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#### GAF 1 Campus Drive Parsippany, NJ 07054

#### 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: EverGuard<sup>®</sup> PVC XK and EverGuard<sup>®</sup> PVC Smooth Single Ply Roof Systems 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.

04/24/25

This NOA renews and revises NOA No. 18-0123.04 and consists of pages 1 through 8. The submitted documentation was reviewed by Jorge L. Acebo.



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## **ROOFING SYSTEM APPROVAL**

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	Single Ply Roofing
<u>Material:</u>	PVC
<u>Deck Type:</u>	Steel
Maximum Design Pressure:	-45 psf.

## TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

<u>Product</u>	<u>Dimensions</u>	Test <u>Specification</u>	Product <u>Description</u>
EverGuard <sup>®</sup> PVC Smooth	50 mil thick 10' x 100' 5' x 100' 60 mil thick 10' x 80' 5' x 80' 80 mil thick 10' x 65' 5' x 65'	D4434	Polyester single ply PVC membrane for mechanically attached or adhered applications.
EverGuard <sup>®</sup> PVC XK	60 mil thick 10' x 90' 76" x 90' 80 mil thick 10' x 75' 76" x 75'	D4434	Polyester single ply PVC KEE based membrane for mechanically attached or adhered applications.
EverGuard <sup>®</sup> #2331 Bonding Adhesive	5 gallons	Proprietary	Adhesive for fully adhered systems and membrane flashing.
EverGuard <sup>®</sup> WB 181 Bonding Adhesive	5 gallons	Proprietary	A water based adhesive for PVC and TPO based membranes.
EverGuard <sup>®</sup> PVC Round Stack	Various	proprietary	PVC membrane molded to wrap around round roof structures.
EverGuard <sup>®</sup> PVC Outside Corner	6x6	proprietary	Outside corner of base and curb flashing.
EverGuard <sup>®</sup> PVC Corner Curb Flashing	Various	proprietary	Corners are fabricated from reinforced PVC membrane.
EverGuard <sup>®</sup> PVC Square Tube Wrap	Various	proprietary	PVC membrane molded to wrap around square roof structures.
EverGuard <sup>®</sup> PVC Inside Corner	6 x 6 x 5-1/4	proprietary	Inside corner of base and curb flashing.
EverGuard <sup>®</sup> PVC Coated Metal	Various	proprietary	Un-reinforced membrane laminated to galvanized sheet metal.
Topcoat <sup>®</sup> Elastomeric Roofing Membrane	1, 5 or 55gal.	ASTM D6083	An acrylic, water based elastomeric membrane system used to protect various types of roofing surfaces



# **APPROVED INSULATIONS:**

#### TABLE 2

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Product Name	<b>Product Description</b>	Manufacturer <u>(With Current NOA)</u>
EnergyGuard <sup>™</sup> Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>TM</sup> Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>TM</sup> RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> RA Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>TM</sup> RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> RH Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> RM Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> RN Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard <sup>™</sup> Perlite Roof Insulation	Perlite insulation board	GAF
DensDeck <sup>®</sup> Roof Board	Gypsum board	Georgia Pacific Gypsum
Securock <sup>®</sup> Gypsum-Fiber Roof Board	Gypsum board	US Gypsum Corp.

# **APPROVED FASTENERS:**

Fastener <u>Number</u>	Product <u>Name</u>	Product <u>Description</u>	Dimensions	Manufacturer <u>(With Current NOA)</u>
1.	Drill-Tec <sup>™</sup> #12 Fastener	Insulation and base ply fastener	various	GAF
2.	Drill-Tec <sup>™</sup> #14 Fastener	Insulation and base ply fastener	various	GAF
3.	Drill-Tec <sup>™</sup> 3" Steel Plates	Round 3" metal plate	3" round	GAF
4.	Drill-Tec <sup>™</sup> XHD Fastener	Insulation fastener and base ply fastener	various	GAF
5.	Drill-Tec <sup>™</sup> 2 3/8 in. Barbed XHD Plate	Round galvalume coated steel plate	Plate Diameter: 2-3/8"	GAF
6.	Drill-Tec <sup>™</sup> 3" Standard Steel Plate	Round 3" metal plate	3" round	GAF
7.	Drill-Tec <sup>™</sup> AccuTrac <sup>®</sup> Recessed Plate	Insulation and base ply fastener	3"square	GAF

