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® Freedom™ TPO SA 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. 07-0808.07 and consists of pages 1 through 16.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Self-Adhered Single Ply Roofing
Material:	TPO
Deck Type:	LWC
Maximum Design Pressure	-382.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® Freedom™ TPO SA Membrane	Various	ASTM D 6878	Self-Adhered thermoplastic olefin reinforced membrane.
EverGuard® Freedom™ TPO SA Membrane with RapidSeam™	Various	ASTM D 6878	Self-Adhered thermoplastic olefin reinforced membrane with self adhering side lap.
EverGuard® Freedom™ HW TPO Membrane	Various	ASTM D 6878	Self-Adhered thermoplastic olefin reinforced membrane.
EverGuard® TPO-45 Utility Flashing Strips	Various	ASTM D 6878	Thermoplastic olefin reinforced flashing membrane.
EverGuard® TPO UN-60 Detailing Membrane	Various	ASTM D 6878	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.
EverGuard® Self-Adhering Standing Seam TPO	30 per carton 10' length		TPO Standing seam Batten Strips adhered to EverGuard TPO membrane to simulate the appearance of a metal standing seam roof.
StormSafe™ (P015 Underlayment)	48" x 600'	Proprietary	Synthetic polyethylene underlayment used as an anchor sheet beneath Freedom™ TPO SA material

Product	Dimensions	Test Specification	Product Description
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) wide	ASTM D4601	Asphalt impregnated and coated, fiberglass base sheet
GAFGLAS® STRATAVENT® Eliminator™ Nailable	39.37" (1 meter) wide	ASTM D3672 ASTM D 4897	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 D 6163 ASTM D 5147	SBS modified asphalt base sheet reinforce with a glass fiber mat.
RUBEROID® SBS Heat-Weld™ Granule	39.37" (1 meter) wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP Smooth	39.37" (1 meter) wide	ASTM D5147 ASTM D6298	Non-woven polyester mat coated with polymer modified asphalt. Does not have a factory applied surfacing.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ PolyIso, RA, RN	Polyisocyanurate foam 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.
Dens Deck	Water-resistant gypsum board	Georgia Pacific
DensDeck Prime®	Water resistant gypsum board	Georgia Pacific
DensDeck DureGuard™	Water resistant gypsum board	Georgia Pacific
Structodek® TD	Flame Resistant High Density Wood Fiber board.	Knight-Celotex
Structodek®	Insulation board	Knight-Celotex
Securock™	Fiber reinforced roof board	USG Corporation

Product	Dimensions	Test Specification	Product Description
FireOut™ Fire Barrier Coating	N/A	N/A	Low VOC, water-base 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, FTMS 141,6271, 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.
Leak Buster™ Matrix™ 322 Elastomeric Roof Coating	5, 55 gallons	ASTM D 1653, ASTM D 412, ASTM E 470 ASTM D 6038	Styrene acrylic-based roof coating that forms a seamless and flexible layer of protection for your roof.
Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane	5, 55 gallons	ASTM D 412, ASTM B 117, ASTM C 794, ASTM G 21, FTMS 141.6271, ASTM D 21-96, ASTM D 1475 ASTM E 1644.	Surface coating for smooth surfaced and mineral surfaced roofs.
Leak Buster™ Matrix™ 715 MB Elastomeric Roofing Membrane	5, 55 gallons	ASTM D 412, ASTM D 21-96, ASTM D 1475, ASTM E 1644	Surface coating for smooth surfaced and mineral surfaced roofs.
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.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) wide	ASTM D 4601	Asphalt impregnated and coated glass mat base sheet.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ Base Sheet Fastener and Plate	Base sheet fastening assembly.		GAF Materials Corp.
2.	Drill-Tec™ CR Base Sheet Fastener and Plate	Base sheet fastening assembly.		GAF Materials Corp.
3.	Drill-Tec™ Metal Plates	Round Galvalume stress plates.	3" and 3 ½"	GAF Materials Corp.
4.	NTB Fasteners	Fastener for use in gypsum, tectum and lightweight insulating concrete decks.		GAF Materials Corp.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Underwriters Laboratory, Inc.	UL790	03CA38009	01/21/04
IRT-Arcon, Inc.	TAS-114	04-019	04/26/04
Factory Mutual Research Corp.	FMRC 4470	3020588	03/24/04
Exterior Research and Design, LLC	TAS 114	01515.02.06	02/08/06
Trinity | ERD	Physical Properties	G121110.12.08	12/02/08
Atlantic & Caribbean Roof Consulting, LLC	TAS 114-D	ACRC 07-017	04/19/07
	TAS 114-D	ACRC 07-024	05/01/07
	TAS 114-D	ACRC 07-016	04/19/07
	TAS 114-D	ACRC 07-043	09/13/07
	TAS 114-D	ACRC 07-045	09/13/07
	TAS 114-D	ACRC 07-045	01/17/07
	TAS 114-D	ACRC 08-023	04/17/08
	TAS 114-D	ACRC 07-025	05/02/07
Florida Testing Engineering & Consulting Inc.	TAS 114-D	08-050183	05/08/08
	TAS 114-J	08-050185	05/06/08
	TAS 114-J	08-072805	04/28/08

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4I: Lightweight Concrete, Insulated

Deck Description: Cellular or Aggregate Lightweight Concrete

System Type B: Base layer of insulation mechanically attached to Steel Deck over slip sheet. Membrane is subsequently adhered to insulation.

