

Notice of Acceptance (NOA)

GAF EverGuard® TPO Single Ply Roofing System
Over Wood Decks

Updated: 8/08



*Your Best And Safest Choice...
Quality You Can Trust Since 1886!*



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**GAF Materials Corporation
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 by the BCCO and accepted by the Building Code and Product Review Committee 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF EverGuard® TPO Single Ply Roofing System over Wood 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. 04-0723.02 and consists of pages 1 through 8.
The submitted documentation was reviewed by Jorge L. Acebo.



**NOA No.: 08-0514.05
Expiration Date: 09/22/10
Approval Date: 07/31/08
Page 1 of 8**

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	TPO, Single Ply Roofing
Deck Type:	Wood
Maximum Design Pressure	-97.5 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 Membrane (White, Grey and Tan)	Various	ASTM D 6878	ThermoPlastic Olefin reinforced membrane.
EverGuard® TPO (45 mil, 60 mil, 80 mil) Membrane	Various	ASTM D 6878	ThermoPlastic Olefin reinforced, fleece-backed membrane.
EverGuard® TPO 45 mil Utility Flashing Membrane	Various	ASTM D 6878	Reinforced flashing membrane.
EverGuard® UN-55 Detailing Membrane	Various	ASTM D 6878	reinforced flashing membrane.
EverGuard® Coated Metal	4' x 8' 4' x 10' sheets	US CS-245-62	EverGuard® membrane laminated 24 Ga. galvanized steel.
EverGuard® Preformed Corners	4" x 4" x 4" 20 pcs. crtn.	ASTM D 4434	Prefabricated molded one piece corners.
EverGuard® Preformed Vent Boots	1" - 8" o.d. 6 pcs. crtn.	ASTM D 4434	Pre-molded vent pipe boots.
EverGuard® TPO Bonding Adhesive	5 gallon pails	Proprietary	Adhesive for fully adhered systems and membrane flashing.
EverGuard® H ₂ O Bonding Adhesive	5 gallons	Proprietary	Water based adhesive for fully adhered systems and membrane flashing.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.
EverGuard® Aluminum Termination Bar	1/8 x 1" x 10	TAS 114	Lip termination bar.
EverGuard® Expansion Joint Cover	4"-8" x 50'		Low profile expansion joint cover.
EverGuard® Standard Walkway	1/8" x 30" x 36"		Standard duty walkway pad.
EverGuard® Heavy Duty Walkway	1/4" x 30" x 36"		Heavy-duty walkway pad.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
VersaShield®	350 sq ft. roll	ASTM D 226 Type II	Non-Asphaltic Fiberglass-Based Underlayment and/or fire barrier.
TOPCOAT® Fireshield Elastomeric Roofing Membrane		ASTM D-3412 ASTM D-21-96 ASTM D-1475 ASTM E-1644 ASTM D-6083	Surface coating for smooth surfaced and mineral surfaced roofs with fire prevention additives.
TOPCOAT® Surface Seal	5 or 55 gal	ASTM D-412 ASTM B-117 ASTM C-794 ASTM G-12 ASTM D-21-96 ASTM D-1475 ASTM E-1644	Solvent based elastomeric membrane system used to protect various types of roofing surfaces
FireOut	5 or 55 gal	UL R1306	A low VOC, water-based coating system that provides flame spread and penetration protection.

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ PolyIso	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ RA, RN	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ Composite RA, RN	Polyisocyanurate foam insulation with high-density fiberboard or Permalite perlite insulation.	GAF Materials Corp.
EnergyGuard™ Perlite	Perlite insulation board.	GAF Materials Corp.
EnergyGuard™ High Density Fiberboard	High density wood fiberboard insulation.	GAF Materials Corp.
EnergyGuard™ Composite	Polyisocyanurate/wood fiberboard composite.	GAF Materials Corp.
Dens Deck®	Water-resistant gypsum board	Georgia Pacific



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Drill-Tec™ #12 Standard & #14 HD Roofing Fasteners	Insulation fastener for steel, wood & concrete decks.		BMCA.
2.	Drill-Tec™ ASAP	Pre-assembled fasteners and metal and plastic plates.		BMCA.
3.	Drill-Tec™ Plastic Polypropylene Plates	Round Polypropylene plate.	3" & 3-½" round	BMCA.
4.	Drill-Tec™ Metal Insulation Plates	Round galvalume plate.	3" & 3-½" round	BMCA.
5.	Drill-Tec™ AccuTrac Plate or Drill-Tec™ Steel Plates	Square or Round Galvalume® coated steel plates	Plate Diameter: 3" and 3 ½"	GAF Materials Corp.
6.	Drill-Tec™ XHD Barbed Seam Plates	Round barbed galvalume membrane plate.	2⅜" round	GAF Materials Corp.

