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 RUBEROID® Modified Bitumen Roof System for Poured Gypsum 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. 03-0501.01 and consists of pages 1 through 18.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	SBS/APP, Modified Bitumen
Deck Type:	Gypsum
Maximum Design Pressure	-75 psf
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
LeakBuster™ Matrix™ 307 Premium Asphalt Primer	5, 55 gallons	ASTM D 41	Asphalt concrete primer used to promote adhesion of asphalt in built-up roofing.
GAF Mineral Shield® Granules	60 lb. Bags 100 lb. bags	ASTM D 1863	Granules for surfacing of exposed asphalt, cold process cement or emulsion. GAF Mineral Shield® Granules shall be used for flashing applications only.
LeakBuster™ MATRIX™ 305 Fibered Asphalt Emulsion	5 gallons	ASTM 1227	Surface coating for smooth surfaced roofs.
LeakBuster™ MATRIX™ 303 Premium Fibered Aluminum Roof Coating	1, 5 gallons	ASTM D 2824	Fibered aluminum coating.
LeakBuster™ MATRIX™ 204 Wet/Dry Roof Cement	1, 5 gallons	ASTM D 3019 ASTM D 3409	Refined asphalt blended with a mineral stabilizer and fibers. Permits adhesion to wet and dry surfaces.
GAFGLAS® #75	39.37" (1 meter) Wide	ASTM D 4601	Asphalt impregnated and coated glass mat base sheet.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Asphalt impregnated and coated, fiberglass base sheet
GAFGLAS® Flex Ply™ 6	39.37" (1 meter) Wide	ASTM D 2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D 2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGLAS® STRATAVENT® Eliminator Perforated	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 with factory perforations.
GAFGLAS® Flashing	various		Asphalt coated glass fiber mat flashing sheet available in three sizes.

Product	Dimensions	Test Specification	Product Description
GAFGLAS® STRATAVENT® Eliminator Perforated 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® SBS Heat-Weld™ Smooth	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer-modified asphalt and smooth surfaced.
RUBEROID® SBS Heat-Weld™ Granule	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® SBS Heat-Weld™ 170 FR	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® SBS Heat-Weld™ PLUS	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® SBS Heat-Weld PLUS FR	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® Modified Base Sheet	39.37" (1 meter) Wide	ASTM D4601, Type II, UL Type G2 BUR	Premium glass fiber reinforced SBS-modified base sheet
RUBEROID® SBS Heat-Weld™ 25	1 meter (39.37") wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer-modified asphalt and smooth surfaced.
RUBEROID® Mop Granule	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP Smooth	1 sq. roll 87 lbs.	ASTM D 6298 ASTM D 5147	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
RUBEROID® MOP PLUS	39.37" (1 meter) Wide	ASTM D 6164 ASTM D 5147	Non-woven polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP 170FR	39.37" (1 meter) Wide	ASTM D 6164 ASTM D 5147	Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® MOP FR	39.37" (1 meter) Wide	ASTM D 6164 ASTM D 5147	Non-Woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® TORCH Smooth	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, smooth surface.
RUBEROID® TORCH Granule	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface.

Product	Dimensions	Test Specification	Product Description
RUBEROID® TORCH PLUS	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, granule surface
RUBEROID® TORCH FR	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Heavy duty, polyester reinforced, coated with fire retardant asphalt modified bitumen membrane, granule surface.
RUBEROID® 170FR TORCH	39.37" (1 meter) Wide	ASTM D 6222 ASTM D 5147	Heavy duty, polyester reinforced, coated with fire retardant asphalt modified bitumen membrane, granule surface.
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®30	39.37" (1 meter) Wide	ASTM D 6163 ASTM D 5147	Non woven fiberglass mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID®30 FR	39.37" (1 meter) Wide	ASTM D 6298 ASTM D 5147	Non woven fiberglass mat coated with fire retardant, polymer modified asphalt and surfaced with mineral granules.
RUBEROID® ULTRACLAD® SBS	39.37" (1 meter) Wide	ASTM D 6163 ASTM D 5147	Woven fiberglass mat coated with Polymer modified asphalt surfaced with aluminum, copper or stainless steel foil.
RUBEROID® Dual FR	39.37" (1 meter) Wide	ASTM D 6164 ASTM D 5147	Non-woven polyester and fiberglass mat coated with file retardant, polymer modified asphalt and surfaced with mineral granules.
GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet	39.37" (1 meter) wide	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules and reflective EnergyCote™ coating.
TOPCOAT® Flashing Grade	1,5 gal.or qt. tubes	TAS 139	Water-based flashing compound
TOPCOAT® Flexseal®	1,5 gal.or 1qt. tube	TAS 139	Solvent based flashing compound for gutters and other detailing
Vent Stacks (metal and plastic)		PA 100(A) ASTM D 1929 ASTM D 635	One-way valve vent used to relieve built-up pressure within the roof system. GAF Vent Stacks are available in metal or plastic.
LeakBuster™ MATRIX™ 304 Non-Fibered Aluminum Roof Coatings	5 gallons	ASTM D2824, Type I	Non-fibered. Aluminum pigmented, asphalt roof coating
GAF Built-Up Roofing Asphalt	100 lb. cartons, bulk	ASTM D312, Types I, II, III and IV	Interply mopping and surfacing asphalt
RUBEROID® MOD Asphalt, Asphalt L & Asphalt P	60 lb. kegs		SEBS modified asphalt

