

# DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES BOARD AND CODE ADMINISTRATION DIVISION

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599 www.miamidade.gov/building/

### **NOTICE OF ACCEPTANCE (NOA)**

Tremco Inc. 3735 Green Road Beachwood, OH 44122

#### **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:** Tremco Modified Bitumen over Concrete Decks

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

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

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

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

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

This NOA renews and revises NOA No. 11-0301.04 and consists of pages 1 through 27. The submitted documentation was reviewed by Alex Tigera.

Stephen



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 1 of 27

## **ROOFING SYSTEM APPROVAL**

<u>Category:</u> Roofing

Sub-Category: Modified Bitumen

Material:SBSDeck Type:ConcreteMaximum Design Pressure-465 psf

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

<u>Product</u>	<b>Dimensions</b>	<u>Test</u> Specifications	<b>Product Description</b>
BURmastic Adhesive	5 or 55 gallon	Proprietary	Cold applied ply sheet and surfacing adhesive.
BURmastic Adhesive SF	5 gallon	Proprietary	Cold applied ply sheet adhesive.
BURmastic Composite Ply	36" x 66.6'	ASTM D 4601 Type II	Type II asphalt impregnated glass felt for use in conventional and modified bitumen built up roofing.
BURmastic Glass Ply	36" x 72'	ASTM D 4601 Type II, Proprietary	Asphalt coated, fiberglass reinforced base/ply sheet.
BURmastic Glass Ply 28 lb	3' x 108'	ASTM D 4601 Type II	Asphalt coated, fiberglass reinforced base/ply sheet.
Double Duty Aluminum	5 gallon containers	ASTM D 2824	Aluminum pigmented roof coating.
FAS-N-FREE	System	Proprietary	One part, solvent free insulation adhesive.
PolyTHERM Roofing Ply	39 ¾" x 318'	Proprietary	Non-woven, heat resistant polyester ply sheet.
POWERply Standard FR	39 ½" x 34.5"	ASTM D 6163	Fiberglass reinforced modified-bitumen membrane.
POWERply Premium FR	39 ½" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Supreme FR	39 ½" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Premium Smooth	39 ½" x 51.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.
POWERply Supreme Smooth	39 ½" x 34.5'	ASTM D 6162	Composite reinforced modified-bitumen membrane.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16 Page 2 of 27

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

<b>Product</b>	<b>Dimensions</b>	<u>Test</u> Specifications	<b>Product Description</b>
POWERply Standard Cold Adhesive	5 and 55 gallon containers	Proprietary	Cold applied ply sheet and membrane adhesive.
Premium III	100 lb. keg	ASTM D 312	Premium grade Type III asphalt.
Premium IV	100 lb. keg	ASTM D 312	Premium grade Type IV asphalt.
THERMastic 80	60 lb. Containers	Proprietary	All purpose roofing cement.
THERMglass Type IV		ASTM D 2178 VI	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built up roofing.
TREMprime Q.D. primer	1,5 or 55 gallon containers	ASTM D 41	Asphalt based roofing primer.
TremLastic S Adhesive	5 or 55 gallon	Proprietary	Non-fibered, polymer modified.
TREMprime WB primer	5 gallon container	Proprietary	Water based roofing primer.

# **APPROVED INSULATIONS:**

#### TABLE 2

<u>Product</u>	<b>Dimensions</b>	Test Specification	Product <u>Description</u>	<u>Manufacturer</u>
ACFoam-II	Various	TAS 110	Polyisocyanurate foam insulation	Atlas Roofing Corporation
High Density Wood Fiberboard	Various	TAS 110	Wood fiber insulation board	Generic
Perlite Insulation Board	Various	TAS 110	Perlite insulation board	Generic
ENRGY 3	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville Corp.
ENRGY 3 Plus	Various	TAS 110	Polyisocyanurate foam insulation	Johns Manville Corp.
ISO 95+ GL	Various	TAS 110	Polyisocyanurate foam insulation	Firestone Building Products Company
Ultra-Max	Various	TAS 110	Polyisocyanurate foam insulation	Rmax Operating, LLC



