MIAMI-DADE

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® PVC Membrane 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 revises NOA No. 08-0221.12 and consists of pages 1 through 7.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

NOA No.: 10-0113.05
Expiration Date: 08/07/13
Approval Date: 06/30/10

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	PVC
Deck Type:	Steel
Maximum Design Pressure	-75 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® PVC	81" x 100" or 40.5" x 100" (half roll)	ASTM D4434	Thermoplastic single-ply membrane.
FireOut™	N/A	N/A	Low VOC, water-base fire barrier coating system that provides outstanding flame spread and penetration to combustible roof decks in the event of fire.
Topcoat® FireShield® MB	5, 55 gallons	ASTM D 412, ASTM D 21-96, ASTM D 1475, ASTM E 1644	Water-base sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.
Topcoat® FireShield® SB	5, 55 gallons	ASTM B 117, ASTM C 794, ASTM G 21, FTMS141,6271, ASTM D 412, ASTM D 21-96, ASTM D 1475, ASTM E 1644	Solvent-base sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.
Topcoat® MB Plus	5, 55 gallons	ASTM D 412, ASTM D 21-96, ASTM D 1475, ASTM E 1644	Water-based, low VOC, sprayable polymeric liquid, which cures to form a seamless rubber membrane.
Topcoat® Surface Seal SB	5, 55 gallons	ASTM D 412, ASTM B 117, ASTM C 794, ASTM G 21, FTMS141.6271, ASTM D 21-96, ASTM D 1475, ASTM E 1644	Solvent-based, sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.

Product	Dimensions	Test Specification	Product Description
TOPCOAT® EnergyCote™ Elastomeric Coating	2, 5 gallons	ASTM D-2196 ASTM D-1475 ASTM E-1644 ASTM C-1549 ASTM E-408	Highly reflective elastomeric coating.
TOPCOAT® Elastomeric Roofing Membrane	1, 5 or 55gal.	TT-C-555B ASTM D6083 ASTM C794	An acrylic, water based elastomeric membrane system used to protect various types of roofing surfaces.
EverGuard® PVC Coated Metal Flashing Sheet	4" x 10' sheets	Proprietary	24 Gauge steel with a 25 mil thick membrane film.
EverGuard® Cut Edge Sealant	1 gallon	Proprietary	Clear solvent-based liquid sealant.
EverGuard® PVC Detail Strip	Various		Unreinforced membrane for penetrations and corners.
EverGuard® PVC Cut Edge Sealant	16 oz. and 1 gallon	Proprietary	Semi-clear liquid thermoplastic sealant.
EverGuard® PVC Pipe Boot	Various	Proprietary	Molded PVC unreinforced membrane.
EverGuard® PVC Detailing & Flashing Membrane	Various	Proprietary	Unreinforced membrane for penetrations and corners.
EverGuard® PVC Inside Corner	2-3/4" x 3.5" with 6' flange	Proprietary	Molded PVC unreinforced membrane for flashing inside corners of base and curb flashing.
EverGuard® PVC Outside Corner	8" diameter	Proprietary	Molded PVC unreinforced membrane for flashing outside corners of base and curb flashing.
EverGuard® PVC Pitch Pocket	6-1/2" diameter by 3-3/4" high	Proprietary	Molded rigid PVC pocket.
EverGuard® PVC T-Joint Cover Patch	4" x 10' sheets	Proprietary	24 gauge steel with .040" thick membrane film.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard® Polyiso Insulation	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard® RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard® RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard® RA Composite Polyiso Insulation	Polyisocyanurate foam insulation with high-density fiberboard or Permalite perlite insulation.	GAF Materials Corp.
EnergyGuard® Perlite Roof Insulation	Perlite insulation board.	GAF Materials Corp.
Dens Deck® Roof Board	Water-resistant gypsum board.	Georgia Pacific
DensDeck® Prime® Roof Board	Water-resistant gypsum board.	Georgia Pacific
Securock® Gypsum-Fiber Roof Board	Fiber reinforced roof board.	USG Corporation
Structodek®	Wood fiber insulation board.	Blue Ridge Fiberboard, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ #12 Fastener	Insulation fastener and Base Ply fastener for steel & wood decks.	various	GAF Materials Corp.
2.	Drill-Tec™ #14 Fastener	Insulation fastener and Base Ply fastener for steel.	various	GAF Materials Corp.
3.	Drill-Tec™ #15 XHD Fastener	Insulation fastener and Base Ply fastener for steel.	various	GAF Materials Corp.
4.	Drill-Tec™ 2-3/8 in. XHD Plate	AZ55 Galvalume coated barber steel plate used with fastener.	2-3/8" dia	GAF Materials Corp.
5.	Drill-Tec™ Plastic Insulation Plate	Round 3" plastic plate.	3" round	GAF Materials Corp.
6.	Drill-Tec™ Metal Insulation Plate	Round 3" galvalume plate.	3" round	GAF Materials Corp.
7.	Drill-Tec™ SXHD Fastener	Self tapping coated carbon steel screw w/#3 Phillips head.		GAF Materials Corp.
8.	Drill-Tec™ SXHD Plates	AZ55 Galvalume coated double barbed steel plate used with fastener.	2-3/4" dia	GAF Materials Corp.
9.	Drill-Tec™ AccuTrac® Steel Plate	Square Galvalume stress plates.	3 x 3	GAF Materials Corp.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	FMRC 4470	3028606	02/23/07
Underwriters Laboratories, Inc.	UL 790	97NK38018	07/22/98
Underwriters Laboratories, Inc.	CGSB-37.54-95	02NK18635	11/12/03
Architectural Testing, Inc.	ASTM D 4434	52825.02-106-31	06/03/09

APPROVED ASSEMBLIES

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 22 ga., Grade 80 steel decking secured to minimum 0.25" thick structural steel supports spaced a maximum of 6' o.c. with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. at each structural steel support. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 24" o.c.

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

All General and System Limitations shall apply.

One or more layers of the following.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard® Polyiso Insulation, EnergyGuard® RA Polyiso Insulation, EnergyGuard® RN Polyiso Insulation Minimum 1.5″ thick	**1, 6, 9**	**N/A**

Note: Top layer shall have preliminary attachment, prior to the installation of the membrane sheet, 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 membrane sheet below for fasteners and density.

Membrane EverGuard® PVC mechanically fastened through the insulation as specified below:

Fastening #1: Secure to deck using Drill-Tec™ XHD Fasteners and Drill-Tec™ 2-3/8" Barbed XHD Plates. Spaced maximum 12 in. (305 mm) o.c. in the roof cover side laps and in rows spaced maximum 75.5 in. (1.19 m) apart. Laps are sealed with a minimum 1.5 in. (38mm) wide heat weld located on the outside edge of the lap.
Maximum Design Pressure –45 psf (See General Limitation #7)

Fastening #2: Secure to deck using Drill-Tec™ XHD Fasteners and Drill-Tec™ 2-3/8" Barbed XHD Plates. Spaced maximum 6 in. (152 mm) o.c. in the roof cover side laps and in rows spaced maximum 75.5 in. (1.19 m) apart. Laps are sealed with a minimum 1.5 in. (38mm) wide heat weld located on the outside edge of the lap.
Maximum Design Pressure –75 psf (See General Limitation #7)

Maximum Design Pressure: See Fastening Options Above

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 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 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE