

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

NOTICE OF ACCEPTANCE (NOA)

Versico, a division of Carlisle Construction Materials Incorporated PO Box 1289 Carlisle, PA 17013

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: Versico VersiWeld Single Ply TPO Roof Systems 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 renews NOA# 13-0219.21 and consists of pages 1 through 18. The submitted documentation was reviewed by Alex Tigera.



ATTHE 710/15

NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 1 of 18

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/pera

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	TPO
<u>Deck Type:</u>	Concrete
Maximum Design Pressure	-540 psf
Fire Classification:	See General Limitation #1

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

Product Name	Dimensions	Test <u>Specifications</u>	Product Description
VersiFleece TPO	various	TAS 131	Reinforced white or colored TPO membrane with fleece backing.
VersiFleece AC TPO	Various	TAS 131	Reinforced white or colored TPO membrane with fleece backing.
VersiWeld	various	TAS 131	Reinforced white or colored TPO membrane.
VersiWeld Plus TPO	various	TAS 131	Reinforced white or colored TPO membrane.
VersiWeld HS	various	TAS 131	Reinforced white or colored FR TPO membrane.
VersiWeld TPO Pressure Sensitive RUSS	various	TAS 131	Reinforced Securement Strip.
DASH Adhesive	various	TAS 110	Polyurethane Adhesive
OlyBond 500BA	Various	TAS 110	Polyurethane Adhesive
One-Step Adhesive	Various	TAS 110	Polyurethane Adhesive
VersiWeld Bonding Adhesive	various	TAS 110	Solvent-based bonding adhesive.
Aqua Base 120 Bonding Adhesive	Various	TAS 110	Water-based bonding adhesive
Cold Applied Adhesive	Various	TAS 110	Asphalt-Modified Polyether Adhesive

NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 2 of 18



APPROVED INSULATIONS:

Product Name

TABLE 2Product Description

(With Current NOA) Polyisocyanurate MP-H, MP-HNB Polyisocyanurate roof insulation. Versico, Inc. Dens Deck, Dens Deck Prime Georgia-Pacific Gypsum, Silicon treated gypsum LLC. Hunter Panels H-Shield, H-Shield NB Isocyanurate Insulation Wood Fiberboard Regular wood fiber insulation Generic High Density Wood Fiberboard High Density Wood Fiber insulation board. Generic Generic Type X Gypsum Gypsum Wallboard XPS Extruded polystyrene Generic High Density Wood Fiber insulation board. Blue Ridge Fiberboard, Inc. Structodeck High Density Fiberboard Insulation

APPROVED FASTENERS:

TABLE 3

<u>Fastener</u> Number	<u>Product</u> <u>Name</u>	<u>Product</u> Description	Dimensions	<u>Manufacturer</u> (With Current NOA)
1.	HD 14-10 Fastener	Insulation/membrane fastener for concrete decks.	Various	Versico, Inc.
2.	Insultite Fastener, HPVX Fastener, HPV-XL Fastener	Insulation and membrane fastener	Various	Versico, Inc.
3.	Insulation Fastening Plates	Metal plates used for membrane securement with Sure-Seal fasteners.	2-7/8" dia	Versico, Inc.
4.	HPVX, HPV-XL Plates	Metal plates used for membrane securement with Sure-Seal fasteners.	2-3/8" dia	Versico, Inc.
5.	CD-10	Insulation/membrane fastener for concrete decks.	Various	OMG, Inc.
6.	#14 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.

