



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

**NOTICE OF ACCEPTANCE (NOA)**

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786)315-2590 F (786) 31525-99

[www.miamidade.gov/economy](http://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, EverGuard Extreme® TPO, EverGuard® TPO FB Ultra and EverGuard Extreme® TPO FB Ultra Single Ply Roofing System over Lightweight Concrete Decks.**

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

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

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

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

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

This NOA renews and revises NOA No. 09-0811.16 and consists of pages 1 through 15.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0102.10  
Expiration Date: 04/16/19  
Approval Date: 04/03/14  
Page 1 of 15

## ROOFING SYSTEM APPROVAL

<b>Category:</b>	Roofing
<b>Sub-Category:</b>	Single Ply Roofing
<b>Material:</b>	TPO
<b>Deck Type:</b>	Lightweight Concrete
<b>Maximum Design Pressure:</b>	-300 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 Membrane	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced membrane.
EverGuard Extreme® TPO Membrane	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced membrane designed to protect against heat aging and UV degradation.
EverGuard® TPO FB Ultra	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced fleece back membrane.
EverGuard Extreme® TPO FB Ultra	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced fleece back membrane designed to protect against heat aging and UV degradation.
GAFGLAS® #80 Ultima Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	A nailable, fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
Ruberoid® 20	39.37" (1 meter) Wide	ASTM D6163	SBS polymer-modified asphalt base sheet reinforced with a glass fiber mat.
EverGuard® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing.
EverGuard® Extreme® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing and designed to protect against heat aging and UV degradation.
EverGuard® TPO Cover Tape	6" x 100'	Proprietary	GAF TPO laminated to white butyl tape primarily used for edge metal details.
EverGuard® TPO Cover Tape Heat-Weld™	6" x 100'	Proprietary	Manufactured from unreinforced GAF TPO laminated to a six inch wide strip, half the strip with a self-adhered side and half the strip with a heat-weldable edge; used for edge metal details.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard Extreme® TPO Cover Tape Heat-Weld™	6" x 100'	Proprietary	Manufactured from reinforced GAF TPO designed to protect against heat aging and UV degradation laminated to a six inch wide strip, half the strip with a self-adhered side and half the strip with a heat-weldable edge; used for edge metal details.
EverGuard® TPO Detailing Membrane	24" x 50'	Proprietary	Un-reinforced flashing material manufactured from GAF TPO.
EverGuard Extreme® TPO Detailing Membrane	24" x 50'	Proprietary	Un-reinforced flashing material manufactured from GAF TPO designed to protect against heat aging and UV degradation.
EverGuard® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO.
EverGuard Extreme® TPO Flashing Strip	Various	Proprietary	Reinforced flashing membrane manufactured from GAF TPO designed to protect against heat aging and UV degradation.
EverGuard® TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded with GAF TPO compound to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
EverGuard Extreme® TPO Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange	Proprietary	Pourable sealer pocket is molded from GAF TPO designed to protect against heat aging and UV degradation compounded to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.
EverGuard® TPO RTA (Roof Transition Anchor) Strip™	6" x 100' roll	Proprietary	Reinforced GAF TPO membrane with pressure sensitive adhesive primarily used to secure membrane for transitions from the field to vertical surfaces.
EverGuard® TPO Split Pipe Boot	1" - 2" 3" - 5" 6" - 8"	Proprietary	Reinforced GAF TPO membrane split to accommodate most common pipes and conduits.
EverGuard Extreme® TPO Split Pipe Boot	1" - 2" 3" - 5" 6" - 8"	Proprietary	Reinforced GAF TPO designed to protect against heat aging and UV degradation split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	Various	Proprietary	Reinforced GAF TPO with split design overlap to be wrapped around square or rectangular tubing.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard Extreme® TPO Square Tube Wrap	Various	Proprietary	Square Tube Wraps are fabricated from 45 mil thick reinforced GAF TPO designed to protect against heat aging and UV degradation
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO.
EverGuard Extreme® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from 45 mil thick reinforced GAF TPO designed to protect against heat aging and UV degradation.
EverGuard® TPO Scupper	8" x 10" x 12"	Proprietary	Scupper manufactured from coated metal and unreinforced membrane.
EverGuard® TPO T-Joint Cover Patch	100 patches per box	Proprietary	Patch manufactured from unreinforced membrane.
EverGuard Extreme® TPO T-Joint Cover Patch	100 patches per box	Proprietary	Patch manufactured from unreinforced GAF TPO designed to protect against heat aging and UV degradation
EverGuard® TPO Vent	2 vents per carton	Proprietary	Vent manufactured out of reinforced TPO membrane and galvanized steel.
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured from reinforced 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	Inside corner manufactured from unreinforced GAF TPO designed to protect against heat aging and UV degradation
EverGuard® TPO Universal Corners	Various	Proprietary	Universal corners are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured of GAF TPO.
EverGuard Extreme® TPO Universal Corners	Various	Proprietary	Universal corners are heat seamable and designed to accommodate both inside and outside corners of base and curb flashings manufactured from GAF TPO designed to protect against heat aging and UV degradation.
EverGuard® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from GAF TPO and supplied with stainless steel clamping rings.