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 3 of 27

# **APPROVED FASTENERS:**

## TABLE 3

Fastener Number	<u>Product</u> <u>Name</u>	Product Description	<u>Dimensions</u>	<u>Manufacturer</u> (With Current NOA)
1.	#14 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
2.	Dekast 14, Dekfast 15 HS	Insulation and membrane fastener	Various	SFS Intec, Inc.
3.	Dekfast Dekflat Round Plastic Lock Plate	Polypropylene round stress plates	3" round	SFS Intec, Inc.
4.	Dekfast Hex Plate	Polypropylene round stress plates	3' round	SFS Intec, Inc.
5.	#15 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
6.	Flat Bottom Metal Plate	Galvalume stress plates	3" square	OMG, Inc.
7.	CD-10	Insulation fastener	Various	OMG, Inc.
8.	Fluted Nail	Insulation fastener	Various	OMG, Inc.
9.	3 in. Ribbed Galvalume Plate	Galvalume round stress plate	Various	OMG, Inc.
10.	3 in. Ribbed Galvalume Plate (Flat)	Galvalume round stress plate	Various	OMG, Inc.
11.	OMG 2-3/8" Barbed XHD Plate	Galvanized steel stress plate	2-3/8" round	OMG, Inc.
12.	OMG Eyehook Accuseam Plate	Galvalume round stress plate	2-3/8" round	OMG, Inc.
13.	AccuTrac Plate	Galvalume square stress plate	3" square	OMG, Inc.
14.	AccuTrac Flat Bottom	Aluminized square stress plate	3" square	OMG, Inc.
15.	Flat Bottom Metal Plate	Galvalume stress plate	3" square	OMG, Inc.
16.	Recessed Metal Plate	Galvalume stress plate	3" square	OMG, Inc.
17.	OMG 3" Galvalume Steel Plate	Galvalume stress plate	3" diameter	OMG, Inc.
18.	3 in. Round Metal Plate	Galvalume AZ50 steel plate	3" diameter	OMG, Inc.
19.	OMG Plastic Plate	Polypropylene stress plate	3.25" diameter	OMG, Inc.
20.	Trufast #14 HD Fastener, Trufast #15 EHD Fastener	Insulation fastener for wood, steel and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
21.	Trufast 3" Metal Insulation Plate	Galvalume AZ50 steel plate	3" diameter	Altenloh, Brinck & Co. U.S., Inc.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16 Page 4 of 27

# **EVIDENCE SUBMITTED:**

<b>Test agency</b>	<b>Test Identifier</b>	<b>Test Name/Report</b>	<b>Date</b>
Factory Mutual Research Corporation	1994 FM	Current Insulation Fastening Requirements	01/01/94
	2Y9A5.AM	FM 4470	11/13/95
	2D1A8.AM 0D0A9.AM	FM 4470 FM 4470	07/27/2000 08/01/2000
PRI Asphalt Technologies, Inc.	TRE-15-02-01	Physical Properties	05/25/99
IRT of S. Florida, Inc.	000-12	TAS 114	09/09/2000
Underwriters Laboratories, Inc.	R6692	Fire Classification Compliance	01/01/94
Momentum Technologies, Inc.	DX12K5A CX13K5A DX11K5A	ASTM D 6163 ASTM D 6162 ASTM D 6164	11/07/05
Atlantic & Caribbean Roof Consulting, LLC	ACRC 07-015	TAS-114 Appendix "D"	04/17/07



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 5 of 27

#### **APPROVED ASSEMBLIES:**

**Membrane Type:** SBS

**Deck Type 3I:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

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

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u> <u>Insulation Fasteners</u> <u>Fastener Density/ft<sup>2</sup></u>

(Table 3)

**Perlite Insulation Board** 

Minimum 1" thick N/A N/A

<u>Top Insulation Layer</u> <u>Insulation Fasteners</u> <u>Fastener Density/ft<sup>2</sup></u>

(Table 3)

**Perlite Insulation Board** 

Minimum 1" thick N/A N/A

Note: All insulation shall be adhered to the deck in THERMastic 80 at 2.5 gal./sq. or in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Base Sheet:** (Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the

insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32

 $lb./sq. \pm 15\%$ .

**Ply Sheet:** (Optional) Two plies of THERMglass IV adhered to the insulated substrate with THERMastic

80 Premium III or Premium IV asphalt at an application rate of 32 lb./sq.  $\pm$  15%.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR

adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. ±

15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

**Surfacing:** Use one of the following surfacings:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM

D312 asphalt at an application rate of 60 lb./sq.  $\pm$  15%

2. A coat of Double Duty Aluminum at 1 gal./sq.

**Maximum Design** 

-45 psf. (See General Limitation #9.)

Pressure:



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 6 of 27

**Deck Type 3I:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(2):** One or more layers of insulation adhered with approved asphalt

All General and System Limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u> <u>Insulation Fasteners</u> <u>Fastener Density/ft<sup>2</sup></u>

(Table 3)

ACFoam-II, , Ultra-Max

Minimum 1.5" thick N/A N/A

Note: Base layers of insulation shall be bonded to primed concrete deck with  $\frac{1}{2}$ " ribbons of  $\frac{3}{4}$ " ribbons of FAS-N-FREE adhesive applied at 3 gal./sq.

<u>Top Insulation Layer</u> <u>Insulation Fasteners</u> <u>Fastener Density/ft<sup>2</sup></u>

(Table 3)

**Perlite Insulation Board** 

Minimum 1" thick N/A N/A

Note: Top layer of insulation shall be bonded with ½" ribbons of ¾" ribbons of FAS-N-FREE adhesive applied

at 3 gal./sq.

**Base Sheet:** (Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the

insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32

 $lb./sq. \pm 15\%$ .

Ply Sheet: (Optional) Two plies of THERMglass IV adhered to the insulated substrate with THERMastic

80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq.  $\pm$  15%.

Cap Sheet: ((Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR

adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. ±

15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

**Surfacing:** Use one of the following surfacings:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM

D312 asphalt at an application rate of 60 lb./sq.  $\pm$  15%

2. A coat of Double Duty Aluminum at 1 gal./sq.

**Maximum Design** 

Pressure:

-45 psf. (See General Limitation #7.)

NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 7 of 27



**Deck Type 31:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(3):** One or more layers of insulation adhered with approved asphalt

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II, ENRGY 3, ENRGY 3 Plus Minimum 1.3" thick	N/A	N/A
Ultra-Max Minimum 1.4" thick	N/A	N/A
High Density Wood Fiberboard Minimum: ½" thick	N/A	N/A
Perlite Insulation Board Minimum 3/4" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet or base insulation layer. All Insulation shall be adhered to the anchor sheet or primed deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup> or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Two or three plies of THERMglass Type IV or PolyTHERM Roofing Ply sheet adhered to

insulation or based sheet with THERMastic 80, Premium III or Premium IV asphalt at 30 to 35

llb/sq for each ply. (See specification number for appropriate number of plies).

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 8 of 27

**Surfacing:** 

(Required if no cap is used). Install one of the following surfacings:

- 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq
- 2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 1/5 gal./sq. and 400 lbs./sq., respectively.

Maximum Design Pressure:

-45 psf. (See General Limitation #9.)



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 9 of 27

**Deck Type 3I:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A(4):** One or more layers of insulation adhered with approved asphalt

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners</b>	Fastener Density/ft <sup>2</sup>
	<u>(Table 3)</u>	
ACFoam-II, ENRGY 3, ENRGY 3 Plus, U	ltra-Max	
Minimum 1" thick	N/A	N/A
W. 1 B. 1 W. 1 B. 1 1		
High Density Wood Fiberboard	27/1	77/4
Minimum ½" thick	N/A	N/A
Perlite Insulation Board		
	NT/A	NT/A
Minimum <sup>3</sup> / <sub>4</sub> " thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet or base insulation layer. All insulation shall be adhered to the anchor sheet or primed deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft<sup>2</sup> or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass Ply 28

lb sheet adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive or POWERply Standard Cold

Adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 10 of 27

#### **Surfacing:**

(Required if no cap is used). Install one of the following surfacings:

- 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following:
  - a. Double Duty Aluminum coating at ¾ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone
- 2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 1/5 gal./sq. and 400 lbs./sq., respectively.

# Maximum Design Pressure:

-45 psf. (See General Limitation #9.)



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 11 of 27

**Deck Type 3I:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

System Type A(5): One or more layers of insulation adhered with approved asphalt

All General and System Limitations apply.

One or more layers of any of the following insulations.

**Insulation:** 

**OPTION #1:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. followed by min. ½" thick High Density Wood Fiberboard adhered to the base insulation layer in a similar manner.

**OPTION #2:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq. followed by min. ½" thick High Density Wood Fiberboard adhered to the base insulation layer in a similar manner.

**OPTION #3:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**OPTION #4:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq. followed by min. <sup>1</sup>/<sub>4</sub>" thick DensDeck adhered to the base insulation layer in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**OPTION #5:** Min. 1.5" thick ENRGY 3 Plus adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Two or three plies of THERMglass Type IV or PolyTHERM Roofing Ply sheet adhered to

insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at 30 to 35

lb/sq for each ply. (See specification number for appropriate number of plies).

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.



**Ply Sheet:** 

NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16 Page 12 of 27

#### **Surfacing:**

(Required if no cap is used). Install one of the following surfacings:

- 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq
- 2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively
- 3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively:

# Maximum Design Pressure:

- -252.5 psf, for Insulation Option #1 (See General Limitation #9.)
- -195.0 psf, for Insulation Option #2 (See General Limitation #9.)
- -130.0 psf, for Insulation Option #3 (See General Limitation #9.)
- -405.0 psf, for Insulation Option #4 (See General Limitation #9.)
- -335.0 psf, for Insulation Option #5 (See General Limitation #9.)



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 13 of 27

**SBS Membrane Type:** 

Deck Type 3I: Concrete Decks, Insulated, New Construction 2500 psi structural concrete or concrete plank **Deck Description:** 

One or more layers of insulation adhered with approved asphalt System Type A(6):

All General and System Limitations apply.

One or more layers of any of the following insulations.

Insulation

**OPTION #1:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq. followed by min. 1/4" thick DensDeck or DensDeck Prime or 1/2" thick High Density Wood Fiberboard adhered to the base insulation layer in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**OPTION #2:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**OPTION #3:** Min. 1.5" thick ACFoam-II, Trisotech G, ENRGY 3 or Ultra-Max adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq. followed by min. 1/4" thick DensDeck or DensDeck Prime adhered to the base insulation layer in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**OPTION #4:** Min. 1.5" thick ENRGY 3 Plus adhered to the primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per sq.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass **Ply Sheet:** 

Ply 28 lb sheet adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive or POWERply Standard

Cold Adhesive (See specification number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.



NOA No.: 11-0623.03 **Expiration Date: 07/12/21** Approval Date: 07/09/16

Page 14 of 27

#### **Surfacing:**

(Required if no cap is used). Install one of the following surfacings:

- 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one of the following:
  - a. Double Duty Aluminum coating at ¾ gal./sq., 60 lbs. #11 3M roofing granule's in wet Crushed Stone
- 2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 1/5 gal./sq. and 400 lbs./sq., respectively.

# Maximum Design Pressure:

- -165.0 psf, for Insulation Option #1 (See General Limitation #9.)
- -77.5 psf, for Insulation Option #2 (See General Limitation #9.)
- -240.0 psf, for Insulation Option #3 (See General Limitation #9.)
- -405.0 psf, for Insulation Option #4 (See General Limitation #9.)



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 15 of 27

**Deck Type 31:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

**System Type B(1):** Base layer of insulation mechanically fastened, top layer of insulation adhered with approved

asphalt.

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners</b>	Fastener Density/ft <sup>2</sup>
	<u>(Table 3)</u>	
ACFoam-II, Ultra-Max		
Minimum 1.5" thick	1, 6	1:2 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener Density/ft <sup>2</sup>
	<u>(Table 3)</u>	
Perlite Insulation Board		
Minimum 1" thick	N/A	N/A

Note: Top layer of insulation shall be bonded with ½"" ribbons of FAS-N-FREE adhesive applied at 1.5 gal./sq. for perlite and polyisocyanurate insulation.

**Base Sheet:** (Optional) One ply of PolyTHERM Roofing Ply sheet or BURmastic Composite Ply adhered

to the insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of

 $32 \text{ lb./sq.} \pm 15\%$ .

Ply Sheet: (Optional) Two plies of THERMglass Type IV adhered to the insulated substrate with

THERMastic 80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq. ± 15%.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR

adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq. ±

15% or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq

**Surfacing:** Use one of the following surfacings:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM

D312 asphalt at an application rate of 60 lb./sq.  $\pm$  15%

2. A coat of Double Duty Aluminum at 1 gal./sq.

**Maximum Design** 

-45 psf. (See General Limitation #7.)

Pressure:



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 16 of 27

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

Deck Description: 2500 psi structural concrete or concrete plank

**System Type B(2):** Base layer of insulation mechanically fastened, top layer of insulation adhered with approved

asphalt.

