

**EverGuard<sup>®</sup> Freedom<sup>™</sup> TPO HW and  
EverGuard<sup>®</sup> Freedom<sup>™</sup> TPO  
with RapidSeam<sup>™</sup> Technology  
over Steel Decks**

**Miami-Dade County  
Notice of Acceptance (NOA)**

Updated: 2/09



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North America's Largest Roofing Manufacturer!™*

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**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® Freedom™ TPO SA and EverGuard® Freedom™ with RapidSeam™ TPO Single Ply Roofing System over Steel 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 NOA No. 08-0324.01 and consists of pages 1 through 7.  
The submitted documentation was reviewed by Jorge Acebo.



**NOA No.: 08-1124.05  
Expiration Date: 04/29/14  
Approval Date: 02/25/09  
Page 1 of 7**

## ROOFING SYSTEM APPROVAL

<b>Category:</b>	Roofing
<b>Sub-Category:</b>	TPO, Self-Adhered Single Ply Roofing
<b>Deck Type:</b>	Steel
<b>Maximum Design Pressure</b>	-60 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 SA Membrane	Various	ASTM D 6878 TAS 131	Self-Adhered thermoplastic olefin reinforced membrane.
EverGuard® Freedom™ with RapidSeam™ TPO Membrane	Various	ASTM D 6878 TAS 131	Self-Adhered thermoplastic olefin reinforced membrane.
EverGuard® Freedom™ HW TPO Membrane	Various	ASTM D 6878 TAS 131	Self-Adhered thermoplastic olefin reinforced membrane.
EverGuard® TPO-45 Utility Flashing Strips	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced flashing membrane.
EverGuard® TPO UN-60 Detailing Membrane	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced flashing membrane.
EverGuard® TPO Coated Metal	4' x 8' 4' x 10' sheets	US CS-245-62	EverGuard membrane laminated 24 Ga. galvanized steel.
EverGuard® TPO Preformed Corners	4" x 4" x 4" 20 pcs. crtn.	ASTM D 4434	Prefabricated molded one piece corners.
EverGuard® TPO Preformed Vent Boots	1" - 8" o.d. 6 pcs. crtn.	ASTM D 4434	Premolded vent pipe boots.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.
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® HD Walkway	1/4" x 30" x 36"		Heavy duty walkway pad.
SeamCote™	2, 5 gallons	Proprietary	Elastomeric protective coating
EnergyCote™ Coating	2, 5 gallons	ASTM D-2196 ASTM D-1475 ASTM E-1644 ASTM C-1549 ASTM E-408	Highly reflective elastomeric coating



FireOut™	5, 55 gallons	Low VOC, fire barrier coating
VersaShield® VersaShield® FB-1S VersaShield® FB-2S	350 sq. ft roll	ASTM-D 226 Non-Asphaltic Fiberglass-Based 4869 Type I, II Underlayment
TOPCOAT® FireShield® SB	5, 55 gallons	ASTM D-412 Elastomeric roofing membrane ASTM D-21 ASTM D1475 ASTM E-1644
WeatherCote™	5 gallons	Surface coating for smooth surfaced and mineral surfaced roofs.

**APPROVED INSULATIONS:**

**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ PolyIso, RA, RN	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ High Density Fiberboard	High density wood fiberboard insulation.	GAF Materials Corp.
EnergyGuard™ Perlite	Perlite insulation board.	GAF Materials Corp.
EnergyGuard™ Composite RA, RN	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.	GAF Materials Corp.
EnergyGuard™ Wood Fiberboard	Wood fiberboard insulation	GAF Materials Corp.
Wood Fiberboard	Regular wood fiber insulation	Generic
High Density Wood Fiberboard	High Density Wood Fiber insulation board.	Generic
Dens Deck™ Dens Deck Prime® DensDeck DuraGuard™	Water-resistant gypsum board	Georgia Pacific
Securock™	Fiber reinforced roof board	USG



**APPROVED FASTENERS:**

**TABLE 3**

<b><u>Fastener Number</u></b>	<b><u>Product Name</u></b>	<b><u>Product Description</u></b>	<b><u>Dimensions</u></b>	<b><u>Manufacturer (With Current NOA)</u></b>
1.	Drill-Tec™ #12 Standard & #14 HD Roofing Fasteners	Insulation fastener for steel, wood & concrete decks.		GAF Materials Corp.
2.	Drill-Tec™ #15 XHD Roofing Fasteners	Self tapping coated screw w/#3 Phillips head.		GAF Materials Corp.
3.	Drill-Tec™ XHD Plates	AZ55 Galvalume coated barber steel plate used with fastener.	2- <sup>3</sup> / <sub>8</sub> " dia	GAF Materials Corp.
4.	Drill-Tec™ HD Plate	AZ55 Galvalume coated barber steel plate used with fastener.	2" dia	GAF Materials Corp.
5.	Drill-Tec™ Membrane Plates	Round 2" nylon reinforced seam plate.	2" round	GAF Materials Corp.
6.	Drill-Tec™ Plastic Insulation Plates	Round plastic plate.	3" round	GAF Materials Corp.
7.	Drill-Tec™ Metal Insulation Plates	Round galvalume plate.	3" round	GAF Materials Corp.
8.	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.

**EVIDENCE SUBMITTED:**

<b><u>Test Agency/Identifier</u></b>	<b><u>Name</u></b>	<b><u>Report</u></b>	<b><u>Date</u></b>
Underwriters Laboratory, Inc.	03CA38009	UL 790	01/21/04
Factory Mutual Research Corp.	3020588	FM 4470	03/24/04
	3023458	FM4450	07/18/06



**APPROVED ASSEMBLIES:**

**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga. Type B steel deck secured to minimum 1/4" thick supports space at maximum 6 ft o.c. with ITW Buildex Traxx/4 or Traxx/5 spaced at 6" o.c. Deck side laps are secured with Traxx/1 fasteners spaced at maximum 24" o.c.

**System Type B(1):** Base layer of insulation mechanically attached to roof deck. Any subsequent layer are then adhered to base layer of insulation. Membrane is subsequently adhered to insulation.

**All General and System Limitations apply.**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ PolyIso Minimum 2" thick</b>	1	1:2 ft <sup>2</sup>

**Note: Base layers of insulation shall be mechanically attached using the fastener density listed. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

<b>Top Insulation Layer (Optional)</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ PolyIso Minimum 1" thick</b>	N/A	N/A

**Note: Optional top layer of insulation shall be adhered OlyBond 500™ Adhesive Fastener applied in continuous 1/4" wide beads at a maximum spacing of 6" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.**

**Membrane:** EverGuard® Freedom™ 45 mil, 60 mil, 80 mil TPO SA or EverGuard® Freedom™ with RapidSeam™ TPO adhered to insulation with a minimum 6" side lap fully self-adhered or Freedom™ 45 mil, 60 mil HW (self-adhered) with a minimum 3" side lap heat welded with a minimum 1.75" 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 1to 1.5 gal./sq.

**Maximum Design**

**Pressure:** -52.5 psf (See General Limitation #7.)



**Deck Type 2I:** Steel, Insulated

**Deck Description:** Minimum 22 ga. Type B steel deck secured to minimum ¼" thick structural supports spaced at maximum 6 ft o.c. with ITW Buildex Traxx/5 spaced at 6" along the center of the supports. Deck side laps are secured with Traxx/1 fasteners spaced at maximum 24" o.c.

**System Type B(2):** Base layer of insulation mechanically attached to roof deck. Any subsequent layers are then adhered to base layer of insulation. Membrane is subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
EnergyGuard™ RA or EnergyGuard™ RN Minimum 2" thick	1	1:6 ft <sup>2</sup>

**Note:** Base layers of insulation shall be mechanically attached using the fastener density listed. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Securock™ Minimum 1/4" thick	N/A	N/A

**Note:** Optional top layer of insulation shall be adhered OlyBond 500™ Adhesive Fastener applied in continuous 3/4" wide beads at a maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Membrane:** EverGuard® Freedom™ 45 mil, 60 mil, 80 mil TPO SA or EverGuard® Freedom™ with RapidSeam™ TPO adhered to insulation with a minimum 6" side lap fully self-adhered or Freedom™ 45 mil, 60 mil HW (self-adhered) with a minimum 3" side lap heat welded with a minimum 1.75" 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:** -60 psf (See General Limitation #7.)



## STEEL 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 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.

## 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 sidelap 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 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 9B-72 of the Florida Administrative Code.

**END OF THIS ACCEPTANCE**



NOA No.: 08-1124.05  
Expiration Date: 04/29/14  
Approval Date: 02/25/09