<b><u>Product</u></b>	<b><u>Dimensions</u></b>	<b><u>Test Specification</u></b>	<b><u>Product Description</u></b>
EverGuard Extreme® TPO Vent Boot	1" - 6" o.d. 6 pcs. Crtn.	Proprietary	Vent pipe boot molded from GAF TPO designed to protect against heat aging and UV degradation and supplied with stainless steel clamping rings.
EverGuard® TPO Expansion Joint Cover	Various	Proprietary	Low profile joint cover manufactured from reinforced GAF TPO.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Clear solvent based sealant for TPO cut edges.
EverGuard® TPO Drain	Various	Proprietary	Spun aluminum drain preflashed with un-reinforced GAF TPO membrane.
EverGuard® TPO Seam Cleaner	1 gallon	Proprietary	Solvent based seam cleaner.
EverGuard® TPO Standing Seam Tape	6"	Proprietary	A white butyl cover tape.
EverGuard® TPO Batten Seam Profile	10' length 1 ½" base 1 ¼" vertical rib	Proprietary	Accessory applied over GAF TPO roofing system to simulate a standing seam metal roof.
EverGuard® TPO Standing Seam Profile	10' length 1 ½" base 1 ¼" vertical rib	Proprietary	Accessory applied over GAF TPO roofing systems to simulate a standing seam metal roof.
EverGuard® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing outside corners of base and curb flashing manufactured from non-reinforced GAF TPO.
EverGuard Extreme® Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing outside corners of base and curb flashing manufactured from non-reinforced GAF TPO designed to protect against heat aging and UV degradation.
LRF Adhesive M	1:1 applicator	Proprietary	A two-part elastomeric foamable adhesive.
LRF Adhesive O	1:1 applicator	Proprietary	A dual component polyurethane adhesive used to adhere single ply roof covers.
GAF 2-Part Roofing Adhesive	1:1 applicator	Proprietary	A dual component, low-rise, polyurethane froth adhesive.
EverGuard® WB 181 Bonding Adhesive	5 gallons	Proprietary	A water based adhesive for TPO based membranes.
Topcoat® Membrane	5 gallon pails	ASTM D6083	An acrylic, water based elastomeric membrane system used to protect various types of roofing surfaces.
Topcoat® TPO Red Primer	1 gallon	Proprietary	Tinted primer used on TPO to improved adhesion of Topcoat® coatings.



**APPROVED INSULATIONS:**

<b>TABLE 2</b>		
<b>Product Name</b>	<b>Product Description</b>	<b>Manufacturer (With Current NOA)</b>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
DensDeck® Roof Board	Gypsum board	Georgia Pacific Gypsum, LLC
Securock® Gypsum-Fiber Roof Board	Gypsum board	USG Corporation
Securock® Glass-Mat Roof Board	Gypsum board	USG Corporation
Structodek High Density Fiber Board	High density fiber board	Blue Ridge FiberBoard, Inc.

**APPROVED FASTENERS:**

<b>TABLE 3</b>				
<b>Fastener Number</b>	<b>Product Name</b>	<b>Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
1.	Drill-Tec™ Base Sheet Fastener (1.7 in.)	G-90 galvanized fastener with plate for base sheet attachment to gypsum and lightweight concrete.	1.125" head x 1.7" length 2.75" Dia. Plate	GAF
2.	Drill-Tec™ Base Sheet Fastener E (1.7 in.)	G-90 galvanized fastener with plate for base sheet attachment to gypsum and lightweight concrete.	1.125" head x 1.7" length 2.75" Dia. plate	GAF