Manufacturer

EVIDENCE SUBMITTED:

Test Agency	<u>Test Identifier</u>	Description	<u>Date</u>
Architectural Testing Inc.	ATI-37050.01	Wind Uplift Classification	3/13/00
	ATI-37490-01	Membrane Brittleness Testing	7/7/00
Factory Mutual Research Corp.	3003393	Wind Uplift Classification	3/30/99
	3003393	Wind Uplift Classification	3/26/99
	(Letter Report)	_	
	3001522	Wind Uplift Classification	3/26/99
	3001522	Wind Uplift Classification	11/3/98
	(Letter Report)		
	3Z9A1.AM	Wind Uplift and Fire Classification	10/15/97
	Approval Guide Excerpt	Wind Uplift and Fire Listings	5/00
	3012879	Class 4470	04/86
	3021941	Class 4470	03/20/06
	3014692	Class 4470	08/05/03
	3014751	Class 4470	08/27/03
	3013584	Class 4470	06/27/03
	3011329	Class 4470	06/10/02
	3017662	Class 4470	06/07/05
Celotex Corporation Testing Services	520257	Membrane Physical Property Testing	4/19/00
SGS U.S. Testing Company Inc.	131248-R2	Membrane Ozone Testing	1/6/00
Trinity ERD	C46470.07.14-1A	TAS 131	07/16/14
-	C46470.07.14-1B	TAS 131	07/16/14
	C46470.07.14-2A	TAS 131	07/30/14
	C46470.07.14-4-R1	TAS 131	07/21/14



APPROVED ASSEMBLIES

Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced, VersiFleece
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type A(1):	One or more layers of insulation adhered with approved asphalt, OlyBond 500BA, One-Step or with DASH Adhesive. Membrane fully adhered.

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

Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
Polyisocyanurate MP-HNB, Hunter H-Shield NB Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft², or OlyBond 500BA at a rate of 1gal./sq, or DASH Adhesive at a rate of 1.2 gal./sq, or One-Step at a rate of 1/3gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Vapor Retarder:	None.
Barrier:	None.
Membrane #1:	VersiWeld, VersiWeld HS, Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membrane fully adhered to the insulation using VersiWeld Bonding Adhesive applied to the substrate at a rate of 1 gal/60 ft. ² (finished surface) or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120ft ² . (finished surface). Outside 1.5" of side laps are heat welded.
Membrane #2:	VersiFleece TPO 100 or 115 mil membrane fully adhered to the insulation using DASH Adhesive applied to the substrate at a rate of 1 gal/sq or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120ft ² . Outside 1.5" of side laps are heat welded.
Membrane #3:	VersiFleece AC TPO membrane adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq or Cold Applied Adhesive applied to the substrate at a rate of 1 gal/67 ft. ² Outside 1.5" of side laps are heat welded.
Maximum Design Pressure:	 -187.5 psf; insulation adhered to concrete with DASH Adhesive, or One-Step (See General Limitation #9) -150 psf; insulation adhered to concrete with OlyBond BA (See General Limitation #9)
	-150 psf; insulation adhered to concrete with Asphalt (See General Limitation #9)



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 5 of 18

Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced, VersiFleece
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type A(2):	One or more layers of insulation adhered with DASH Adhesive. Membrane fully adhered.

Base Insulation Layer	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft ²
Polyisocyanurate MP-H		
Minimum 1.5" thick	N/A	N/A
(Optional) Top Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> Density/ft ²
Dens Deck, Dens Deck Prime		
Minimum ¼" thick	N/A	N/A

Note: All insulation shall be fully adhered to the deck with DASH Adhesive at a rate of 1 gal./sq.

Vapor Retarder: (Optional) Any UL of FMRC approved vapor Retarder applied to the roof deck or over a base layer of insulation.

Barrier: None.