TABLE 3



## **EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Report</u>	<u>Test Name</u>	<u>Date</u>
FM Approvals	3044914	4470	06/18/12
	3023458	4470	07/18/06
	3043941	4470	01/16/12
	3033135	4470	11/24/08
	3038318	4470	12/10/10
	797-07043-267	4470	01/16/12
NEMO ETC, LLC	NEMO 4S-GAF-18-003.12.18-1	ASTM D4434	12/04/18
	NEMO 4S GAF-18-003.12.18-2	ASTM D4434	12/04/18
	GAF-SC10365.10.16-2-R1	<b>ASTM D4434</b>	12/01/16
	GAF-SC10365.01.17	ASTM D4434	01/16/17
	GAF-SC10365.03.17	ASTM D4434	03/17/17
	4r-FMI-20-SSTHP-01.A	ASTM D4434	10/10/21
	4r-FMI-20-SSTHP-01.B	ASTM D4434	08/01/22
PRI Construction Materials	GAF-499-02-01	ASTM D6083	03/12/14
Technologies, LLC	GAF-369-02-01	ASTM C1289	10/22/12
	GAF-464-02-01	ASTM C1289	02/06/14
	GAF-629-02-01	ASTM C1289	02/26/16
	376T0105	Proprietary	12/08/20
	376T0224	Proprietary	10/20/21

## **DECK STRESS ANALYSIS CALCULATIONS/REPORTS**

Engineer/Agency	<u>Identifier</u>	Assemblies	Date
FM Approval Deck Limitations	N/A	C(1), D(1)	01/01/13



### **APPROVED ASSEMBLIES:**

Membrane Type:	Single Ply, PVC
Deck Type 2I:	Steel, Insulated
Deck Description:	<ul> <li>Minimum 22 ga., Type B, Grade 33 steel deck is secured to minimum 0.25" thick steel structural supports spaced at maximum, 72 in. on center with ICH Traxx/5, ICH Traxx/4, Teks 4 or Teks 5 fasteners spaced 6 in. on center at each bearing. The deck side laps are fastened 24 in on center with ICH Traxx/1 or Stitch Teks 1 fasteners.</li> <li>This Tested Assembly has been analyzed for allowable deck stress. See evidence submitted table.</li> </ul>

System Type C(1): All layers of insulation are mechanically attached to the deck; membrane is adhered to the insulation.

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

Insulation Fasteners

One or more layers of the following insulations : **Base Insulation Layer** 

Dase insulation Layer	(Table 3)	Density/ft <sup>2</sup>
Any polyisocyanurate foam insulation listed in Table 2		
Minimum: 1.5" Thick	N/A	N/A
Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener
	(Table 3)	Density/ft <sup>2</sup>
Securock <sup>®</sup> Gypsum-Fiber Roof Board		
Minimum: 1/4" Thick	1, 2, 6, 7	1:1.6

Note: Insulation layer shall be mechanically attached with fasteners and density described above. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. See Roofing Application Standard RAS 117 for fastening details.

Membrane:	One ply of EverGuard <sup>®</sup> PVC Smooth or EverGuard <sup>®</sup> PVC XK fully adhered with EverGuard <sup>®</sup> WB 181 Bonding Adhesive applied at a total rate of 0.84 gal./sq. or with EverGuard <sup>®</sup> #2331 Bonding Adhesive applied at a total rate of 1.67 gal./sq. Apply half of the adhesive to the underside of the membrane and half to the insulation. The laps are heat welded a minimum of 1-1/2" width for automatic machine welding. Weld width shall be minimum 2" width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.
Surfacing:	(Optional) Topcoat <sup>®</sup> Elastomeric Roofing Membrane applied per manufacturer's instructions.
Maximum Design Pressure:	-45 psf (See General Limitation #7.)



