

NOTICE OF ACCEPTANCE (NOA)

Bitec, Inc.
P.O. Box 497
Morrilton, AR 72110

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 BNC -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. BNC 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 and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Bitec Modified Bitumen 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 and revises NOA No. 06-0109.05 and consists of pages 1 through 28.
The submitted documentation was reviewed by Jorge L. Acebo.



A handwritten signature in black ink, appearing to read "Jorge L. Acebo".

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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Materials: SBS/APP
Deck Type: Concrete
Maximum Design Pressure -567.5 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>
APM-4.5T	25.58 x 3.28'; roll weight: 92lbs.	ASTM D 6223 ASTM D 5147	APP torch applied mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
APM-4T	32.8 x 3.28'; roll weight: 107 lbs.	ASTM D 6223 ASTM D 5147	APP torch applied mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
MDA	32.8 x 3.28'; roll weight: 107 lbs.	ASTM D 6223 ASTM D 5147	APP torch applied colored pattern mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
APS-4T	33.5 x 3.28'; roll weight: 90 lbs.	ASTM D 6223 ASTM D 5147	APP torch applied modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
FA-2T	49.2 x 3.28'; roll weight: 70 lbs.	ASTM D 6509 ASTM D 5147	APP torch applied modified bitumen membrane reinforced with fiberglass for use as a base sheet or interply membrane only.
SPM-3.5H	33.9 x 3.28'; roll weight: 100 lbs.	ASTM D 6162 ASTM D 5147	SBS hot asphalt applied mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
SPM-4H	32.8 x 3.28'; roll weight: 100 lbs.	ASTM D 6162 ASTM D 5147	SBS hot asphalt applied mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
MDS	32.8 x 3.28'; roll weight: 100 lbs.	ASTM D 6162 ASTM D 5147	SBS hot asphalt applied colored pattern mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
SPM-4.5T	25.58 x 3.28'; roll weight: 90 lbs.	ASTM D 6162 ASTM D 5147	SBS torch applied mineral surfaced modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
SPS-3H	33.5 x 32.8'; roll weight: 73 lbs	ASTM D 6162 ASTM D 5147	SBS hot asphalt applied modified bitumen membrane reinforced with polyester and fiberglass for use as a roof membrane sheet.
SFM-3.5H	33.9 x 3.28'; roll weight: 100 lbs.	ASTM D 6163 ASTM D 5147	SBS hot asphalt applied modified bitumen membrane reinforced with fiberglass for use as a roof membrane.
SFM-3.5H-FR	33.9 x 3.28'; roll weight: 103 lbs.	ASTM D 6163 ASTM D 5147	SBS hot asphalt applied modified bitumen membrane reinforced with fiberglass for use as a roof membrane sheet.
FS-2H	49.2 x 3.28'; roll weight: 70 lbs.	ASTM D 6163 ASTM D 5147	SBS hot asphalt applied modified bitumen membrane reinforced with fiberglass for use as a base sheet or interply membrane only.

APPROVED INSULATIONS:

TABLE 2

<u>Product</u>	<u>Product Description</u>	<u>Manufacturer (with current NOA)</u>
ACFoam II,	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam Composite	Polyisocynurate/wood fiberboard composite	Atlas Roofing Corporation
ConPearl	Expanded perlite mineral fiber	Conglas
Dow Iso	Polyisocyanurate foam insulation	Dow Roofing Systems
USIso/Perlite Composite	Polyisocynurate/wood fiberboard composite	BMCA
USIso	Polyisocyanurate foam insulation	BMCA
Celotherm	Expanded mineral fiber	Celotex Corporation
Celotex Fiberboard, Celotex High Density Wood Fiberboard	Wood fiber board	Celotex Corporation
Esgard Fiberboard	Wood fiber board	EMCO Ltd.
GAFTEMP Isotherm RA	Polyisocyanurate foam insulation	GAF Material Corp.
GAF Permalite	Expanded mineral fiber	GAF Material Corp.
GAF Fiberboard	Wood fiber board	GAF Material Corp.
High Density Wood Fiberboard	Wood fiber insulation board	Generic