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Underwriters Laboratory, Inc.	03CA38009	UL 790	01/21/04
	R19254	ASTM D-226	09/13/01
Factory Mutual Research Corp.	3B9Q1.AM	FM 4470	01/08/98
	3020588	FM 4470	03/24/04
IRT-ARCON	02-005	TAS 114	01/18/01
	02-008	TAS 114	01/24/02
Atlantic & Caribbean Roof Consulting, LLC	08-022	TAS 114	4/17/08



APPROVED ASSEMBLIES:

Deck Type 1: Wood, Insulated

Deck Description: 1⁹/₃₂" or greater plywood or wood plank

System Type D: Membrane mechanically attached over preliminary fastened insulation to wood deck.

All General and System Limitations apply.

Fire Barrier: FireOut™ Fire Barrier Coating or VersaShield® Non-Asphaltic Fiberglass-Based Underlayment.
(optional)

Dens Deck: Minimum 1/4" thick, preliminary fastened to deck with 4 fasteners per board.

Membrane: EverGuard® TPO or EverGuard® TPO (60 or 80 mil Fleece-Back) 5.0' wide mechanically attached with Drill Tec® #14 HD screws and 2³/₈" Drill Tec® XHD Barbed Seam plates at 6" o.c. in the minimum 5" wide side lap and sealed with minimum 1.3/4" wide heat welds.

Surfacing: (Optional)

1. Advanced Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.
2. EverGuard® self-adhering Standing Seam Architectural Profiles installed in compliance with manufacturer's specifications and applicable Building Codes.
3. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -45 psf; (See General Limitation #7)



Deck Type 1I: Wood, Non-Insulated

Deck Description: 1⁹/₃₂" or greater plywood or wood plank

System Type E(1): A mechanically attached anchor sheet with membrane fully adhered.

All General and System Limitations apply.

Fire Barrier: FireOut™ Fire Barrier Coating or VersaShield® Non-Asphaltic Fiberglass-Based Underlayment or minimum 1/4" thick Dens Deck, preliminary fastened to deck with 4 fasteners per board..

Anchor sheet: GAFGLAS® #80 Ultima™ Base Sheet, STRATAVENT® Eliminator™ Perforated Nailable Base Sheet, RUBEROID® Modified Base Sheet, RUBEROID® 20 or RUBEROID® Mop Smooth base sheet mechanically fastened to deck as described below;

Fastening

Options: Anchor sheets attached to deck with approved minimum 1 1/4" annular ring shank nails and 1 5/8" tin caps at a fastener spacing of 9" o.c. at the 4" lap and in two staggered rows 9" o.c. in the field.

Membrane: EverGuard® TPO or EverGuard® TPO (60 or 80 mil Fleece-Back) adhered to anchor sheet in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional)

1. Advanced Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.
2. EverGuard® self-adhering Standing Seam Architectural Profiles installed in compliance with manufacturer's specifications and applicable Building Codes.
3. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -60 psf, See General Limitation #7



Deck Type 1: Wood, Non-Insulated

Deck Description: ¹⁹/₃₂" plywood nailed 6" o.c. at the field of the sheet with #8 ring shank nails and 4" o.c. at the perimeter of the sheet with #10 ring shank nails. Plywood installed over wood rafters spaced 24" o.c.

System Type E(2): Membrane mechanically attached to wood deck.

All General and System Limitations apply.

Fire Barrier: FireOut™ Fire Barrier Coating or VersaShield® Non-Asphaltic Fiberglass-Based Underlayment or minimum ¼" thick Dens Deck, preliminary fastened to deck with 4 fasteners per board.
(optional)

Membrane: EverGuard® TPO 45 mil, 5.0' wide mechanically fastened over the plywood deck into the cross bracing of the deck (48" o.c. span) with Drill Tec® #14 HD screws and 3" Drill Tec® AccuTrac plates spaced 6" o.c. in the minimum 5" wide side lap of the sheets followed by applying a minimum of 1½" wide heat weld.

Surfacing: (Optional)

1. Advanced Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.
2. EverGuard® self-adhering Standing Seam Architectural Profiles installed in compliance with manufacturer's specifications and applicable Building Codes.
3. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.

Maximum Design

Pressure: -97.5 psf; (See General Limitation #7)



WOOD DECK SYSTEM LIMITATIONS:

- 1 A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

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 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 08-0514.05
Expiration Date: 09/22/10
Approval Date: 07/31/08
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