Deck: Minimum 22 ga. Type B steel deck secured to minimum ¼" 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.

Slip Sheet: Install one ply of GAFGLAS® #75, GAFGLAS® #80 Ultima™ Base Sheet, STRATAVENT® Eliminator Nailable Venting or RUBEROID® 20 loose laid over Lightweight Concrete deck.

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^2**
EnergyGuard PolyIso or EnergyGuard RA Minimum 2" thick	**1**	**1:2 ft^2**

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.

Membrane: EverGuard® Freedom™ 45, 60, 80 TPO SA with RapidSeam™ adhered to insulation according to manufacturer's instructions with a minimum 6" side lap fully self-adhered.
Or;
EverGuard® Freedom™ HW (self-adhered) 45, 60, 80 TPO SA with a minimum 3" side lap heat welded with a minimum 1.75" weld; adhered to insulation according to manufacturer's instructions.

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.)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: MEARLCRETE® Cellular Concrete LLC lightweight concrete over 1.5 B, 22 gauge 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.

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

Fire Barrier: (Optional) ¼" Securock™ or Dens Deck® preliminarily secured to the deck or VersaShield® 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 SA adhered to base sheet according to manufacturer's instructions.

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)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Elastizel Lightweight Insulating Concrete (Min. 300 psi) poured over structural concrete

System Type F(1): Membrane fully adhered directly to the primed deck.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ 45, 60, 80, TPO SA with RapidSeam™ with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.
Or;
EverGuard® Freedom™ HW (self-adhered) 45, 60, and 80 TPO SA with a minimum 3" side lap heat welded with a minimum 1.75" weld fully self-adhered. Adhered according to manufacturers instructions onto the primed deck.

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: -382.5 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore Lightweight Insulating Concrete (Min. 300 psi) poured over structural concrete

System Type F(2): Membrane fully adhered directly to the primed deck.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ 45, 60, 80, TPO SA with RapidSeam™ with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.
Or;
EverGuard® Freedom™ HW (self-adhered) 45, 60, and 80 TPO SA with a minimum 3" side lap heat welded with a minimum 1.75" weld fully self-adhered. Adhered to according to manufacturers instructions onto the primed deck.

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: -217.5 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: LWC Products light weight insulating concrete (Min. 300 psi) poured over structural concrete.

System Type F(3): Membrane fully adhered directly to the primed deck.

Vapor Retarder: One or more plies of RUBEROID® SBS Heat-Weld™ Granule or RUBEROID® Mop heat welded or mopped over a structural concrete deck.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ 45, 60, 80, TPO SA with RapidSeam™ with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.
Or;
EverGuard® Freedom™ HW (self-adhered) 45, 60, and 80 TPO SA with a minimum 3" side lap heat welded with a minimum 1.75" weld fully self-adhered. Adhered to according to manufacturers instructions onto the primed deck.

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: -172.5 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: LWC Products light weight insulating concrete (Min. 300 psi) poured over structural concrete.

System Type F(4): Membrane fully adhered directly to the primed deck.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ 45, 60, 80, TPO SA with RapidSeam™ with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.
Or;
EverGuard® Freedom™ HW (self-adhered) 45, 60, and 80 TPO SA with a minimum 3" side lap heat welded with a minimum 1.75" weld fully self-adhered. Adhered to according to manufacturers instructions onto the primed deck.

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: -325 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: MEARLCRETE® Cellular Concrete LLC lightweight concrete 300 psi over a 4" concrete slab

System Type F(5): Membrane and/or anchor is adhered to the roof deck.

All General and System Limitations apply.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ 45, 60, 80, TPO SA with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.

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: -300 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type : Structural concrete 3000 psi

Deck Description: Minimum two (2") inches of thick Concrecel lightweight insulating concrete with a minimum compressive strength of 250-300 psi poured over structural concrete.

System Type F(6): Membrane fully adhered directly to the primed deck.

All General and System Limitations apply.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ TPO SA 45, 60, 80 with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.

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: -150 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Structural concrete 3000 psi

Deck Description: Celcore lightweight insulating concrete 250-300 psi poured over a structural concrete deck.

System Type F(7): Membrane fully adhered directly to the primed deck.

All General and System Limitations apply.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ to 2 gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ TPO SA with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.

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: -155 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, TPO, Self-Adhered

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: MEARLCRETE® Cellular Concrete LLC lightweight concrete over 1.5 B, 22 gauge 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 F(8): Membrane fully adhered directly to the primed deck.

All General and System Limitations apply.

Primer: Deck primed with TOPCOAT® Surface Seal SB applied at the rate of $1^1/_2$ gallons per square to achieve a thickness of 16 wet mils.

Membrane: EverGuard® Freedom™ HW (self-adhered) 45, 60, 80 TPO SA, EverGuard® Freedom™ 45, 60, 80 TPO SA with RapidSeam™ or EverGuard® Freedom™ TPO 45, 60, 80 SA with a minimum 6" side lap fully self-adhered. Adhered according to manufacturer's instructions onto the primed deck.

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: -142.5 psf (See General Limitation #9)

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 gage 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 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE