5” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
DensDeck, DensDeck Prime Minimum ¼” thick	N/A	N/A

**Note: Apply insulation in OMG OlyBond 500 in continuous ¾” to 1” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with OMG OlyBond 500 in continuous ¾” to 1” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -127.5 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
Poly ISO 2, AC Foam-II, H-Shield, Mule-Hide Poly ISO 1 Minimum 1.5" thick	N/A	N/A
<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
DensDeck, DensDeck Prime Minimum 1/4" thick	N/A	N/A

**Note: Apply insulation in OMG OlyBond 500 in continuous 3/4" to 1" beads/ribbons spaced 12" o.c. Additional layers of insulation to be adhered with OMG OlyBond 500 in continuous 3/4" to 1" beads/ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -150.0 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
<b>Insulfoam EPS Minimum 1.5" thick</b>	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
<b>Structodek High Density Fiberboard Roof Insulation Minimum ½" thick</b>	N/A	N/A

**Note: Apply insulation in Insta Stik Quik Set Insulation Adhesive in continuous ¾ to 1" beads/ribbons spaced 12" o.c. Additional layers of insulation to be adhered with Insta Stik Quik Set Insulation Adhesive in continuous ¾ to 1" beads/ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -157.5 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, H-Shield, Mule-Hide Poly ISO 1, ENRGY 3 Minimum 2” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

**Note: All insulation shall be adhered in full asphalt applied at 25 lb/sq. or with Insta Stik Quik Set Insulation Adhesive in continuous ¾ to 1” beads/ribbons, OMG OlyBond 500 in continuous ¾” to 1” beads/ribbons, ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/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 the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(8):** All layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation.

**All General and System limitations apply.**

**Primer:** Concrete deck shall be primed with PG100 Asphalt Primer.  
**(Optional)**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, ENRGY 3, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A

<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, ENRGY 3, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A

**Note: Apply insulation in Millennium One Step Foamable Adhesive in continuous ½” to ¾” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with Millennium One Step Foamable Adhesive in continuous ½” to ¾” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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



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

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

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-IV Minimum 2.0” thick	N/A	N/A
Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A
ACFoam-III Minimum 1.3” thick	N/A	N/A
ISO 95+ GL, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, JM ISO 3, ENRGY 3 Minimum 1.0” thick	N/A	N/A

<u>Top Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

**Note: All insulation shall be applied in ICP Adhesives CR-20 in continuous 1.5” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet, self-adhered.

**Membrane:** One ply of SA-SBS Cap Sheet, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -240.0 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

**Primer:** Concrete deck shall be primed with PG100 Asphalt Primer and allowed to dry prior to application of vapor barrier.  
**(Optional)**

**Vapor Barrier:** SA-SBS Cap Sheet, self-adhered.  
**(Optional)**

One or more layers of any of the following insulations:

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

**Note: Apply insulation in ICP Adhesives CR-20 in continuous 3" to 3-1/2" beads/ribbons spaced 12" o.c. Additional layers of insulation to be adhered with ICP Adhesives CR-20 in continuous 3" to 3-1/2" beads/ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -240.0 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

**Primer:** Concrete deck shall be primed with PG100 Asphalt Primer and allowed to dry prior to application of vapor barrier.

**Vapor Barrier:** SA-SBS Cap Sheet, self-adhered.  
**(Optional)**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A

**Note: Apply insulation in ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. Additional layers of insulation to be adhered with ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -250.0 psf (See General Limitation #9.)



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type A(12):** One or more layers of insulation adhered with approved adhesive. Membranes subsequently adhered to insulation layer.