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<u>Product</u>	<u>Product Description</u>	<u>Manufacturer (with current NOA)</u>
Type X Gypsum	Gypsum board.	Generic
Perlite Insulation	Perlite insulation board	Generic
Dens Deck	Water resistant gypsum board	G-P Gypsum Corp.
Armor Board Regular Fiberboard	Wood fiber board	Honeywell Int'l. Inc.
Armor R Plus	Polyisocyanurate foam insulation	Honeywell Int'l. Inc.
Hubert Fiberboard	Wood fiber board	Huebert Fiberboard, Inc.
Fesco Foam, UltraGard	Polyisocyanurate foam insulation	Johns Manville Corp.
Fesco Board, Retro-Fit Board	Expanded mineral fiber	Johns Manville Corp.
Kop-R Wood Fiber	Polyisocyanurate foam insulation	Koppers Industries, Inc.
Kop-R (WC)	Polyisocyanurate/wood fiberboard composite	Koppers Industries, Inc.
Kop-R (WII)	Polyisocyanurate foam insulation	Koppers Industries, Inc.

APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast Fasteners #14 & #15	Insulation fastener for wood, steel and concrete decks		Construction Fasteners Inc.
2.	Dekfast Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 1/4"	Construction Fasteners Inc.
3.	Roofgrip #14 & #15 Fasteners	Insulation fastener for wood, steel and concrete decks.		ITW Buildex Corp.
4.	Metal Plate	Galvalume stress plate.	3" round 3" square	ITW Buildex Corp.
5.	Olympic HD	Insulation fastener		OMG, Inc.
6.	Olympic Standard	3" round galvalume AZ50 steel plate	3" round	OMG, Inc.
7.	Olympic G-2	Galvalume AZ55 steel plate	3.5" round	OMG, Inc.
8.	HD Insul-Fixx Fastener	Insulation fastener for use in steel and concrete decks		SFS Stadler
9.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Stadler



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corporation	J.I. # 0B3A7.AM	FM 4470	12/30/96
Trinity Engineering, Inc.	06.94.07	TAS 114-C	06/07/94
Underwriters Laboratories, Inc.	R12321 (N)	TAS 114-D UL 790	02/25/93
Exterior Research & Design, LLC	10650.10.97-1(R1)	TAS 114-D	04/03/06
	10651.10.98-1	TAS 114-J ASTM D 5147 ASTM D 6163 ASTM D 6164 ASTM D 6222	01/04/99



APPROVED ASSEMBLIES

- Membrane Type:** APP Modified
- 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 fully 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 ²
ACFoam-II		
Minimum 1.5" thick	N/A	N/A
Base or Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Fiberglas		
Minimum 1 ⁵ / ₁₆ " thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board		
Minimum 3/4" thick	N/A	N/A
Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber		
Minimum 1" thick	N/A	N/A
Celotex High Density Wood Fiberboard		
Minimum 1/2" 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 base sheet. All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

- Base Sheet:** One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.
- Ply Sheet:** One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.
- Membrane:** One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.
- Surfacing:** (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -45 psf (See General Limitations # 9)



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Membrane Type: SBS Modified
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 fully 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/ft²
ACFoam-II		
Minimum 1.5" thick	N/A	N/A
Base or Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Fiberglas		
Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board		
Minimum 3/4" thick	N/A	N/A
Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber		
Minimum 1" thick	N/A	N/A
Celotex High Density Wood Fiberboard		
Minimum 1/2" 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 base sheet. All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
 Install one of the following:
 1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -45 psf (See General Limitations # 9)



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Membrane Type: APP Modified
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 fully 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/ft²
ACFoam-II Minimum 1.5" thick	N/A	N/A
Base or Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Celotex High Density Wood Fiberboard Minimum ½" 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 base sheet. All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
 Install one of the following:
 1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -410 psf (See General Limitations # 9)



Membrane Type: SBS Modified
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 fully 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/ft²
ACFoam-II Minimum 1.5" thick	N/A	N/A
Base or Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Celotex High Density Wood Fiberboard Minimum ½" 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 base sheet. All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
 Install one of the following:
 1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -410 psf (See General Limitations # 9)



Membrane Type: APP Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type B(1): Base layer of insulation mechanically fastened, top layer of insulation fully 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/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	1, 3 or 5	1:4 ft²
ACFoam II Minimum 1.5" thick	5	1:2 ft²
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 2" thick	1, 3 or 5	1:4 ft²
Fiberglas Minimum 1⁵/₁₆" thick	1, 3 or 5	1:2.7 ft²

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	N/A	N/A
Celotex High Density Wood Fiberboard Minimum 1/2" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A

Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.



Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -45 psf (See General Limitations # 9)



Membrane Type: SBS Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type B(2): Base layer of insulation mechanically fastened, top layer of insulation fully 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/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	1, 3 or 5	1:4 ft²
ACFoam II Minimum 1.5" thick	5	1:2 ft²
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 2" thick	1, 3 or 5	1:4 ft²
Fiberglas Minimum 1⁵/₁₆" thick	1, 3 or 5	1:2.7 ft²

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	N/A	N/A
Celotex High Density Wood Fiberboard Minimum 1/2" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A

Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.



- Base Sheet:** One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.
- Ply Sheet:** One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.
- Membrane:** One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.
- Surfacing:** (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.
- Maximum Design Pressure:** -45 psf (See General Limitations # 9)



Membrane Type: APP Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type B(3): Base layer of insulation mechanically fastened, top layer of insulation fully 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 ²
ACFoam II Minimum 1.5" thick	5	1:2 ft ²

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft ²
Celotex High Density Wood Fiberboard Minimum ½" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A

Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
 Install one of the following:
 1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -52.5 psf (See General Limitations # 7)



Membrane Type: SBS Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type B(4): Base layer of insulation mechanically fastened, top layer of insulation fully 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 ²
ACFoam II Minimum 1.5" thick	5	1:2 ft ²

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft ²
Celotex High Density Wood Fiberboard Minimum ½" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A

Apply optional top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². 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 may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
 Install one of the following:
 1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -52.5 psf (See General Limitations # 7)



Membrane Type: APP Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type C(1): All layers of insulation simultaneously fastened.

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/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	N/A	N/A
ENRGY-2, PSI-25, ACFoam-II, Isotherm R, FlintBoard ISO Minimum 1.5" thick	N/A	N/A
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 1" thick	N/A	N/A
Type X Gypsum Minimum 5/8" thick	N/A	N/A

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 2" thick	1, 3 or 5	1:4 ft ²
Fiberglas Minimum 1⁵/₁₆" thick	1, 3 or 5	1:2.7 ft ²
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	1, 3 or 5	1:2 ft ²
Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber Minimum 1" thick	1, 3 or 5	1:2 ft ²

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.



Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)

Install one of the following:

1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design

Pressure: -45 psf (See General Limitations # 9)



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Membrane Type: SBS Modified
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type C(2): All layers of insulation simultaneously fastened.

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/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	N/A	N/A
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 1" thick	N/A	N/A
Type X Gypsum Minimum 5/8" thick	N/A	N/A
DensDeck Minimum 1/4" thick	N/A	N/A

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

Top Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 2" thick	1, 3 or 5	1:4 ft ²
Fiberglas Minimum 1⁵/₁₆" thick	1, 3 or 5	1:2.7 ft ²
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	1, 3 or 5	1:2 ft ²
Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber Minimum 1" thick	1, 3 or 5	1:2 ft ²

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.



- Base Sheet:** One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the insulation with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.
- Ply Sheet:** One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.
- Membrane:** One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.
- Surfacing:** (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.
- Maximum Design Pressure:** -45 psf (See General Limitations # 9)



Membrane Type: APP Modified
Deck Type 3I: Concrete Decks, Insulated, New Construction
Deck Description: 2500 psi structural concrete or concrete plank
System Type D(1): All layers of insulation and base sheet simultaneously attached.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board, Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber Minimum 1" thick	N/A	N/A
Type X Gypsum Minimum 5/8" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 mechanically attached through the insulation to the concrete deck as specified below.

Fastening #1: Fasten base sheet with #14, #15 Dekfast with Hex Plate, #14, #15 Roofgrip with Recessed or Flat Bottom Plate, Olympic Heavy Duty with Standard or G2 Plate or Rawl #14 with Rawl 3 in. Insulation Plate spaced 12" o.c. in a 4" side lap and 12" o.c. in one row in the center of the sheet.
Maximum Design Pressure: -45.0 psf (See General Limitation #9.)

Fastening #2: Fasten base sheet with SFS HD Insulfixx with Insulfixx S plates spaced 12" o.c. in a 4" side lap and 12" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: -67.5 psf (See General Limitation #7.)



Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: See Fastening options above.



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

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners Table 3	Fastener Density/ft²
ACFoam II, Armor R Plus, Dow Iso, GAFTEMP Isotherm RA, Kop-R(WII), UltraGard, USIso Minimum 1.4" thick	N/A	N/A
ACFoam Composite, Kop-R(WC), Fesco Foam, USIso/Perlite Composite Minimum 1.5" thick	N/A	N/A
Fiberglas Minimum 1⁵/₁₆" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board, Armor Board Regular, Esgard, Celotex Fiberboard, GAFTEMP Fiberboard, Huebert Fiberboard, Kop-R Wood Fiber Minimum 1" thick	N/A	N/A
Type X Gypsum Minimum 5/8" thick	N/A	N/A
Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board Minimum 3/4" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 mechanically attached through the insulation to the concrete deck as specified below.

Fastening #1: Fasten base sheet with #14, #15 Dekfast with Hex Plate, #14, #15 Roofgrip with Recessed or Flat Bottom Plate, Olympic Heavy Duty with Standard or G2 Plate or Rawl #14 with Rawl 3 in. Insulation Plate spaced 12" o.c. in a 4" side lap and 12" o.c. in one row in the center of the sheet.
Maximum Design Pressure: -45.0 psf (See General Limitation #9.)

Fastening #2: Fasten base sheet with SFS HD Insulfixx with Insulfixx S plates spaced 12" o.c. in a 4" side lap and 12" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: -67.5 psf (See General Limitation #7.)



- Ply Sheet:** One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.
- Membrane:** One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.
- Surfacing:** (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
 2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.
- Maximum Design Pressure:** See Fastening options above.



Membrane Type: APP Modified
Deck Type 3: Concrete Decks, Non-insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type E(1): Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 mechanically attached to the concrete deck as specified below.
Fasten base sheet with #14, #15 Dekfast with Hex Plate, #14, #15 Roofgrip with Recessed or Flat Bottom Plate, Olympic Heavy Duty with Standard or G2 Plate or Rawl #14 with Rawl 3 in. Insulation Plate spaced 12" o.c. in a 4" side lap and 12" o.c. in one row in the center of the sheet.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -45 psf (See General Limitations # 9)



Membrane Type: SBS Modified
Deck Type 3: Concrete Decks, Non-insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 mechanically attached to the concrete deck as specified below.

Fasten base sheet with #14, #15 Dekfast with Hex Plate, #14, #15 Roofgrip with Recessed or Flat Bottom Plate, Olympic Heavy Duty with Standard or G2 Plate or Rawl #14 with Rawl 3 in. Insulation Plate spaced 12" o.c. in a 4" side lap and 12" o.c. in one row in the center of the sheet.

Ply Sheet: One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -45 psf (See General Limitations # 9)



Membrane Type: APP Modified
Deck Type 3: Concrete Decks, Non-insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type F(1): Base sheet fully adhered to primed deck.

All General and System Limitations apply.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the primed deck with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FA-2T or APS-4T torch applied or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of MDA, APS-4T, APM-4T, or APM-4.5T torch applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -567.5 psf (See General Limitations # 9)



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

All General and System Limitations apply.

Base Sheet: One or more plies of Miami-Dade Approved ASTM D 4601 adhered to the primed deck with a full mopping of approved asphalt at an application rate of 20-40 lb./sq.

Ply Sheet: One ply of FS-2H or SPS-3H or one or more plies of Miami-Dade Approved ASTM D 2178 ply sheet adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the base sheet.

Membrane: One ply of SPM-4.5T torch welded, or one ply of MDS, SPM-3.5H, SFM-3.5H, SFM-3.5H-FR or SPS-3H adhered with a full mopping of asphalt at an application rate of 20-40 lbs./sq. applied to the ply sheet.

Surfacing: (Optional for mineral surfaced membranes required for smooth surfaced membranes)
Install one of the following:
1. 400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq..
2. Miami-Dade Approved Roof Coating approved for use over APP/SBS membranes; applied as specified in the current Miami-Dade product approval.

Maximum Design Pressure: -567.5 psf (See General Limitations # 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 137, 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 Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. 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.)**

END OF THIS ACCEPTANCE



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