



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

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

GAF
1361 Alps Road
Wayne, NJ 07470

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: GAF EverGuard® TPO Single Ply Roofing 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 NOA revises NOA No. 13-0425.01 and consists of pages 1 through 31.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0128.02
Expiration Date: 07/13/18
Approval Date: 02/06/14
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ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	TPO
Deck Type:	Concrete
Maximum Design Pressure:	-502.5 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>
EverGuard® TPO	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced membrane.
EverGuard Extreme TPO	Various	ASTM D6878 TAS 131	Thermoplastic Olefin reinforced membrane formulated for extreme protection against heat aging and UV degradation.
EverGuard® TPO FB Ultra	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced, fleece-backed membrane.
EverGuard Extreme® TPO FB Ultra	Various	ASTM D6878 TAS 131	Thermoplastic Olefin reinforced, fleece back membrane formulated for extreme protection against heat aging and UV degradation.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
UnderRoof™ 2	39 3/8" x 67.8' rolls	ASTM D1970	Self-adhering reinforced membrane of SBS modified asphalt with polyester surfacing.
EverGuard® #1121 Bonding Adhesive	5 gallons	Proprietary	Adhesive for fully adhered systems and membrane flashing.
EverGuard® WB 181 Bonding Adhesive	5 gallons	Proprietary	Water based rubberized adhesive for fully adhered systems and membrane flashings.
LRF Adhesive M	Dual component cylinders	Proprietary	A two-component, one-step, foamable adhesive.
LRF Adhesive O	Dual component cylinders	Proprietary	A two-component, one-step, membrane foamable adhesive.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard [®] Low VOC TPO Bonding Adhesive	5 gallon pails	Proprietary	A contact type bonding adhesive for TPO single ply roofing membranes and flashings.
Matrix [™] 307 Premium Asphalt Primer	3, 5, 55 gallons	ASTM D41	Asphalt concrete primer used to promote all types of asphalt-based roofing materials.
Topcoat [®] Elastomeric Roofing Membrane	1, 5, 55 gallon pails	ASTM D6083	An acrylic, water based elastomeric membrane system used to protect various types of roofing surfaces.
Topcoat [®] MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer used to block asphalt bleed-through.
Topcoat [®] Surface Seal SB	5 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant used to protect and restore aged roof surfaces and to increase a roof's reflectivity.
EverGuard [®] TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with 25 mil thick TPO membrane film.
EverGuard [®] Extreme [®] TPO Coated Metal	4' x 10' sheets	Proprietary	Extreme [®] TPO membrane laminated to 25 Ga. galvanized sheet metal.
EverGuard [®] TPO Cover Tape	6" x 100'	Proprietary	30 mil TPO membrane laminated to white butyl tape.
EverGuard [®] TPO Heat-Weld [™] Cover Tape	6" x 100'	Proprietary	45 mil reinforced TPO membrane six inch wide tape.
EverGuard Extreme [®] TPO Heat-Weld [™] Cover Tape	6" x 100'	Proprietary	Extreme [®] TPO 45 mil reinforced TPO membrane six inch wide tape.
EverGuard [®] TPO Detailing Membrane	24" x 50'	Proprietary	55 mil thick reinforced TPO membrane.
EverGuard Extreme [®] TPO Detailing Membrane	24" x 50'	Proprietary	55 mil thick reinforced Extreme TPO membrane.
EverGuard [®] TPO Flashing Membrane	Various	Proprietary	Reinforced flashing membrane.
EverGuard Extreme [®] TPO Flashing Strip	Various	Proprietary	Reinforced Extreme TPO flashing membrane.
EverGuard [®] TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded with TPO compound to a nominal 70 mil thickness.
EverGuard [®] RTA TPO (Roof Transition Anchor) Strip [™]	6" x 100' roll	Proprietary	Reinforced TPO membrane with pressure sensitive adhesive.