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 6 of 18

Membrane #1:	VersiWeld, VersiWeld HS, Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membrane fully adhered to the insulation using VersiWeld Bonding Adhesive applied to the substrate at a rate of 1 gal/60 ft ² . (finished surface). Outside 1.5" of side laps are heat welded. <i>Over Base Layer Insulations:</i> <i>Maximum Design Pressure –352.5 psf. (See General Limitation #9)</i>
	Over Top Layer Insulations: Maximum Design Pressure –322.5 psf. (See General Limitation #9)
	Or
	VersiWeld, VersiWeld HS, Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membrane fully adhered to the insulation using Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120 ft ² . (finished surface) Outside 1.5" of side laps are heat welded. <i>Over Base Layer Insulations:</i>
	Maximum Design Pressure –90 psf. (See General Limitation #9)
	Over Top Layer Insulations: Maximum Design Pressure –90 psf. (See General Limitation #9)
Membrane #2:	VersiFleece TPO 100 or 115 membranes fully adhered to the insulation using DASH Adhesive applied to the substrate at a rate of 1 gal/sq. or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120 ft ² . Outside 1.5" of side laps are heat welded. <i>Over Base Layer Insulations: Maximum Design Pressure –480 psf. (See General Limitation #9)</i>
	Over Top Layer Insulations: Maximum Design Pressure –322.5 psf. (See General Limitation #9)
Membrane #3:	VersiFleece AC TPO membrane adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq or Cold Applied Adhesive applied to the substrate at a rate of 1 gal/67 ft. ² Outside 1.5" of side laps are heat welded. <i>Over Base Layer Insulations:</i>
	Maximum Design Pressure –457.5 psf. (See General Limitation #9)
	Over Top Layer Insulations: Maximum Design Pressure –375 psf. (See General Limitation #9)
Maximum Design Pressure:	See Membrane Options Above.



Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced, VersiFleece
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type A(3):	One or more layers of insulation adhered with approved asphalt, or OlyBond 500BA, or One- Step, or with DASH Adhesive. Membrane fully adhered.

Base Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> Density/ft ²
One of the following covered with the boards listed in Base or To	<u>.</u>	
Dens Deck, Dens Deck Prime Minimum ¼" thick	N/A	N/A
Base or Top Insulation Layer	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft ²
One or more layers of the following as a Base or Top Layer or ov	er the Base Layer listed above:	
Polyisocyanurate MP-H Minimum 1.2" thick	N/A	N/A
Structodeck High Density Fiberboard		
Minimum ¹ / ₂ " thick	N/A	N/A
High Density Fiberboard		
Minimum ³ /4" thick	N/A	N/A
Dens Deck, Dens Deck Prime		
Minimum ¹ / ₄ " thick	N/A	N/A

Note: All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft², or OlyBond 500BA at a rate of 1 gal./sq, or One-Step at a rate of 1/3 gal/sq. or DASH Adhesive at a rate of 1 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the Polyisocyanurate side facing down.



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 8 of 18

(Optional) Any UL of FMRC approved vapor Retarder applied to the roof deck or over a base layer of insulation.
None.
VersiWeld, VersiWeld HS, Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membrane fully adhered to the insulation using VersiWeld Bonding Adhesive applied to the substrate at a rate of 1 gal/60 ft. ² (finished surface) or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120ft ² . (finished surface) Outside 1.5" of side laps are heat welded.
VersiFleece TPO 100 or 115 mil membrane fully adhered to the insulation using DASH Adhesive applied to the substrate at a rate of 1 gal/sq or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120 ft. ² Outside 1.5" of side laps are heat welded.
VersiFleece AC TPO membrane adhered to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq or Cold Applied Adhesive applied to the substrate at a rate of 1 gal/67 ft. ² Outside 1.5" of side laps are heat welded.
-322.5 psf; insulation adhered to the deck with DASH Adhesive followed by Membrane #2 listed above. (See General Limitation #9)
-150 psf; insulation adhered to the deck with OlyBond 500BA & Gypsum Top Layer (See General Limitation #9)
-127.5 psf; insulation adhered to the deck with One-Step & Fiberboard Top Layer, or Olybond 500BA Polyiso (See General Limitation #9)
-120 psf; insulation adhered to the deck with Olybond 500BA & Polyiso top layer (See General Limitation #9)
-232.5 psf; insulation adhered to the deck with One Step & Gypsum or Polyiso Top Layer (See General Limitation #9)
-150 psf with Asphalt (See General Limitation #9)



Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced, VersiFleece
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type C(1):	All layers of insulation simultaneously attached. Membrane fully adhered.