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Fastoner

Membrane Type:	Single Ply, PVC
Deck Type 2I:	Steel, Insulated
Deck Description:	Minimum 22 ga., Type B, Grade 80 steel deck is secured to minimum 0.25" thick steel structural supports spaced at maximum, 72 in. on center with ICH Traxx/5 fasteners spaced 6 in. on center at each bearing. The deck side laps are fastened 24 in on center with ICH Traxx/1 fasteners. <b>This Tested Assembly has been analyzed for allowable deck stress. See</b> evidence submitted table.

**System Type D(1):** Membrane mechanically attached to steel deck through preliminarily fastened insulation.

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

One or more layers of the following insulations :		
Insulation Layer	Insulation Fasteners	Fastener
·	(Table 3)	Density/ft <sup>2</sup>
<b>EnergyGuard<sup>™</sup> Polyiso Insulation, EnergyGuard<sup>™</sup> RA</b>	Polyiso Insulation,	·
EnergyGuard <sup>™</sup> RH Polyiso Insulation, EnergyGuard <sup>™</sup>	RM Polyiso Insulation,	
EnergyGuard <sup>™</sup> RN Polyiso Insulation		
Minimum: 1.5" Thick	N/A	N/A

Note: Insulation shall have preliminary attachment, prior to the installation of the membrane, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and membrane shall be simultaneously fastened. See below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane:	One ply of EverGuard <sup>®</sup> PVC XK mechanically fastened through the insulation. Secure 120 inch wide sheet to deck using Drill-Tec <sup>™</sup> XHD Fasteners and Drill- Tec <sup>™</sup> 2-3/8" Barbed XHD Plates, spaced 6 in. o.c. in the roof cover side laps and in rows spaced 115 in. apart. The laps are heat welded a minimum of 1-1/2" width for automatic machine welding. Weld width shall be minimum 2" width for hand welding. The membrane is then rolled with a water filled roller weighing a minimum of 250 lbs.
Surfacing:	(Optional) Topcoat <sup>®</sup> Elastomeric Roofing Membrane applied per manufacturer's instructions.
Maximum Design	
Pressure:	-45 psf (See General Limitation #7.)



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Membrane Type:	Single Ply, PVC
Deck Type (2):	Steel, Insulated
<b>Deck Description:</b>	18 - 22 ga. 33 ksi
System Type D(2):	All layers of insulation are pre-secured and the membrane is mechanically attached to the 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.

<b>Thermal Barrier:</b>	Minimum 0.5 thick DensDeck <sup>®</sup> Roof Board, Securock <sup>®</sup> Gypsum-Fiber Roof
(Optional)	Board or Securock <sup>®</sup> Glass Mat Roof Board or minimum 0.75 in. thick
	EnergyGuard <sup>™</sup> Perlite Roof Insulation loose laid.

One or more layers of the following insulations :

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
EnergyGuard <sup>™</sup> RA Polyiso Insulation	(100100)	Density
Minimum: 1.5" Thick	N/A	N/A
Top Insulation Layer	<b>Insulation Fasteners</b>	Fastener
	(Table 3)	Density/ft <sup>2</sup>
DensDeck <sup>®</sup> Roof Board, Securock <sup>®</sup> Gypsum-Fiber Roof	Board	
Minimum: 1/4" Thick	N/A	N/A

Note: Insulation shall have preliminary attachment, prior to the installation of the membrane, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and membrane shall be simultaneously fastened. See below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Membrane:	One ply of EverGuard <sup>®</sup> PVC XK mechanically attached 6 in. o.c. with rows spaced 114 in. with Drill-Tec <sup>™</sup> 2 3/8 in. Barbed XHD Plates and Drill-Tec <sup>™</sup> XHD Fasteners. The laps are heat welded a minimum of 1-1/2" width for automatic machine welding. Weld width shall be minimum 2" width for hand welding.
Surfacing:	(Optional) Topcoat <sup>®</sup> Elastomeric Roofing Membrane applied per manufacturer's instructions.
Maximum Design	
Pressure:	-45 psf (See General Limitation #7)



# **STEEL DECK SYSTEM LIMITATIONS:**

- 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 Professional Engineer, Registered 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 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



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