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard® TPO Split Pipe Boot	Various	Proprietary	45 mil thick reinforced TPO membrane split to accommodate most common pipes and conduits.
EverGuard Extreme® TPO Split Pipe Boot	Various	Proprietary	45 mil thick reinforced Extreme® TPO membrane split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	Various	Proprietary	Square tube wraps are fabricated from 45 mil thick reinforced TPO membrane.
EverGuard Extreme® TPO Square Tube Wrap	Various	Proprietary	Square Tube Wraps are fabricated from 45 mil thick reinforced Extreme® TPO membrane.
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners are fabricated from 45 mil thick reinforced TPO membrane.
EverGuard® Extreme® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from 45 mil thick reinforced Extreme® TPO membrane.
EverGuard® TPO Scupper	8" x 10" x 12"	Proprietary	TPO coated metal 55 mil unreinforced membrane.
EverGuard® TPO T-Joint Cover Patch	100 patches per box	Proprietary	55 mil thick unreinforced membrane.
EverGuard Extreme® TPO T-Joint Cover Patch	100 patches per box	proprietary	Extreme® TPO 55 mil thick unreinforced membrane.
EverGuard® TPO Vent	2 vents per carton	Proprietary	Vent manufactured out of reinforced 45 mil TPO membrane and galvanized steel.
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured out of reinforced 45 mil TPO membrane and galvanized steel.
EverGuard® TPO Walkway Rolls	Rolls 1/8"x30"x50'	Proprietary	Standard duty walkway rolls.
EverGuard® TPO Inside Corner	6" x 6" x 5/4"	Proprietary	Inside corners of base and curb flashings.
EverGuard Extreme® TPO Inside Corner	6" x 6" x 5/4"	Proprietary	Extreme® TPO inside corners for base and curb flashings.
EverGuard® TPO Universal Corners	Various	Proprietary	The universal style corner accommodates both inside and outside corners of base and curb flashings.
EverGuard® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boots.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard® TPO Expansion Joint Cover	Various	Proprietary	60 mil thick TPO reinforced membrane, heat weldable, joint cover.
EverGuard® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing outside corners of base and curb flashing.
EverGuard Extreme® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Extreme® TPO flashing for outside corners of base and curb flashing.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.
EverGuard® TPO Drain	Various	Proprietary	Spun aluminum drain preflashed with 55 mil un-reinforced TPO membrane.
EverGuard® TPO Seam Cleaner	1 gallon	Proprietary	Solvent-based seam cleaner
EverGuard® TPO Standing Seam Tape	6"	Proprietary	TPO white cover tape.
EverGuard® TPO Batten Seam Profile	10' length 1 ½" base 1 ¼" vertical rib	Proprietary	Accessory applied over TPO roofing system to simulate standing seam metal roof.
EverGuard® TPO Standing Seam Profile	10' length 1 ½" base 1 ¼" vertical rib	Proprietary	Accessory applied over TPO roofing system to simulate standing seam metal roof.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
Securock® Gypsum-Fiber Roof Board	Gypsum roof board	United States Gypsum Corporation

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ #14 Fastener	Carbon steel fastener used in steel, wood or concrete decks.	various	GAF
2.	Drill-Tec™ 2 3/8 in. Barbed XHD Plate	Round galvanized steel stress plates for use with Drill-Tec fasteners.	2-3/8 in. dia.	GAF
3.	Drill-Tec™ 2 in. Barbed Plate	Round galvanized steel stress plates for use with Drill-Tec fasteners.	2 in. dia.	GAF
4.	Drill-Tec™ 2 3/4 in. Barbed SXHD Plate	Round galvanized steel stress plates for use with Drill-Tec fasteners.	2-3/4 in. dia.	GAF
5.	Drill-Tec™ 3" Steel Plate	Round galvalume steel stress plate for use with Drill-Tec fasteners.	3"	GAF