**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	4470	3003617	12/20/99
	4470	3015578	05/12/04
	4470	3047636	08/08/13
UL LLC	UL 790	R10689	03/14/13
	UL 790	R1306	05/22/13
	Physical Properties	09CA55838	12/04/10
IRT-ARCON, Inc.	TAS 114-J	02-007	01/24/02
Atlantic & Caribbean Roof Consulting, LLC	TAS 114-D	11-067	11/21/11
PRI Construction Materials Technologies, LLC	TAS 114-H	GAF 457-02-02	01/20/14
	TAS 114-D	GAF 457-02-08	01/24/14
	TAS 114-D	GAF 457-02-07	01/24/14
	TAS 114-J	GAF 457-02-04	01/24/14
	TAS 114-D	GAF 457-02-06	01/24/14
	ASTM D6878	GAF 421-02-01	10/22/13
	ASTM D6878	GAF 422-02-01	10/29/13
	ASTM D6878	GAF 424-02-01	11/11/13
	ASTM D6878	GAF 425-02-01	11/11/13
	Physical Properties	GAF-508-02-01	03/12/14
	ASTM D6083	GAF 499-02-01	03/12/14
	ASTM D6083	GAF-245-02-01	06/10/10
	ASTM D6083	GAF-084-02-01	05/07/06
	ASTM D6083	GAF-276-02-0-R1	01/03/11
	Trinity   ERD	ASTM D6163	G34140.04.11-2
ASTM D4601		G34140.04.11-4	04/25/11
ASTM D4897		G34140.04.11-5-R1	10/18/13



## APPROVED ASSEMBLIES:

**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Celcore Lightweight Concrete, minimum 350 psi, over minimum 2500 psi Structural Concrete or minimum 22 ga. Steel deck.

**System Type E:** Base sheet mechanically attached, subsequent membrane 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.**

**Steel Deck:** Minimum 22 ga. Type B vented steel deck secured to steel supports at maximum span of 6 ft. o.c. Steel deck shall be fastened with 5/8" puddle welds and washers at a maximum spacing of 6" o.c. Side laps shall be fastened with ITW Buildex Traxx/1 fasteners spaced at maximum 24" o.c.

**Lightweight Concrete:** The deck is filled with a slurry coat to a depth of 1/8" above the top deck rib. **(Optional)** A 2" thick Apache Holey Board is pressed firmly in place over the slurry. A minimum 2" thick top coat of Celcore Lightweight Concrete is poured over the optional Apache Holey Board or directly onto the steel deck with a minimum compressive strength of 350 psi.

**Vapor Retarder:** Any UL or FM approved vapor retarder may be installed over the deck. **(Optional)**

**Base Sheet:** One ply of GAFGLAS® #80 Ultima Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet or Ruberoid® 20 base sheet mechanically fastened as described below.

**Fastening:** Fasteners installed into LWC with Drill-Tec™ Base Sheet Fasteners (1.7 in.) or Drill-Tec™ Base Sheet Fasteners E (1.7 in.) at a fastener spacing of 7" o.c. with a minimum 3" lap and in two staggered rows 7" o.c. in the field.

**Membrane:** EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to base sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. 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.

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

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

### Maximum Design

**Pressure:** -60 psf. (See General Limitation #7)





**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Mearlcrete Cellular Lightweight Insulated Concrete over Steel

**System Type F(1):** Membrane adhered to roof 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.**

**Steel Deck:** Minimum 22 ga. 33 ksi, Type BV, G-90, at 6' span, 5/8" puddle welds at 6" o.c. along structural supports. Deck side laps secured at 18" o.c. with #12-14 x 7/8 HWH.

**Lightweight Concrete:** The deck is filled with a slurry coat of Mearlcrete Cellular Lightweight Concrete, minimum 300 psi, to a depth of 1/8" above the top deck rib. **(Optional)** EPS Holey Board with 3" diameter holes is placed into the slurry, followed by a minimum 2" thick pour of Mearlcrete Cellular Lightweight concrete, minimum 300 psi.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using GAF 2-Part Roofing Adhesive applied in spatter pattern at 3.75 lbs./100 ft<sup>2</sup>. 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.

Or

One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using EverGuard® WB181 Bonding Adhesive applied at 120 ft<sup>2</sup>/gal. 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.

Or

One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied in 0.75" ribbons 4" o.c. for full coverage. 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.

**Surfacing:** **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

**(Optional)**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design**

**Pressure:** -52.5 psf (See General Limitation #9)



NOA No.: 14-0102.10  
Expiration Date: 04/16/19  
Approval Date: 04/03/14  
Page 9 of 15

**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Mearlcrete Cellular Lightweight Concrete over Structural Concrete

**System Type F(2):** Membrane adhered to roof 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.**

**Concrete Deck:** Minimum 2500 psi structural concrete.

**Lightweight Concrete:** The deck is filled with a slurry coat of Mearlcrete Cellular Lightweight Concrete, minimum 300 psi, to a depth of 1/8" above the top deck rib. **(Optional)** EPS Holey Board with 3" diameter holes is placed into the slurry, followed by a minimum 2" thick pour of Mearlcrete Cellular Lightweight concrete, minimum 300 psi.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using GAF 2-Part Roofing Adhesive applied in spatter pattern at 3.75 lbs./100 ft<sup>2</sup>. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using EverGuard® WB181 Bonding Adhesive applied at 120 ft<sup>2</sup>/gal. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied in 0.75" ribbons 4" o.c. for full coverage. 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.