**All General and System limitations apply.**

**Primer:** Concrete deck shall be primed with PG100 Asphalt Primer.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, ENRGY 3, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A
DensDeck Minimum ½” thick	N/A	N/A

**Note: Apply insulation in ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. to substrate. Additional layers of insulation to be adhered with ICP Adhesives CR-20 in continuous 3” to 3-1/2” beads/ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap®, SA-SBS KoolCap® FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -262.5 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, H-Shield, Mule-Hide Poly ISO 1 Minimum 2" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	N/A	N/A

**Note: All insulation shall be adhered with hot asphalt at a rate of 25 lbs/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -350.0 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

**Primer:** Concrete deck shall be primed with PG100 Asphalt Primer.

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2, ACFoam-III, ENRGY 3, H-Shield, Mule-Hide Poly ISO 1, H-Shield CG, Multi-Max FA-3 Minimum 1.5” thick	N/A	N/A

**Note: Apply insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 On ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -480 psf (See General Limitation #9.)



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

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

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2 Minimum 2” thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

**Note: All insulation shall be adhered with OMG OlyBond 500 at rate of 1 gal/ 100ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 On ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -545 psf (See General Limitation #9.)



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

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ACFoam-II, Poly ISO 2 Minimum 2" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	N/A	N/A

**Note: Apply insulation in a full mopping of any approved mopping asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as Base Layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.**

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 On ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -545 psf (See General Limitation #9.)



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type C(1):** All layers of insulation are mechanically attached to roof deck. Membrane is subsequently adhered to insulation.

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
ENRGY-3, ACFoam-II, Poly ISO 2, H-Shield, Mule-Hide Poly ISO 1 Minimum 1.5" thick	1, 6 or 7	1:1.33 ft <sup>2</sup>

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

**Base Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 On ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -82.5 psf (See General limitation #7.)



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type C(2):** All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
Any approved Polyisocyanurate listed in Table 2 Minimum 1.5” thick	N/A	N/A

**Note:** All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼” thick	3 or 7	1:1.33 ft <sup>2</sup>

**Base Sheet:** One or more plies of Nail Base sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs. /sq.

**Ply Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 One ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

**Maximum Design Pressure:** -82.5 psf (See General limitation #7.)



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type D:** All insulation is loosed laid with preliminary attachment to deck. Base sheet is subsequently mechanically fastened through insulation to the roof deck. Membranes subsequently adhered.

**All General and System limitations apply.**

One or more layers of any of the following insulations:

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
Any approved Polyisocyanurate listed in Table 2 Minimum 1” thick	N/A	N/A
<u>(Optional) Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
DensDeck Minimum ¼” thick	N/A	N/A

**Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.**

**Base Sheet:** One ply of Nail Base or Nail Base P fastened to the deck as described below.

**Fastening:** Attach base sheet using Mule-Hide HDP Fasteners or Mule-Hide EHD Fasteners with Mule-Hide 3” Insulation Plates spaced 12” o.c. in a 4” lap and 12” o.c. in two equally spaced staggered rows in the center of the sheet.

**Ply Sheet:** One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
 Or  
 On ply of APP Torch G, torch-applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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



**Membrane Type:** SBS/APP  
**Deck Type 3I:** Concrete Decks, Insulated  
**Deck Description:** 2500 psi structural concrete or concrete plank  
**System Type F(1):** Base sheet self-adhered. Membranes subsequently adhered.

**All General and System Limitations apply.**

**Note: Concrete deck shall be primed with PG100 Asphalt Primer and allowed to dry prior to application of base sheet.**

**Base Sheet:** (Optional if using self-adhered cap sheets) One or more plies of SA Base Sheet or SA Base Sheet FR, self-adhered.

**Membrane:** One ply of SA-SBS KoolCap<sup>®</sup>, SA-SBS KoolCap<sup>®</sup> FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet FR, SA-APP Cap Sheet or SA-APP Cap Sheet FR, self-adhered.  
Or  
One ply of APP Torch G, torch applied.

**Surfacing:** (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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



## CONCRETE DECK SYSTEM LIMITATIONS:

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

## GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

**Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

**END OF THIS ACCEPTANCE**



NOA No.: 17-0824.12  
Expiration Date: 11/22/22  
Approval Date: 11/02/17  
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