



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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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® Freedom™ TPO HW, EverGuard Extreme® Freedom™ TPO HW and EverGuard® Freedom™ TPO with RapidSeam™ Technology 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. 09-0226.05 and consists of pages 1 through 10.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0403.03
Expiration Date: 05/27/19
Approval Date: 05/01/14
Page 1 of 10

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	TPO
Deck Type:	LWC
Maximum Design Pressure:	-75 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® Freedom™ TPO with RapidSeam™ Technology	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with self-adhering laps.
EverGuard® Freedom™ TPO HW	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with a heat weldable seam.
EverGuard Extreme® Freedom™ TPO HW	Various	ASTM D6878 TAS 131	Self-adhered thermoplastic olefin reinforced membrane with a heat weldable seam designed for advanced protection against heat aging and UV degradation.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
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.
VersaShield® Fire-Resistant Roof Deck Protection	12" x 100' rolls	ASTM D226	Non-asphaltic fiberglass-based underlayment and /or fire barrier.
StormSafe™ Anchor Sheet	48" Wide	ASTM D4601	A synthetic anchor sheet manufactured of polypropylene woven fabric coated on both sides with polypropylene.
EverGuard® TPO Coated Metal	4' x 10' sheets	Proprietary	24 gauge steel with a 25 mil thick GAF TPO for edge detailing.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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' 10" 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 reinforced GAF TPO laminated to a six inch wide tape with a 3 inch self-adhered area and a 3 inch heat-weldable edge; used for edge metal details.
EverGuard Extreme® TPO Cover Tape Heat-Weld	6" x 100'	Proprietary	Manufactured from reinforced GAF TPO designed for advanced 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	Unreinforced flashing material manufactured from GAF TPO.
EverGuard Extreme® TPO Detailing Membrane	24" x 50'	Proprietary	Unreinforced 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 for advanced protection 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 for advanced protection against heat aging and UV degradation compounded to a nominal 70 mil thickness designed for waterproofing irregular shaped roof penetrations.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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 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 for advanced protection against heat aging and UV degradation split to accommodate most common pipes and conduits.
EverGuard® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO with split design overlap to be wrapped around square or rectangular tubing.
EverGuard Extreme® TPO Square Tube Wrap	4" x 4" 4" x 6" 6" x 6"	Proprietary	Reinforced GAF TPO designed for advanced protection against heat aging and UV degradation; with split design overlap to be wrapped around square or rectangular tubing.
EverGuard® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO.
EverGuard Extreme® TPO Corner Curb Wrap	Various	Proprietary	Corners fabricated from reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Scupper	4" x 6" x 12" 8" x 10" x 12"	Proprietary	Scupper manufactured from EverGuard® TPO Coated Metal and unreinforced GAF TPO.
EverGuard® TPO T-Joint Cover Patch	100 patches per box	Proprietary	EverGuard® TPO T-Joint Cover Patch manufactured from unreinforced GAF TPO.
EverGuard Extreme® TPO T-Joint Cover Patch	100 patches per box	Proprietary	EverGuard® TPO T-Joint Cover Patch manufactured from unreinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
EverGuard® TPO Vent	2 vents per carton	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.
EverGuard® TPO T-Top Vent	4" or 6"	Proprietary	Vent manufactured from reinforced GAF TPO membrane and galvanized steel.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
EverGuard® TPO Walkway Rolls	Rolls 1/8" x 30" x 50'	Proprietary	Standard duty walkway rolls.
EverGuard® TPO Inside Corner	6" x 6" x 5/4"	Proprietary	Inside corner manufactured from unreinforced GAF TPO.
EverGuard Extreme® TPO Inside Corner	6" x 6" x 5/4"	Proprietary	Inside corner manufactured from unreinforced GAF TPO designed for advanced protection 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 for advanced protection 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.
EverGuard Extreme® TPO Vent Boot	1" - 6" o.d. 6 pcs. crtn.	Proprietary	Vent pipe boot molded from GAF TPO designed for advanced protection 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.
EverGuard® TPO Seam Cleaner	1 gallon	Proprietary	Solvent based seam cleaner.
EverGuard® TPO Standing Seam Tape	6"	Proprietary	A white butyl tape.
EverGuard® TPO Batten Seam Profile	10' length 1 1/2" base 1 1/4" vertical rib	Proprietary	Accessory applied over GAF TPO roofing system to simulate a standing seam metal roof.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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 for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO.
EverGuard Extreme® TPO Fluted Corner	8" diameter nominal .05" non-reinforced	Proprietary	Flashing for outside corners of base and curb flashing manufactured from non-reinforced GAF TPO designed for advanced protection against heat aging and UV degradation.
Topcoat® Membrane	1, 5 or 55 gallons	ASTM D6083	Acrylic, water based elastomeric membrane system designed to protect various types of roofing surfaces.
Topcoat® TPO Red Primer	1 gallon	Proprietary	Tinted primer used on TPO to improve adhesion of Topcoat® coatings.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Securock® Gypsum-Fiber Roof Board	Gypsum board	USG Corporation
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ Locking Impact Nail	Preassembled fastener/plate unit for base ply and insulation attachment to cementitious wood fiber, poured gypsum and lightweight insulating concrete decks.	Various	GAF