Product	Dimensions	Test Specification	Product Description
TopCoat® Surface Seal SB	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
LeakBuster™ Matrix 715 MB Coating	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
TopCoat® MB+(Matrix 715 MB Coating)	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
LeakBuster™ MATRIX™ 531 WeatherCote™ Elastomeric Flashing Grade	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
TopCoat® Elastomeric Roofing Membrane	5, 55 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
LeakBuster™ Matrix™ 102 SBS Adhesive	5 gallons	ASTM D3019	Cold Applied Modified SBS Asphalt Adhesive
LeakBuster™ Matrix™ 201 Premium SBS Flashing Cement	5 gallons	ASTM D3019	Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.
LeakBuster™ Matrix™ 202 SBS Flashing Cement	5 gallons	ASTM D4586	Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.
LeakBuster™ Matrix™ 203 Plastic Roof Cement	5 gallons	ASTM D4586	Standard Plastic Asphalt Roofing Cement
FireOut™	5, 55 gallons		Low VOC, fire barrier coating
VersaShield®	350 sq. ft roll	ASTM-D 226 4869 Type I, II	Non-Asphaltic Fiberglass-Based Underlayment
VersaShield® FB-1S	350 sq. ft roll	ASTM-D 226 4869 Type I, II	Non-Asphaltic Fiberglass-Based Underlayment
VersaShield® FB-2S	350 sq. ft roll	ASTM-D 226 4869 Type I, II	Non-Asphaltic Fiberglass-Based Underlayment
TOPCOAT® FireShield® SB	5, 55 gallons	ASTM D-412 ASTM D-21-96 ASTM D1475 ASTM E-1644	Elastomeric roofing membrane
Storm Safe (P015 Underlayment)	40″ wide	Proprietary	Synthetic Underlayment

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ PolyIso EnergyGuard™ RA, EnergyGuard™ RN, EnergyGuard™ Ultra	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ Composite EnergyGuard™ Composite RN EnergyGuard™ Composite RA	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.	GAF Materials Corp.
EnergyGuard™ Fiberboard	Fiberboard insulation.	GAF Materials Corp.
EnergyGuard™ Perlite	Perlite insulation board.	GAF Materials Corp.
EnergyGuard™ GAFCANT	Cut perlite board	GAF Materials Corp.
EnergyGuard™ Recover Board	Perlite recover board	GAF Materials Corp.
EnergyGuard™ Tapered Edge Strip	Tapered perlite board	GAF Materials Corp.
EnergyGuard™ High Density Fiberboard	High density wood fiberboard insulation.	GAF Materials Corp.
Wood Fiber	Wood fiber insulation board	Generic
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Dens Deck® Dens Deck Prime® DensDeck DuraGuard™	Water resistant gypsum board	G-P Gypsum Corp.
Securock™	Fiber reinforced roof board	USG