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>	
UL LLC	R10689	UL 790	03/14/13	
	R1306	UL 790	05/22/13	
Exterior Research and Design, LLC. Atlantic & Caribbean Roof Consulting, LLC	09CA55838	Physical Properties	12/04/10	
	01881.09.03-2	TAS 114	09/09/03	
	07-027	TAS -114	05/04/07	
	06-035		10/18/06	
	11-002		03/21/11	
	11-003		03/21/11	
	11-012		04/06/11	
	11-013		04/06/11	
	11-014		04/06/11	
	11-041		09/05/11	
	11-047		09/09/11	
	12-008		04/10/12	
	12-019		04/25/12	
	12-024		05/09/12	
	12-025		05/09/12	
	Factory Mutual Research Corp.	3003617	FM 4470	12/20/99
		3013861		03/28/03
3015578			12/02/03	
3012721			02/11/04	
3015578			05/12/04	
3015029			02/19/04	
3024051			03/28/06	
3013788			01/10/03	
3011140			08/14/01	
3023458			07/18/06	
3031350			09/27/07	
3036141			08/10/09	
3041685			03/24/11	
3038318			12/10/10	
3036141			08/10/09	
3014692			08/05/03	
3032856			11/24/08	
3041535		06/08/11		
3041769		05/26/11		
3044862		05/11/12		
3038318		12/10/10		
PRI Construction Materials Technologies LLC	GAF-289-02-01	ASTM D6878/TAS 131	09/07/11	
	GAF-290-02-01	ASTM D6878/TAS 131	09/21/11	
	GAF-421-02-01	ASTM D6878/TAS 131	10/21/13	
	GAF-422-02-01	ASTM D6878/TAS 131	10/29/13	
	GAF-314-02-01	ASTM D2178	08/23/11	
	GAF-315-02-01	ASTM D2178	08/23/11	
	GAF-245-02-01	ASTM D6083	06/10/10	
	GAF-084-02-01	ASTM D6083	05/07/06	
	GAF-276-02-01REV	ASTM D6083	01/03/11	
GAF-344-02-01	ASTM D1970	04/23/12		



APPROVED ASSEMBLIES:

Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(1): Membrane adhered to adhered insulation.

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

Vapor Retarder: Any UL or FMRC approved vapor retarder may be installed over the deck per (Optional) manufactures specifications.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation Minimum 1.5” thick	N/A	N/A

Note: All insulation shall be adhered as specified in one of the options below. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Insulation Option #1: One or more layers of minimum 1.5” thick insulation in OlyBond® at 1 gal./sq. full coverage.

Insulation Option #2: One or more layers of minimum 1.5”. thick insulation in OlyBond 500® or OlyBond 500® Green in ¾” to 1” wide ribbons spaced 12” o.c.

Membrane: EverGuard® TPO or EverGuard Extreme TPO is adhered using EverGuard® WB181 Bonding Adhesive as described below.

The EverGuard® WB181 Bonding Adhesive is applied a total rate of 0.84 gal./sq. Per manufacturer’s instructions, one quarter of the adhesive is applied to the back surface of the roof cover and three quarters of the adhesive is applied to the substrate. The side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding. The top surface is broomed and is rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: -272.5 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(2): Membrane adhered to adhered insulation.

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

Vapor Retarder: Any UL or FMRC approved vapor retarder may be installed over the deck per (Optional) manufactures specifications.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation Minimum 1.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer (Matrix™ 307 Premium Asphalt Primer) and allowed to dry prior to application of insulation. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is adhered using EverGuard® WB181 Bonding Adhesive as described below.

The EverGuard® WB181 Bonding Adhesive is applied a total rate of 0.84 gal./sq. Per manufacturer’s instructions, one quarter of the adhesive is applied to the back surface of the roof cover and three quarters of the adhesive is applied to the substrate. The side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding. The top surface is broomed and is rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

**Maximum Design
Pressure:** -202.5 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(3): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation Minimum 2” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Securock® Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