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
UL LLC	UL 790	R10689	03/14/13
	UL 790	R1306	05/22/13
Factory Mutual Research Corp.	4470	3008869	03/19/01
	4470	3020588	03/24/04
	4470	3033862	12/24/08
	4470	3042033	11/21/11
	4470	3033283	12/24/08
Exterior Research and Design, LLC	TAS 114	01515.02.06	02/08/06
	ASTM D903/TAS 114	02843.02.05-06	02/02/05
Trinity ERD	ASTM D4601	G121110.12.08	12/02/08
	ASTM D6164	G31360.03.10	03/31/10
	ASTM D4601	G34140.04.11-4	04/25/11
	ASTM D4897	G34140.04.11-5-R1	10/18/13
	ASTM D6164	G33470.01.11	01/13/11
Florida Testing Engineering & Consulting Inc.	TAS 114-J	08-050185	05/06/08
PRI Construction Materials Technologies, LLC	ASTM D6878	GAF-426-02-01	01/27/14
	ASTM D6878	GAF-423-02-01	01/27/14
	ASTM D6878	GAF-501-02-01	01/27/14
	ASTM D6083	GAF-499-02-01	03/12/14
	ASTM D2178	GAF-315-02-01	08/23/11
	TAS 110	GAF-349-02-01	07/03/12
	ASTM C1289	GAF-369-02-01	10/23/12
	ASTM D1475	GAF-508-02-01	03/12/14
	ASTM D6083	GAF-499-02-01	03/12/14
ASTM D2178	GAF-314-02-01	08/23/11	
Momentum Technologies Inc.	ASTM D6083	EX14A3A	02/26/04



APPROVED ASSEMBLIES:

Membrane Type: TPO

Deck Type 4: Lightweight Concrete, Insulated,

Deck Description: Mearlcrete Lightweight Insulating Concrete, minimum 300 psi, (cast to provide dry density of 27.0 lb./ft³ over Structural Concrete Deck.

System Type A: Insulation layers are adhered. Membrane is 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.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Securock[®] Gypsum-Fiber Roof Board Minimum 0.25" thick	N/A	N/A

Note: Securock[®] Gypsum-Fiber Roof Board adhered to the deck in 3/4" to 1" wide ribbons 6" o.c. of OlyBond 500[®], OlyBond 500[®] Green or OlyBond[®] Adhesive at a rate of 1 gal./sq. Insulation is walked in after placement over the adhesive. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Cap Sheet: EverGuard[®] Freedom[™] TPO with RapidSeam[™] Technology adhered to insulation with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard[®] Freedom[™] TPO HW or EverGuard Extreme[®] Freedom[™] TPO HW adhered to insulation and rolled with a weighted roller. 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:
(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: -75 psf. (See General Limitation #9)



Membrane Type: TPO

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Mearlcrete® Cellular Concrete LLC lightweight concrete, minimum 300 psi, over 1.5 B, 22 gauge 33 ksi, vented steel attached to steel joist with 5/8" puddle welds and side laps secured with #10 TEK screws at 6" o.c. steel joist spaced at 6' o.c.

System Type E: Membrane and/or anchor sheet mechanically attached 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.

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

Fire Barrier: ¼" Securock® Gypsum-Fiber Roof Board, DensDeck® Roof Board (Slip sheet or Vapor Retarder required if using Securock or DensDeck fire barrier) preliminarily secured to the deck.
(Optional)
Or
VersaShield® Fire-Resistant Roof Deck Protection preliminarily secured to the deck.

Base Sheet: StormSafe™ Anchor Sheet mechanically attached as described below.

Fasteners: Drill-Tec™ Locking Impact Nail, one row at 7.5" on the 4" side lap and three center rows at 12" o.c.

Cap Sheet: EverGuard® Freedom™ TPO with RapidSeam™ Technology adhered to the base sheet with a minimum 6" side lap fully self-adhered and rolled with a weighted roller.
Or
EverGuard® Freedom™ TPO HW or EverGuard Extreme® Freedom™ TPO HW adhered to base sheet and rolled with a weighted roller. 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: -52.5 psf. (See General Limitation #7)



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 gauge 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.: 14-0403.03
Expiration Date: 05/27/19
Approval Date: 05/01/14
Page 10 of 10