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec NTB	Glass reinforced Nylon insulation fastener for gypsum & CWF decks with barbs.	Various	BMCA
2.	Drill-Tec NTB Plate	Galvalume stress plate	3" round	BMCA
3.	Drill-Tec CR 1.2 Base Sheet Fastener	Base sheet fastening only	Various	BMCA
4.	Drill-Tec™ Lite-Deck Fastener	Pre-assembled fasteners and metal plates.	Fastener: Various lengths Plate: 3" diameter	BMCA
5.	Drill-Tec™ NTB-1HWO Fastener	A glass-filled nylon auger fastener with a 1″ head for gypsum, cementitious wood and LWC.	Fastener: $2^1/_2$″ to 10″ lengths Plate: 2″ or 3″	BMCA
6.	Drill-Tec™ NTB-1HWW Fastener	A glass-filled nylon auger fastener with a 1″ head and locking wire barbs for gypsum, cementitious wood and LWC.	Fastener: $2^1/_2$″ to 10″ lengths Plate: 2″ or 3″	BMCA
7.	Drill-Tec™ Locking Impact Nail	Base Sheet fastener for lightweight concrete, gypsum & tectum decks.	Fastener: Various lengths Plate: 2.7" diameter	BMCA
8.	Twin Loc-Nail	Base sheet fastener with intergrated Plate.	1.8" long w/ 2.7" dia. plate	ES Products, Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corporation	FMRC 1996	Current Insulation Attachment Requirements	01.01.96
Factory Mutual Research Corp.	J.I. 0D0A8.AM	Wind Uplift, FMRC 4470 - PA 114	07.09.97
Factory Mutual Research Corp.	J.I. 2B8A4.AM	Wind Uplift, FMRC 4470 - PA 114	07.02.97
Exterior Research & Design, LLC Trinity Engineering	#4482.10.97-1 #4483.04.97-1	Wind Uplift	06-06-97
IRT-Arcon, Inc.	02-011	Wind Uplift PA 114	02/26/02
IRT-Arcon, Inc.	02-015	Wind Uplift PA 114	03/26/02
Exterior Research & Design, LLC Trinity Engineering	01881.09.03-2	TAS 114D	09/09/03

APPROVED ASSEMBLIES

Membrane Type: APP/SBS Heat Weld

Deck Type 6I: Poured Gypsum, Insulated

Deck Description: Poured Gypsum Concrete

System Type A(1): Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA **Minimum 1.2" thick**	**N/A**	**N/A**
EnergyGuard™ PolyIso, EnergyGuard™ RA, RN, Ultra **Minimum 1.3" thick**	**N/A**	**N/A**
EnergyGuard, EnergyGuard™ Composite, EnergyGuard™ RA, EnergyGuard™ RN **Minimum 1.4" thick**	**N/A**	**N/A**
EnergyGuard™ Composite, EnergyGuard™ RA, RA **Minimum 1.5" thick**	**N/A**	**N/A**
EnergyGuard™ RA, EnergyGuard™ PolyIso **Minimum 1.75" thick**	**N/A**	**N/A**
EnergyGuard™ High Density Fiberboard, EnergyGuard™ Fiberboard, EnergyGuard™ Recover Board, Gypsum Board, EnergyGuard™ Perlite **Minimum ½" thick**	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® STRATAVENT® Eliminator Perforated laid dry or a layer of EnergyGuard™ Perlite or wood fiber overlay board on all Polyisocyanurate applications.

Anchor sheet: One ply of STRATAVENT® Eliminator Perforated laid dry, GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth mechanically fastened as described below:

Fastening Options: Drill-Tec CR 1.2" Base Sheet fasteners at a 4" side lap 7" o.c. and in three rows staggered in the center of the sheet 7" o.c.;
(Maximum Design Pressure –52.5 psf, See General Limitation #7)

Drill-Tec™ Locking Impact Nail or ES Twin Loc-Nail fasteners at a 4" side lap 9" o.c. and in two rows staggered in the center of the sheet 12" o.c.;
(Maximum Design Pressure –75 psf, See General Limitation #7)

Base Sheet: One or more plies of GAFGLAS® Ply 4, STRATAVENT® Eliminator Perforated laid dry, GAFGLAS® FlexPly™6 or GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth, RUBEROID® Modified Base Sheet adhered to the insulation in a full mopping of an approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. (See General Limitation #4)

Ply Sheet: (Optional, required if used with RUBEROID® 20 or perforated STRATAVENT®) one or more plies of GAFGLAS® PLY 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80, RUBEROID® Mop Smooth or RUBEROID® 20 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One or more plies of RUBEROID® Torch Smooth, RUBEROID® Torch Granule, RUBEROID® Torch Plus Granule or RUBEROID® Torch FR torch applied according to manufacturer's application instructions
Or
One or more plies of RUBEROID® SBS Heat-Weld™ PLUS, RUBEROID® SBS Heat-Weld™ PLUS FR, RUBEROID® SBS Heat-Weld™ 170 FR, RUBEROID® SBS Heat-Weld™, RUBEROID® SBS Heat-Weld™ Smooth, RUBEROID® UltraClad™ SBS and RUBEROID® SBS Heat-Weld™ 25 applied according to manufacturer's application instructions.