Note: Each layer of 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

If the optional vapor barrier is not present then the insulation may be adhered with OlyBond 500® or OlyBond 500® Green Adhesive Fastener in ¾” ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO adhered to Securock® Gypsum-Fiber Roof Board with EverGuard® TPO #1121 Bonding Adhesive applied at a total rate of 1.67 gal./sq. Per manufacturer’s instructions, half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The 3” side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding. The top surface is broomed and is rolled with a water filled roller weighing a minimum of 250 lbs.
OR
EverGuard® TPO or EverGuard Extreme® TPO adhered to Securock® Gypsum-Fiber Roof Board with EverGuard® TPO Low VOC Bonding adhesive applied at 0.91 gal./sq. Per manufacturer’s instructions, half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The 3” side laps are sealed with a 1.5” wide heat weld for automatic machine welding. Weld width shall be a minimum 2” width for hand welding. The top surface is broomed and is rolled with a water filled roller weighing a minimum of 250 lbs.



Surfacing: Chosen components must be applied according to manufacturer's application
(Optional) instructions. Any coating listed below used as a surfacing, must be listed within
a current NOA.

1. EverGuard[®] TPO Batten Seam Profile or EverGuard[®] Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat[®] Elastomeric Roofing Membrane, Topcoat[®] MB Plus (to be used as a primer with Topcoat[®] Elastomeric Roofing Membrane) or Topcoat[®] Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -247 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 3000 psi structural concrete

System Type A(4): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RA Polyiso Insulation Minimum 1" thick	N/A	N/A

Note: Each layer of 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

If the optional vapor barrier is not present then the insulation is adhered to the deck using Olybond 500® or Olybond 500® Green applied in 1" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: One ply of EverGuard® TPO or EverGuard Extreme® TPO adhered to the insulation with EverGuard® #1121 Bonding Adhesive applied at a total rate of 1.67 gal./sq. half applied to the insulation and half applied to the underside of the membrane. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Or

One ply of EverGuard® TPO or EverGuard Extreme® TPO adhered to insulation with EverGuard® Low VOC TPO Bonding Adhesive applied at a total rate of 0.91 gal./sq. Apply half the adhesive to the insulation and half to the underside of the membrane. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -502.5 psf; (-442.5 psf. if Vapor Retarder is used) (See General limitation #9)



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Approval Date: 02/06/14
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Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 3000 psi structural concrete

System Type A(5): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RH Polyiso Insulation Minimum 1" thick	N/A	N/A

Note: Each layer of 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

If the optional vapor barrier is not present then the insulation is adhered to the deck using Olybond 500® or Olybond 500® Green applied in 1" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: One ply of EverGuard® TPO, EverGuard Extreme® TPO, EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to the insulation with EverGuard® WB181 Bonding Adhesive applied at a total rate of 0.84 gal./sq. Apply adhesive to the underside of the roof cover and to the substrate. Allow it to become tacky to the touch before applying the roof cover to the substrate. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -215 psf; (See General limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 3000 psi structural concrete

System Type A(6): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 1.5" thick	N/A	N/A

Note: Each layer of 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

If the optional vapor barrier is not present then the insulation is adhered to the deck using Olybond 500® or Olybond 500® Green applied in 1" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered with EverGuard® WB181 Bonding Adhesive applied to the substrate at a rate of 0.84 gal./sq. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -225 psf; (See General limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 3000 psi structural concrete

System Type A(7): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1" thick	N/A	N/A

Note: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of insulation. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra fully adhered in approved asphalt at an application rate of 20-40 lbs./sq. The laps are heat-welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -187.5 psf; (See General limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 3000 psi structural concrete

System Type A(8): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, Tri-Ply® Ultra-Flexible Ply 6® or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RH Polyiso Insulation Minimum 1" thick	N/A	N/A

Note: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-25 lbs./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra fully adhered in approved asphalt at an application rate of 20-25 lbs./sq. The laps are heat-welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -470 psf; (-442.5 psf. if Vapor Retarder is used) (See General limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(9): Membrane adhered to adhered insulation.

