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 Material 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 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 revises NOA No. 08-1124.04 and consists of pages 1 through 13.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

NOA No.: 09-0811.16
Expiration Date: 04/16/14
Approval Date: 11/25/09

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: TPO, Single Ply Roofing
Deck Type: Lightweight Concrete
Maximum Design Pressure -277.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
EverGuard® TPO Membrane	Various	ASTM D 6878 TAS 131	Thermoplastic Olefin reinforced membrane.
EverGuard® TPO FB Ultra Membrane	Various	ASTM D 6878 TAS 131	Thermoplastic Olefin reinforced fleecebacked membrane.
EverGuard® TSR-45 Utility Flashing Membrane	Various	ASTM D 6878 TAS 131	Reinforced flashing membrane.
EverGuard® UN-60 Detailing Membrane	Various	ASTM D 6878 TAS 131	60 mil unreinforced flashing membrane.
EverGuard® UN-55 Detailing Membrane	Various	ASTM D 6878	55 mil un-reinforced flashing membrane.
EverGuard® TPO 45 mil Utility Flashing Strips	Various	ASTM D 6878	Thermoplastic olefin reinforced flashing membrane.
EverGuard® Coated Metal Sheets	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	Premolded vent pipe boots.
EverGuard® #1121 Bonding Adhesive	5 gallon pails	proprietary	Adhesive for fully adhered systems and membrane flashing.
EverGuard® H2O Bonding Adhesive	5 gallons	Proprietary	Water based adhesive for fully adhered systems and membrane flashing.
EverGuard® UN 55 T-Joint Cover Patches	100 patches per box		Conforming membrane seal for use over T-joint in 60 and 80 mil membrane applications.
EverGuard® TPO Cover Tape	6" x 100' roll		.045" TPO membrane laminated to white butyl tape.
EverGuard® Preformed Split Pipe Boot	Various		Split boots to accommodate most pipes and conduits.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.

Product	Dimensions	Test Specification	Product Description
EverGuard® RTA Strip	6" x 100' roll		Reinforced TPO membrane with pressure sensitive adhesive.
EverGuard® Corner Curb Wrap	Various		Flash curbs
EverGuard® TPO Fluted Corner	8" diameter nominal .05" non-reinforced		Flashing outside corners of base and curb flashing.
EverGuard® Square Tube Wrap	Various		Square tube wrap
EverGuard® Inside Corner	6" x 6" x 5¼"		Inside corners of base and curb flashings.
EverGuard® Prefabricated Expansion Joint Covers	4"-8" x 50'		Low profile expansion joint cover.
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.
EverGuard® Pourable Sealer Pocket	9" x 6" x 4" oval with 3" base flange		Pourable sealer.
EverGuard® Drain	Various		Spun aluminum drain preflashed with 55 mil unreinforced TPO membrane.
EverGuard® Scupper	4" x 6" x 12" 8" x 10" x 12"		TPO coated metal 55 mil unreinforced membrane
EverGuard® Vent			Vent manufactured out of reinforced 45 mil TPO membrane and galvanized steel.
EverGuard® TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Solvent based sealant for TPO cut edges.
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.
FireOut™	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 D412 ASTM D21 ASTM D1475 ASTM E 1644	Water-base sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.

Product	Dimensions	Test Specification	Product Description
Topcoat® FireShield® SB	5, 55 gallons	ASTM B117 ASTM C794 ASTM G21 FTMS 141,6271 ASTM D 412 ASTM D2196 ASTM D1475 ASTM E 1644	Solvent-base sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.
Topcoat® MB Plus	5, 55 gallons	ASTM D412 ASTM D21 ASTM D1475 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 D412 ASTM B117 ASTM C794 ASTM G21 FTMS 141.6271 ASTM D 21 ASTM D1475 ASTM E1644	Solvent-based, sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.
StormSafe™ Anchor Sheet	48" x 600'	Proprietary	Synthetic polyethylene underlayment used as an anchor sheet beneath Freedom TPO SA material

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ PolyIso	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ Ultra PolyIso Insulation	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ RA, RN	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ RA, RN Composite Roof Board Insulation	Polyisocyanurate foam insulation with high-density fiberboard or Permalite perlite insulation.	GAF Materials Corp.
EnergyGuard™ Perlite	Perlite insulation board.	GAF Materials Corp.
EnergyGuard™ Composite Board Roof Insulation	Polyisocyanurate/wood fiberboard composite.	GAF Materials Corp.
Dens Deck®, Dens Deck Prime®	Water-resistant gypsum board	Georgia Pacific
Securock™	Fiber reinforced roof board	USG Corporation

APPROVED FASTENERS:

TABLE 3

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

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	4470	3003617	12/20/99
		3015578	05/12/04
		3015029	02/19/04
	4450	3023458	07/18/06
		3026964	07/25/07
Underwriters Laboratories	File R1306	Fire Classification	05/20/99
IRT-ARCON, Inc.	TAS 114	01-035	12/18/01
	TAS 114	02-007	01/24/02
	TAS 114	04-011	02/20/04
	TAS 114	04-007	02/17/04
	TAS 114	04-014	02/17/04
Atlantic & Caribbean Roof Consulting, LLC	TAS 114	07-026	05/03/07

APPROVED ASSEMBLIES:

Deck Type 4: Lightweight Concrete

Deck Description: Cellular Lightweight concrete over minimum 2500 psi Structural Concrete or minimum 22 ga. Steel deck.

System Type E(1): Membrane mechanically attached to deck

All General and System Limitations apply.

Steel Deck: Minimum 22 ga. Grade E 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 ITW Buildex Traxx/1 fasteners spaced at maximum 30" o.c.

Lightweight: Concrete Any approved cellular lightweight insulating concrete. Having current NOA.

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

Membrane: EverGuard® TPO 45, 60, 80 Membrane attached through the lightweight concrete to the underlying steel deck as specified below.

Fastening #1: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using Drill-Tec™ #15 XHD Fasteners and Drill-Tec™ XHD Plates spaced 6" o.c. within minimum 5" wide laps. Laps are spaced at maximum 114.5" o.c. and sealed with a minimum 1.75" wide heat weld.
(Maximum Design Pressure –45 psf; See General Limitation #7)

Fastening #2: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using Drill-Tec™ #15 XHD Fasteners and Drill-Tec™ HD Plates spaced 6" o.c. within minimum 5" wide laps. Laps are spaced at maximum 114.5" o.c. and sealed with a minimum 5" wide heat weld.
(Maximum Design Pressure –67.5 psf; See General Limitation #7)

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 TPO installed incompliance 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: See Fastening Options Above

Deck Type 4: Lightweight Concrete

Deck Description: Cellular Lightweight concrete over minimum 2500 psi Structural Concrete or minimum 22 ga. Steel deck.

System Type E(2): Base sheet mechanically attached, subsequent membrane adhered.

All General and System Limitations apply.

Steel Deck: Minimum 22 ga. Type B steel deck secured to steel supports at maximum span of 6 ft o.c. Steel deck shall be fastened with 5/8" puddle welds and washers at a maximum spacing of 6" o.c. Side laps shall be fastened with ITW Buildex Traxx/1 fasteners spaced at maximum 24" o.c.

Lightweight Concrete: Minimum 300 psi. cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an option minimum 2" thick Apache Holey Board and a minimum 2" thick top coat.

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

Base Sheet: One ply of GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® STRATAVENT® Eliminator™ Nailable or RUBEROID® 20 base sheet mechanically fastened as described below;

Fastening: Fasteners installed through LWC to steel deck. Drill-Tec™ CR Base Fasteners and Plates at a fastener spacing of 7" o.c. at a 3" lap and in two staggered rows 7" o.c. in the field

Membrane: EverGuard® TPO FB Ultra 45, 60 80 Membrane adhered to base 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 TPO 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: -60 psf. (See General Limitation #7)

Deck Type 4: Lightweight Concrete

Deck Description: Cellular Lightweight concrete over minimum 2500 psi Structural Concrete or minimum 22 ga. Steel deck.

System Type E(3): Membrane mechanically attached to deck.

All General and System Limitations apply.

Steel Deck: Minimum 22 ga. Grade 80 steel deck secured to minimum ¼" thick supports space at maximum 6 ft o.c. with ITW Buildex Traxx/5 spaced at 6" o.c. Deck side laps are secured with ITW Buildex Traxx/1 fasteners spaced at maximum 24" o.c.

Lightweight Concrete: Minimum 300 psi. cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an option minimum 2" thick Apache Holey Board and a minimum 2" thick top coat.

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

Barrier: (Optional) ¼" Gypsum, Securock™, Dens Deck® secured to the deck.