Base Insulation Layer	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> Density/ft ²
One of the following covered with the boards liste	d in "Base or Top Insulation Layer".	
XPS		
Minimum 1" thick	N/A	N/A

Note: All insulation layers shall be simultaneously fastened; see Top Layer or Base or Top Layer below for fasteners and density.

Base or Top Insulation Layer	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft ²
Polyisocyanurate MP-H		
Minimum 1.4" thick	1, 5	1:3.2 ft ²
Minimum 2" thick	1, 5	1:4 ft ²
Wood Fiber		
Minimum 1" thick	1, 52	1:2 ft ²
High Density Wood Fiberboard		
Minimum ³ / ₄ " thick	1, 5	1:2.67 ft ²
Dens Deck, Dens Deck Prime		
Minimum ¼" thick	1, 5	1:2 ft ²

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. Top layer of insulation may be adhered with DASH Adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Vapor Retarder: (Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: None.

Membrane: VersiWeld, VersiWeld HS, Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membranes fully adhered to the insulation using VersiWeld Bonding Adhesive applied to the substrate at a rate of 1 gal/60 ft² (finished surface) or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120ft². Outside 1.5" of side laps are heat welded.



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 10 of 18

Or

VersiFleece TPO 100 or 115 membranes fully adhered to the insulation using DASH Adhesive applied to the substrate at a rate of 1 gal/sq. or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120ft². Outside 1.5" of side laps are heat welded. Or

VersiFleece AC TPO membrane fully adhered to the insulation in a mopping of approved asphalt applied within the EVT range and at a rate of 20-25 lbs./sq. or Cold Applied Adhesive applied to the substrate at a rate of 1 gal./67ft². Outside 1.5" of side laps are heat welded.

Maximum Design -45 psf (See General Limitation #7) **Pressure:**



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 11 of 18

Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type C(2):	All layers of insulation simultaneously attached; membrane fully adhered.

Base Insulation Layer	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft ²
One of the following covered with the boards listed in Top Layer.		
XPS Minimum 1" thick	N/A	N/A
Polyisocyanurate MP-H Minimum 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum ¾" thick	N/A	N/A
Structodeck High Density Fiberboard Minimum ½" thick	N/A	N/A
Wood Fiber Minimum 1" thick	N/A	N/A



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

Top Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> Density/ft ²
Required over the insulations listed in Base Layer.		
Dens Deck Prime (For use over all insulation types.) Minimum ⁵ ⁄8" thick	1, 5	1:1.33 ft ²

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.

Vapor Retarder:	(Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.
Barrier:	None.
Membrane:	VersiWeld or VersiWeld HS Reinforced, 45 or 60 mil membrane or VersiWeld Plus TPO 80 mil membrane fully adhered to the insulation using VersiWeld Bonding Adhesive applied to the substrate at a rate of 1 gal/60 ft. ² . (finished surface) Outside 1.5" of side laps are heat welded.
Maximum Design Pressure:	-90 psf (See General Limitation #7)



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 13 of 18

Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type D(1):	Membrane mechanically attached over preliminarily fastened insulation.

Base Insulation Layer	Insulation Fasteners (Table 3)	<u>Fastener</u> <u>Density/ft²</u>
One of the following covered with the boards listed in "Base or To XPS	op Insulation Layer".	
Minimum 1" thick	N/A	N/A
Base or Top Insulation Layer	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft ²
Polyisocyanurate MP-H		
Minimum 1.2" thick	N/A	N/A
Structodeck High Density Fiberboard, Wood Fiber Minimum ½" thick	N/A	N/A
High Density Wood Fiberboard Minimum ¾" thick	N/A	N/A
Dens Deck, Dens Deck Prime Minimum ¼" thick	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an 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. Single and multiple layers of insulation can be attached to the deck with DASH Adhesive, or OlyBond 500BA, or One-Step.