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

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RH Polyiso Insulation Minimum 1” thick	N/A	N/A

**Note: Insulation shall be adhered in LRF Adhesive M in ¾” to 1” wide ribbons spaced 12” o.c.
Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

Membrane: EverGuard® TPO or EverGuard Extreme® TPO is adhered using EverGuard® WB181 Bonding Adhesive. The EverGuard® WB181 Bonding Adhesive is roller applied to the underside of the membrane and to the substrate at a combined 0.84 gal./sq. (0.34 l/m²). The adhesive is allowed to become tacky to touch and the roof cover is applied to the substrate and broomed. The laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -162.5 psf; (See General Limitation #9)



Membrane Type: TPO
Deck Type 3I: Concrete, Insulated
Deck Description: 2500 psi structural concrete

System Type A(10): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, Tri-Ply® Ultra-Flexible Ply 6® or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RH Polyiso Insulation Minimum 1” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Securock® Gypsum-Fiber Roof Board Minimum ¼” thick	N/A	N/A

Note: Each layer of insulation shall be adhered with OlyBond 500® or OlyBond 500® Green in 1” ribbons spaced 12”o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO adhered to Securock® Gypsum-Fiber Roof Board with EverGuard® TPO Low VOC Bonding adhesive applied at 0.91 gal./sq. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface is then broomed and rolled with a weighted roller. The laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: -502.5 psf; (-442.5 psf. if Vapor Retarder is used) (See General limitation #9)



Membrane Type: TPO
Deck Type 3I: Concrete, Insulated
Deck Description: 2500 psi structural concrete

System Type A(11): Membrane adhered to adhered insulation.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, Tri-Ply® Ultra-Flexible Ply 6® or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Securock® Gypsum-Fiber Roof Board Minimum ¼" thick	N/A	N/A

Note: Insulation shall be adhered to the deck with LRF Adhesive M in 1" ribbons spaced 12"o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO adhered to Securock® Gypsum-Fiber Roof Board with EverGuard® WB181 Bonding Adhesive is roller applied to the underside of the membrane and to the substrate at a combined 0.84 gal./sq. The adhesive is allowed to become tacky to touch and the roof cover is applied to the substrate. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: -112.5 psf; (See General Limitation #9)



Membrane Type: TPO
Deck Type 3I: Concrete, Insulated
Deck Description: 2500 psi structural concrete
System Type A(12): Membrane adhered to adhered insulation.

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

Vapor Retarder: UnderRoof™ 2 self-adhered to deck primed with ASTM D-41 or Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ Tapered RH Polyiso Insulation Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Polyiso Insulation Minimum 1” thick	N/A	N/A

Note: Insulation shall be adhered to the deck with OlyBond 500® or OlyBond 500® Green in 1” ribbons spaced 12”o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO or EverGuard Extreme® TPO adhered with EverGuard® WB181 Bonding Adhesive is roller applied at a total rate of 0.84 gal./sq. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate.
 OR
 EverGuard® TPO #1121 Bonding Adhesive rolled applied to both the substrate surface and the underside of the membrane at a rate of 1.67 gal./sq. total. The top surface is then broomed and rolled with a weighted roller.
 OR
 EverGuard® TPO Low VOC Bonding adhesive applied at 0.91 gal./sq. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface is then broomed and rolled with a weighted roller.
 Laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

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



Membrane Type: TPO
Deck Type 3I: Concrete, Insulated
Deck Description: 2500 psi structural concrete
System Type A(13): Membrane adhered to adhered insulation.

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

Vapor Retarder: UnderRoof™ 2 self-adhered to deck primed with ASTM D-41 or Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ Tapered RH Polyiso Insulation Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Polyiso Insulation Minimum 1” thick	N/A	N/A

Note: Insulation shall be adhered to the deck with OlyBond 500® or OlyBond 500® Green in 1” ribbons spaced 12”o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard TPO FB Ultra or EverGuard Extreme TPO FB Ultra adhered with EverGuard® WB181 Bonding Adhesive is roller applied at a total rate of 0.84 gal./sq. One quarter of the adhesive is applied to the back of the roof cover and three quarters of the adhesive is applied to the substrate.
 OR
 EverGuard® TPO #1121 Bonding Adhesive rolled applied to both the substrate surface and the underside of the membrane at a rate of 1.67 gal./sq. total. The top surface is then broomed and rolled with a weighted roller.
 OR
 EverGuard® TPO Low VOC Bonding adhesive applied at 0.91 gal./sq. Half of the adhesive is applied to the substrate and the other half is applied to the back surface of the roof cover. The top surface is then broomed and rolled with a weighted roller.
 Laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

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



Membrane Type: TPO
Deck Type 3I: Concrete, Insulated
Deck Description: 2500 psi structural concrete

System Type A(14): Membrane adhered to adhered insulation.