**Surfacing: (Optional)** **Chosen components must be applied in accordance with 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® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design**

**Pressure:** -205 psf (See General Limitation #9)



**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Elastizell Cellular Lightweight Concrete over Structural Concrete

**System Type F(3):** Membrane adhered to roof 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.**

**Concrete Deck:** Minimum 2500 psi structural concrete.

**Lightweight Concrete:** A 1/8" thick slurry of Elastizell Cellular Lightweight Concrete, minimum 250 psi, is poured over structural concrete deck. **(Optional)** EPS Holey Board with 3" diameter holes is placed into the slurry, followed by a minimum 2" thick pour of Elastizell Cellular Lightweight Concrete, minimum 250 psi.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using GAF 2-Part Roofing Adhesive applied in spatter pattern at 3.75 lbs./100 ft<sup>2</sup>. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using EverGuard® WB181 Bonding Adhesive applied at 120 ft<sup>2</sup>/gal. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied in 0.75" ribbons 4" o.c. for full coverage. 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.

**Surfacing: (Optional)** **Chosen components must be applied in accordance with 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® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design Pressure:** -200 psf (See General Limitation #9)



**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Elastizell Lightweight Concrete over Structural Concrete

**System Type F(4):** Membrane adhered to roof 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.**

**Concrete Deck:** Minimum 3000 psi structural concrete.

**Lightweight Concrete:** A 1/8" thick slurry of Elastizell Cellular Lightweight Concrete, minimum 300 psi, is poured over structural concrete deck. **(Optional)** EPS Holey Board with 3" diameter holes is placed into the slurry, followed by a minimum 2" thick pour of Elastizell Cellular Lightweight Concrete, minimum 300 psi.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied to the substrate in 3/4" wide ribbons spaced 6" o.c. 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.

Or

One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using EverGuard® WB181 Bonding Adhesive applied at 120 ft<sup>2</sup>/gal. in accordance with manufacturer's instructions. 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.

**Surfacing:** **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing must be listed within a current NOA.**

**(Optional)**

1. EverGuard® TPO Batten Seam Profile or EverGuard® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design**

**Pressure:** -142.5 psf (See General Limitation #9)



**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Concrecel Cellular Lightweight Concrete over Structural Concrete

**System Type F(5):** Membrane adhered to roof 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.**

**Concrete Deck:** Minimum 2500 psi structural concrete.

**Lightweight Concrete:** A 1/8" thick slurry of Concrecel Cellular Lightweight Concrete, minimum 200 psi, is poured over structural concrete deck. **(Optional)** EPS Holey Board with 3" diameter holes is placed into the slurry, followed by a minimum 2" thick pour of Concrecel Cellular Lightweight Concrete, minimum 200 psi.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using GAF 2-Part Roofing Adhesive applied in spatter pattern at 3.75 lbs./100 ft<sup>2</sup>. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using EverGuard® WB181 Bonding Adhesive applied at 120 ft<sup>2</sup>/gal. in accordance with manufacturer's instructions. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied in 0.75" ribbons 4" o.c. for full coverage. 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.

**Surfacing: (Optional)** **Chosen components must be applied in accordance with 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® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design**

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



**Membrane Type:** TPO

**Deck Type 4:** Lightweight Concrete

**Deck Description:** Celcore Cellular Lightweight Concrete over Structural Concrete.

**System Type F(6):** Membrane adhered to roof 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.**

**Concrete Deck:** Structural Concrete.

**Lightweight Concrete:** A minimum 2" thick pour of Celcore Cellular Lightweight Concrete, minimum 200 psi, is poured over structural concrete deck per manufacturer's instructions.

**Membrane:** One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using GAF 2-Part Roofing Adhesive in spatter pattern at 3.75 lbs./100 ft<sup>2</sup>. 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.  
Or  
One ply of EverGuard® TPO FB Ultra or EverGuard Extreme® TPO FB Ultra adhered to lightweight insulating concrete using LRF Adhesive O or LRF Adhesive M applied in 0.75" ribbons 4" o.c. for full coverage. 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.

**Surfacing: (Optional)** **Chosen components must be applied in accordance with 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® TPO Standing Seam Profile installed in accordance with manufacturer's specifications and applicable Building Codes.
2. Topcoat® Membrane applied at 1 to 1.5 gal./sq.
3. Topcoat® TPO Red Primer applied at 0.5 gal./sq. prior to applying Topcoat® Membrane.

**Maximum Design**

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



## LIGHTWEIGHT INSULATING CONCRETE 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 and/or RAS 137; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For Systems where specific lightweight insulating concrete is referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

## 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 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.: 14-0102.10  
Expiration Date: 04/16/19  
Approval Date: 04/03/14  
Page 15 of 15