Membrane: EverGuard® TPO 45, 60, 80, or EverGuard® TPO FB Ultra 45, 60 80 Membrane attached through to the underlying steel deck as specified below.

Fastening #1: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using Drill-Tec™ SXHD Fasteners and Drill-Tec™ 2-3/4" Barbed SXHD Plates spaced 12" o.c. within minimum 5.5" wide laps. Laps are spaced at maximum 114.5" o.c. and sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure –45 psf; See General Limitation #7)

Fastening #2: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using EverGuard® XHD Fasteners and EverGuard® 2-3/8" XHD Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 112.5" o.c. and sealed with a minimum 1-5/8" wide heat weld.
(Maximum Design Pressure –52.5 psf; See General Limitation #7)

Fastening #3: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using Drill-Tec™ XHD Fasteners and Drill-Tec™ 2-3/8" Barbed XHD Plates or Drill-Tec™ 2" Double Barbed XHD Plates spaced 6" o.c. within minimum 5" wide laps. Laps are spaced at maximum 115" o.c. and sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure –52.5 psf; See General Limitation #7)

Fastening #4: Fasteners installed through LWC to steel deck. Membrane is mechanically attached using Drill-Tec™ XHD Fasteners and Drill-Tec™ 2-3/4" Barbed SXHD Plates spaced 6" o.c. within minimum 6" wide laps. Laps are spaced at maximum 114" o.c. and sealed with a minimum 1.5" wide heat weld.
(Maximum Design Pressure –60 psf; See General Limitation #7)

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 TPO 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: See Fastening Options Above

Deck Type 4: Lightweight Concrete

Deck Description: Celcore Cellular Lightweight Concrete over minimum 2500 psi Structural Concrete or minimum 22 ga. Steel deck.

System Type F(1): Membrane adhered to roof deck.

All General and System Limitations apply.

Steel Deck: Minimum 22 ga. Vented Type B steel deck secured to steel supports at maximum span of 5 ft o.c. Steel deck shall be fastened with 5/8" puddle welds and washers at a maximum spacing of 6" o.c. and tech screws at 12'o.c. Side laps shall be fastened with ITW Buildex Traxx/1 fasteners spaced at maximum 24" o.c.

Lightweight Concrete: Minimum 300 psi. Celcore cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional Apache Holey Board minimum 2" thick and a minimum 2" thick top coat.

Membrane: EverGuard® TPO FB Ultra 45, 60 or 80 Membrane fully adhered as specified below.

EverGuard® H2O Bonding Adhesive is applied at a rate of 1 gallon per square to the deck with a roller. Then the fleece back membrane is rolled into the wet adhesive and then rolled with a 275 lb water filled roller and the laps heat welded with a minimum 1.5" 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 TPO 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 #9)

Deck Type 4: Lightweight Concrete

Deck Description: Celcore Cellular Lightweight Concrete over minimum 2500 psi Structural Concrete.

System Type F(2): Membrane adhered to roof deck.

All General and System Limitations apply.

Concrete Deck: 2500 psi. structural concrete

Lightweight Concrete: Minimum 300 psi. Celcore cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional Apache Holey Board and minimum 2" thick top coat.

Membrane: EverGuard® TPO FB Ultra 45, 60 or 80 membrane fully adhered as specified below.

EverGuard® H2O Bonding Adhesive is applied at a rate of 1 gallon per square to the deck with a roller. Then the fleece back membrane is rolled into the wet adhesive and then rolled with a 275 lb water filled roller and the laps heat welded with a minimum 1.5" 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 TPO 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: –277.5 psf (See General Limitation #9)

Deck Type 4: Lightweight Concrete

Deck Description: Elastizel Lightweight Concrete over minimum 3000 psi Structural Concrete.

System Type F(3): Membrane adhered to roof deck.

All General and System Limitations apply.

Concrete Deck: 3000 psi. structural concrete

Lightweight Concrete: Minimum of two (2") inches of thickness of Elastizel lightweight insulating concrete with a minimum compressive strength of 250 to 300 psi

Membrane: EverGuard® TPO FB Ultra 45, 60 or 80 membrane fully adhered as specified below.

EverGuard® H2O Bonding Adhesive is applied at a rate of .83 gallon per square to the deck with a roller. Then the fleece back membrane is rolled into the wet adhesive and then rolled with a 275 lb water filled roller and the laps heat welded with a minimum 1.5" 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 TPO 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: –260 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.)**

END OF THIS ACCEPTANCE