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

Vapor Retarder: UnderRoof™ 2 self-adhered to deck primed with ASTM D-41 or Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 1.5" thick	N/A	N/A

Note: Insulation shall be adhered to the deck with OlyBond 500® or OlyBond 500® Green in 1" ribbons spaced 12"o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra with LRF Adhesive O applied to the substrate in 0.75 – 1.0 in. wide ribbons spaced 12.0 in. O.C. and the roof cover is laid into the adhesive and rolled with a weighted roller.
 Laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: -60 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type A(15): Membrane adhered to adhered insulation.

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

Vapor Retarder: UnderRoof™ 2 self-adhered to deck primed with ASTM D-41 or Matrix™ 307 Premium Asphalt Primer at 0.75 gal./sq. and rolled with a weighted roller.

One or more layers each of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RH Tapered Polyiso Insulation Minimum 1.5" thick	N/A	N/A

Note: Insulation shall be adhered to the deck with OlyBond 500® or OlyBond 500® Green in 1" ribbons spaced 12"o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra with LRF Adhesive O applied to the substrate in 0.75 – 1.0 in. wide ribbons spaced 12.0 in. O.C. and the roof cover is laid into the adhesive and rolled with a weighted roller.

Laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

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



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type D(1): Membrane mechanically attached over preliminary fastened insulation.

Vapor Retarder: Any UL or FMRC approved vapor retarder may be installed over the deck (Optional) per manufactures specifications.

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

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1” thick	N/A	N/A

Note: Insulation is preliminary attached, 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.

or

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. Please refer to Roofing Application Standard RAS 117 for insulation attachment

Membrane: EverGuard® TPO or EverGuard Extreme TPO attached to the deck through the preliminary attached insulation as specified below.

Fastening #1: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/8 in. Barbed XHD Plates spaced 6” o.c. within minimum 5” wide laps. Laps are spaced at maximum 14.5” o.c. and sealed with a minimum 1.5” wide heat weld.

(Maximum Design Pressure –45 psf; See General Limitation #7)

Fastening #2: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 in. Double Barbed Steel Plates spaced 6” o.c. within minimum 5” wide laps. Laps are spaced at maximum 14” o.c. and sealed with a minimum 5” wide heat weld.

(Maximum Design Pressure –67.5 psf; See General Limitation #7)

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: See Fastening Options Above



Membrane Type: TPO

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete

System Type D(2): Membrane mechanically attached over preliminary fastened insulation.

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

One or more layers of any of the following insulations.

Vapor Retarder: Any UL or FMRC approved vapor retarder may be installed over the deck per (Optional) manufactures specifications.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation Minimum 1.5” thick	N/A	N/A

Note: Insulation is preliminary attached, 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.

or

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. Please refer to Roofing Application Standard RAS 117 for insulation attachment

Membrane: EverGuard® TPO, EverGuard Extreme® TPO, EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra attached through the preliminary attached insulation as specified below.

Fastening #1: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/4 in. Barbed SXHD Plates spaced 12” o.c. within minimum 5.5” wide laps. Laps are spaced at maximum 14.5” o.c. and sealed with a minimum 1.5” wide heat weld. *(Maximum Design Pressure –45 psf; See General Limitation #7)*

Fastening #2: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/8 in. Barbed XHD Plates spaced 6” o.c. within minimum 6” wide laps. Laps are spaced at maximum 12.5” o.c. and sealed with a minimum 1 5/8” wide heat weld. *(Maximum Design Pressure –52.5 psf; See General Limitation #7)*

Fastening #3: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/8 in. Barbed XHD Plates spaced 6” o.c. within minimum 5” wide laps. Laps are spaced at maximum 14.5” o.c. and sealed with a minimum 1.6” wide heat weld. *(Maximum Design Pressure –52.5 psf; See General Limitation #7)*

Fastening #4: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/8 in. Barbed XHD Plates or Drill-Tec™ 2 in. Double Barbed Steel Plates spaced 6” o.c. within minimum 5” wide laps. Laps are spaced at maximum 15” o.c. and sealed with a minimum 1.5” wide heat weld. *(Maximum Design Pressure –52.5 psf; See General Limitation #7)*



Fastening #5: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 3/4 in. Barbed SXHD Plates spaced 6” o.c. within minimum 6” wide laps. Laps are spaced at maximum 114” o.c. and sealed with a minimum 1.5” wide heat weld. *(Maximum Design Pressure –60 psf; See General Limitation #7)*

Fastening #6: Membrane is mechanically attached using Drill-Tec™ #14 Fasteners and Drill-Tec™ 2 in. Double Barbed Steel Plates spaced 6” o.c. within minimum 5” wide laps. Laps are spaced at maximum 91.5” o.c. and sealed with a minimum 1.75” wide heat weld. *(Maximum Design Pressure –60 psf; See General Limitation #7)*

**Surfacing:
(Optional)** **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: See Fastening Options Above

Membrane Type: TPO

Deck Type 3I: Concrete, Non-Insulated

Deck Description: 2500 psi structural concrete

System Type F(1): Membrane adhered directly to deck.

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

Membrane: EverGuard® TPO FB Ultra adhered to structural concrete deck.

Fastening: Membrane is fully adhered to a structural concrete deck with EverGuard® WB181 Bonding Adhesive roller applied to the concrete at the rate of 0.84 gallons per square or (0.34 Liter/meter squared). Then the fleece back membrane is rolled into the wet adhesive. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -300 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Non-Insulated

Deck Description: 2500 psi structural concrete

System Type F(2): Membrane adhered directly to deck.

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

Membrane: One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered with LRF Adhesive O applied in 1” wide beads spaced 6” o.c. The laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) **Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.**

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer’s specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -502.5 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Non-Insulated

Deck Description: 2500 psi structural concrete

System Type F(3): Membrane adhered directly to deck.

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

Membrane: One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered with LRF Adhesive M applied in 1” wide beads spaced 6” o.c. The laps are heat welded a minimum 1-1/2” width for automatic machine welding. Weld width shall be a minimum 2” in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: (Optional) Chosen components must be applied according to manufacturer's application instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -502.5 psf; (See General Limitation #9)



Membrane Type: TPO

Deck Type 3I: Concrete, Non-Insulated

Deck Description: 2500 psi structural concrete

System Type F(4): Membrane adhered directly to deck.

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

Vapor Retarder: Concrete deck shall be primed with Matrix™ 307 Premium Asphalt Primer and (Optional) allow to dry prior to adhering one or two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 in hot asphalt applied at 20-25 lbs./sq.

Note: If the optional vapor barrier is not present the concrete deck shall be primed with ASTM D 41 asphalt primer (Matrix™ 307 Premium Asphalt Primer) and allowed to dry prior to application of membrane.

Membrane: One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra fully adhered in approved asphalt at an application rate of 20-40 lbs./sq. The laps are heat welded a minimum 1-1/2" width for automatic machine welding. Weld width shall be a minimum 2" in width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.

Surfacing: Chosen components must be applied according to manufacturer's application (Optional) instructions. Any coating listed below used as a surfacing, must be listed within a current NOA.

1. EverGuard® TPO Batten Seam Profile or EverGuard® Self-Adhering Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -390 psf; (See General Limitation #9)



CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida Registered 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 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 with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 14-0128.02
Expiration Date: 07/13/18
Approval Date: 02/06/14
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