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ENRGY 3		
Minimum: 1.4" thick	2, 3, 4	1:3 ft <sup>2</sup>
	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>
E'NRGY 3 Plus		
Minimum: 1.5" thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>
ISO 95+ GL		
Minimum: 1.4" thick	7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>
	20, 2	1:3 ft <sup>2</sup>
Ultra-Max		
Minimum: 1.5" thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:2.9 ft <sup>2</sup>
Perlite Insulation Board		
Minimum: ¾" thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:2 ft <sup>2</sup>
High Density Wood Fiberboard		
Minimum: ½" thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard TAS 117 for fastener details.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 17 of 27

#### **Top Insulation Layer**

### **Insulation Fasteners** (Table 3)

Fastener Density/ft<sup>2</sup>

Any Approved Polyisocyanurate Insulation listed in Table 2

Minimum: ½" thick N/A N/A

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40lbs/100 ft<sup>2</sup> or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

(Optional) BURmastic Composite Ply may be used in conjunction with ply sheet. **Base Sheet:** 

Two or three plies of THERMglass Type IV or PolyTHERM Roofing Ply sheet adhered to **Ply Sheet:** 

insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at 30 to 35

lb/sq for each ply. (See specification number for appropriate number of plies).

**Cap Sheet:** POWERply Supreme FR. POWERply Standard FR. POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.

(Required if no cap is used). Install one of the following surfacings: **Surfacing:** 

> Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq

> 2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400 lbs./sq., respectively

> 3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and 400 lbs/sq., respectively:

**Maximum Design Pressure:** 

-45 psf, (See General Limitation #9.)



NOA No.: 11-0623.03 Approval Date: 07/09/16 Page 18 of 27

**Expiration Date: 07/12/21** 

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type B(3): Base layer of insulation mechanically fastened, top layer of insulation adhered with approved

asphalt.

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ENRGY 3		
Minimum: 1.4" thick	2, 3, 4	1:3 ft <sup>2</sup>
	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>
ENRGY 3 Plus		
Minimum: 1.5" thick	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1:4 ft <sup>2</sup>
ISO 95+ GL		
Minimum: 1.4" thick	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>
	7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21	1:3 ft <sup>2</sup>
Ultra-Max		
Minimum: 1.5" thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:2.9 ft <sup>2</sup>
Perlite Insulation Board		
Minimum: <sup>3</sup> / <sub>4</sub> " thick	2, 5, 7, 8, 9, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19	1:2 ft <sup>2</sup>
High Density Wood Fiberboard		
Minimum: ½" thick	2, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	1:4 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastener details.



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 19 of 27

#### **Insulation Fasteners** (Table 3)

Fastener Density/ft<sup>2</sup>

Any of the insulations listed for Base Layer, above.

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt applied within the EVT range and at a rate of 20-40lbs/100 ft<sup>2</sup> or in FAS-N-FREE adhesive applied in ribbons at a coverage rate of 1.5 gallons per square. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Two or three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass **Ply Sheet:** 

Ply 28 lb sheet adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive (See specification

number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.

POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with **Cap Sheet:** 

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.

**Surfacing:** (Required if no cap is used). Install one of the following surfacings:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one

of the following:

a. Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq., 60 lbs. #11 3M roofing granule's in

wet Crushed Stone

2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 1/5 gal./sq. and 400

lbs./sq., respectively.

**Maximum Design** 

-45 psf. (See General Limitation #9.)

**Pressure:** 



NOA No.: 11-0623.03 **Expiration Date: 07/12/21** Approval Date: 07/09/16

Page 20 of 27

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(1): All layers of insulation simultaneously attached.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer Insulation Fasteners (Table 3) Fastener Density/ft<sup>2</sup>

Perlite Insulation Board, High Density Wood Fiberboard

Minimum 1" thick N/A N/A

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

Top Insulation Layer Insulation Fasteners (Table 3)

Fastener Density/ft<sup>2</sup>

Perlite Insulation Board, High Density Wood Fiberboard

Minimum ½" thick 1 1:2 ft<sup>2</sup>

Note: 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.

**Base Sheet:** (Optional) One ply of PolyTHERM Roofing Ply or BURmastic Composite Ply adhered to the

insulated substrate with THERMastic 80 or Premium III asphalt at an application rate of 32

 $lb./sq. \pm 15\%$ .

**Ply Sheet:** (Optional) Two plies of THERMglass IV adhered to the insulated substrate with THERMastic

80, Premium III or Premium IV asphalt at an application rate of 32 lb./sq.  $\pm$  15%.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR

adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq.  $\pm$  15%

or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

**Surfacing:** Use one of the following surfacing:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM

D312 asphalt at an application rate of 60 lb./sq.  $\pm$  15%:

2. A coat of Double Duty Aluminum at 1 gal./sq

**Maximum Design** 

-45 psf, (See General Limitation #9.)

**Pressure:** 



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 21 of 27

Deck Type 3I: Concrete Decks, Insulated, New Construction
 Deck Description: 2500 psi structural concrete or concrete plank
 System Type C(2): All layers of insulation simultaneously attached.

### All General and System Limitations apply.

One or more layers of any of the following insulations.

ACFoam–II Minimum: 1.3" thick  N/A  N/A  ENRGY 3, Ultra-Max Minimum: 1.4" thick  N/A  N/A	<b>Base Insulation Layer</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Minimum: 1.3" thick  N/A  N/A  ENRGY 3, Ultra-Max	ACE and H	(Tuble b)	
ENRGY 3, Ultra-Max		NT/A	DT/A
	Minimum: 1.3" thick	N/A	N/A
Minimum: 1.4" thick N/A N/A	ENRGY 3, Ultra-Max		
	Minimum: 1.4" thick	N/A	N/A
ENRGY 3 Plus	ENRGY 3 Plus		
Minimum: 1.5" thick N/A N/A		N/A	N/A
History Mand Ethanhamid	History Carlotte Ward Ethankard		
High Density Wood Fiberboard	e ·	NT/ A	77/4
Minimum: ½" thick N/A N/A	Minimum: ½" thick	N/A	N/A
Perlite Insulation Board	Perlite Insulation Board		
Minimum: <sup>3</sup> / <sub>4</sub> " thick N/A N/A	Minimum: 3/4" thick	N/A	N/A

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

<b>Top Insulation Layer</b>	<b>Insulation Fasteners</b>	Fastener Density/ft <sup>2</sup>
	<u>(Table 3)</u>	
ENRGY 3		
Minimum: 1.4" thick	2, 3, 4	1:3 ft <sup>2</sup>
	7, 8, 9, 10, 11, 12, 13, 14, 15, 16,	1:4 ft <sup>2</sup>
	17, 18, 19	
ENRGY 3 Plus		
Minimum: 1.5" thick	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1:4 ft <sup>2</sup>
ISO 95+ GL		
Minimum: 1.4" thick	7, 8, 9, 10, 11, 12, 13, 14, 15, 16,	1:4 ft <sup>2</sup>
	17, 18, 19	
	20, 21	1:3 ft <sup>2</sup>



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 22 of 27

Ultra-Max

Minimum: 1.5" thick 1:2.9 ft<sup>2</sup> 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

**Perlite Insulation Board** 

Minimum: 3/4" thick 1:2 ft<sup>2</sup> 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,

17, 18, 19

**High Density Wood Fiberboard** 

Minimum: ½" thick 1:4 ft<sup>2</sup> 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,

17, 18, 19

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Refer to Roofing Application Standard RAS 117 for insulation attachment.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

**Ply Sheet:** Two or three plies of THERMglass Type IV or PolyTHERM Roofing Ply sheet adhered to

insulation or base sheet with THERMastic 80, Premium III or Premium IV asphalt at 30 to 35

lb/sq for each ply. (See specification number for appropriate number of plies).

POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with Cap Sheet:

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.

(Required if no cap is used). Install one of the following surfacings: **Surfacing:** 

> 1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq

2. Flood coat of THERMastic 80 and gravel at application rates of 3.5 gal./sq. and 400

lbs./sq., respectively

3. Flood coat of BURmastic Adhesive and gravel with applications rates of 4-5 gal./sq. and

400 lbs/sq., respectively:

**Maximum Design** 

**Pressure:** 

-45 psf, (See General Limitation #9.)



NOA No.: 11-0623.03 **Expiration Date: 07/12/21** Approval Date: 07/09/16 Page 23 of 27

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(3): All layers of insulation simultaneously attached.

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners</b>	Fastener Density/ft <sup>2</sup>
	<u>(Table 3)</u>	
ACFoam-II		
Minimum: 1.3" thick	N/A	N/A
ENRGY 3		
Minimum: 1.4" thick	N/A	N/A
ENRGY 3 Plus		
Minimum: 1.5" thick	N/A	N/A
Ultra-Max		
Minimum: 1.4" thick	N/A	N/A
High Density Wood Fiberboard		
Minimum: ½" thick	N/A	N/A
Perlite Insulation Board		
Minimum: 3/4" thick	N/A	N/A

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

<b>Top Insulation Layer</b>	<u>Insulation Fasteners</u> ( <u>Table 3</u> )	Fastener Density/ft <sup>2</sup>
ENRGY 3		
Minimum: 1.4" thick	2, 3, 4	1:3 ft <sup>2</sup>
	7, 8, 9, 10, 11, 12, 13, 14, 15, 16,	1:4 ft <sup>2</sup>
	17, 18, 19	
ENRGY 3 Plus		
Minimum: 1.5" thick	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1:4 ft <sup>2</sup>
ISO 95+ GL		
Minimum: 1.4" thick	7, 8, 9, 10, 11, 12, 13, 14, 15, 16,	1:4 ft <sup>2</sup>
	17, 18, 19	
	20, 21	1:3 ft <sup>2</sup>



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16 Page 24 of 27 Ultra-Max

Minimum: 1.5" thick 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 1:2.9 ft<sup>2</sup>

17, 18, 19

**Perlite Insulation Board** 

Minimum: <sup>3</sup>/<sub>4</sub>" thick 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 1:2 ft<sup>2</sup>

17, 18, 19

**High Density Wood Fiberboard** 

Minimum: ½" thick 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 1:4 ft<sup>2</sup>

17, 18, 19

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Refer to Roofing Application Standard RAS 117 for insulation attachment.

**Base Sheet:** (Optional) BURmastic Composite Ply may be used in conjunction with ply sheet.

Ply Sheet: Two to three plies of BURmastic Composite Ply, BURmastic Glass Ply or BURmastic Glass

Ply 28 lb sheet adhered in 3.5 gal./sq. ± 15% of BURMastic Adhesive (See specification

number for appropriate number of plies).

Note: Base sheet or first ply sheet shall be applied in BURmastic Adhesive SF.

Cap Sheet: POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR adhered with

POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./100 sq.ft.

**Surfacing:** (Required if no cap is used). Install one of the following surfacings:

1. Two part surfacing consisting of 4-5 gal./sq. of TremLastic S Adhesive surfaced with one

of the following:

a. Double Duty Aluminum coating at <sup>3</sup>/<sub>4</sub> gal./sq., 60 lbs. #11 3M roofing granule's in

wet Crushed Stone

2. Flood coat of BURmastic Adhesive and gravel at application rates of 5-6 1/5 gal./sq. and 400

lbs./sq., respectively.

**Maximum Design** 

**Pressure:** 

-45 psf, (See General Limitation #9.)

NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16 Page 25 of 27

MIAMI-DADE COUNTY
APPROVED

**Deck Type 31:** Concrete Decks, Insulated, New Construction **Deck Description:** 2500 psi structural concrete or concrete plank

**System Type E:** Base sheet fully adhered.

#### All General and System Limitations apply.

One or more layers of any of the following insulations.

**Base Sheet:** One ply of BURmastic Composite Ply or BURmastic Glass Ply or BURmastic Glass Ply 28 lb

mechanically fastened to the deck as detailed below.

**Fastening:** Fasten base sheet with #14 Roofgrip at a 4" side lap 9" o.c. and two rows staggered in the

center of the sheet 18" o.c.

**Ply Sheet:** None.

Cap Sheet: (Optional) POWERply Supreme FR, POWERply Standard FR, POWERply Premium FR

adhered with THERMastic 80 or Premium III asphalt at an application rate of 32 lb./sq.  $\pm$  15%

or POWERply Standard Cold Adhesive at a rate of 1.5-2 gal./sq.

**Surfacing:** Use one of the following surfacing:

1. Gravel or slag applied at 300 lbs. or 400 lbs., respectively, in THERMastic 80 or ASTM

D312 asphalt at an application rate of 60 lb./sq.  $\pm$  15%:

2. A second coat of Double Duty Aluminum at 1 gal./sq.

**Maximum Design** 

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



NOA No.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 26 of 27

#### **CONCRETE DECK SYSTEM LIMITATIONS:**

 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.

#### **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.: 11-0623.03 Expiration Date: 07/12/21 Approval Date: 07/09/16

Page 27 of 27