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 14 of 18

Vapor Retarder:	(Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.
Barrier:	None.
Membrane:	VersiWeld, VersiWeld HS, VersiWeld Plus TPO, Reinforced, secured through the preliminarily attached insulation as specified below.
Fastening #1:	HD 14-10, or CD-10 Fasteners with HPVX Plates 6" o.c. through the VersiWeld or VersiWeld Plus TPO Membrane in the lap in rows spaced 7'-7" o.c. <i>Maximum Design Pressure –67.5 psf. (See General Limitation #7)</i>
Fastening #2:	HD 14-10, or CD-10 Fasteners with HPVX Plates 6" o.c. through the VersiWeld or VersiWeld Plus TPO Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 9'-7" o.c. <i>Maximum Design Pressure -60 psf (See General Limitation #7)</i>
Fastening #3:	HD 14-10, or CD-10 Fasteners with HPVX Plates 9" o.c. through the VersiWeld or VersiWeld Plus TPO Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 9'-6" o.c. <i>Maximum Design Pressure -52.5 psf. (See General Limitation #7)</i>
Fastening #4:	HD 14-10, or CD-10 Fasteners with HPVX Plates 6" o.c. through the VersiWeld HS Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 9'-7" o.c. <i>Maximum Design Pressure -52.5 psf. (See General Limitation #7)</i>
Fastening #5:	HD 14-10, or CD-10 Fasteners with HPVX Plates 9" o.c. through the VersiWeld HS Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 9'-7" o.c. <i>Maximum Design Pressure -45 psf. (See General Limitation #7)</i>
Fastening #6:	HD 14-10, or CD-10 Fasteners with HPVX Plates 12" o.c. through the VersiWeld or VersiWeld Plus TPO Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 9'-7" o.c. <i>Maximum Design Pressure -45 psf. (See General Limitation #7)</i>
Fastening #7:	HD 14-10, or CD-10 Fasteners with HPVX Plates 6" o.c. through the VersiWeld HS Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 7'-7" o.c. <i>Maximum Design Pressure –60 psf. (See General Limitation #7)</i>
Fastening #8:	HD 14-10, or CD-10 Fasteners with HPVX Plates 6" o.c. through the VersiWeld or VersiWeld Plus TPO Membrane in the lap or through a VersiWeld TPO Pressure Sensitive RUSS Strip in rows spaced 11'-7" o.c. <i>Maximum Design Pressure –60 psf. (See General Limitation #7)</i>
Maximum Design Pressure:	See Fastening Options Above



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 15 of 18

Membrane Type:	Single Ply, Thermoplastic, TPO, Reinforced
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete.
System Type F:	Membrane fully adhered with DASH Adhesive, Aqua Base 120 Bonding Adhesive, Asphalt or Cold Applied Adhesive.

Vapor Retarder:	None.
Barrier:	None.
Membrane #1:	VersiFleece TPO 100 or 115 membrane fully adhered to the deck using DASH Adhesive applied to the substrate at a rate of 1 gal/sq. or Aqua Base 120 Bonding Adhesive applied to the substrate at a rate of 1 gal/120 $\rm ft^2$
Maximum Design Pressure:	-495 psf with DASH Adhesive (See General Limitation #9) -480 psf w/Aqua Base 120 Bonding Adhesive (See General Limitation #9)
Membrane #2:	VersiFleece AC TPO membrane adhered to the deck in a full mopping of approved asphalt within the EVT range and at a rate of 20-25 lbs./sq. or Cold Adhesive applied to the substrate at a rate of 1 gal./ 67 ft ²
Maximum Design Pressure:	 -60 psf with Cold Adhesive (See General Limitation #9) -97.5 psf with Asphalt and unprimed deck (See General Limitation #9) -495 psf with Asphalt and primed (cut-back asphalt) deck (See General Limitation #9)



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 16 of 18

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.



NOA No: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 17 of 18

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 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
- 8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform 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 membranes or packaging shall bear the imprint or identifiable marking of the manufacturer's name or logo and the following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.



11. 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: 14-0626.13 Expiration Date: 08/31/18 Approval Date: 09/04/14 Page 18 of 18