Surfacing: (Optional, required if RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth is top membrane)

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715 , Leak Buster™ Matrix™ 322, TOPCOAT® MB+, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design Pressure: See Fastening above.

Membrane Type: SBS

Deck Type 6I: Poured Gypsum, Insulated

Deck Description: Poured Gypsum Concrete

System Type A(2): Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
EnergyGuard™ RA Minimum 1.2" thick	**N/A**	**N/A**
EnergyGuard™ PolyIso, EnergyGuard™ RA Minimum 1.3" thick	**N/A**	**N/A**
EnergyGuard™, EnergyGuard™ RN, EnergyGuard™ Composite Minimum 1.4" thick	**N/A**	**N/A**
EnergyGuard™ RA, EnergyGuard™ Composite, EnergyGuard™ Composite RA, RN Minimum 1.5" thick	**N/A**	**N/A**
EnergyGuard™ RA Minimum 1.75" thick	**N/A**	**N/A**
Gypsum Board, EnergyGuard™ Fiberboard, EnergyGuard™ High Density Fiberboard, EnergyGuard™ Recover Board, EnergyGuard™ Perlite Minimum ½" thick	**N/A**	**N/A**

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Dens Deck®, Dens Deck Prime®, DensDeck DuraGuard™, Securock™ Minimum ¼" thick	**N/A**	**N/A**
EnergyGuard™ High Density Fiberboard, EnergyGuard™ Fiberboard, EnergyGuard™ Recover Board, EnergyGuard™ Perlite Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® STRATAVENT® Eliminator Perforated laid dry or a layer of EnergyGuard™ Perlite or wood fiber overlay board on all Polyisocyanurate applications.

Anchor sheet:	One ply of STRATAVENT® Eliminator Perforated laid dry, GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth mechanically fastened as described below:
Fastening Options:	Drill-Tec CR 1.2" Base Sheet fasteners at a 4" side lap 7" o.c. and in three rows staggered in the center of the sheet 7" o.c.; ***(Maximum Design Pressure –52.5 psf, See General Limitation #7)***
	Drill-Tec™ Locking Impact Nail or ES Twin Loc-Nail fasteners at a 4" side lap 9" o.c. and in two rows staggered in the center of the sheet 12" o.c.; ***(Maximum Design Pressure –75 psf, See General Limitation #7)***
Base Sheet:	One ply of STRATAVENT® Eliminator™ Perforated laid dry, GAFGLAS® FlexPly™6 or GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth, RUBEROID® Modified Base Sheet or RUBEROID® 20 adhered to the insulation in a full mopping of an approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. (See General Limitation #4).
Ply Sheet:	(Optional), one or more plies of GAFGLAS® PLY 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80, RUBEROID® MOP Smooth or RUBEROID® 20 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One or more plies of RUBEROID® MOP Smooth, RUBEROID®Mop 170 FR, RUBEROID®Mop Granule, RUBEROID® Mop Plus Granule, RUBEROID®20, RUBEROID®30 or RUBEROID®30 FR or RUBEROID®Mop FR, RUBEROID® Dual FR or RUBEROID® UltraClad™ SBS in adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or, One or more plies of RUBEROID® MOP Smooth, RUBEROID® Mop Granule, RUBEROID® Mop 170 FR, RUBEROID® Mop Plus Granule, RUBEROID® 30, RUBEROID® 30 FR, RUBEROID® Mop FR or RUBEROID® Dual FR in RUBEROID® Modified Bitumen Adhesive at an application rate of 1-2 gal./sq.

Surfacing: (Optional, required if RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth is top membrane)

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715 , Leak Buster™ Matrix™ 322, TOPCOAT® MB+, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design Pressure: See Fastening above.

Membrane Type: APP/SBS Heat Weld

Deck Type 6: Poured Gypsum, Non-insulated

Deck Description: Poured gypsum concrete.

System Type E(1): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base sheet: One ply of STRATAVENT® Eliminator Perforated laid dry, GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth mechanically fastened as described below:

Fastening Options: Drill-Tec CR 1.2" Base Sheet fasteners at a 4" side lap 7" o.c. and in three rows staggered in the center of the sheet 7" o.c.;
(Maximum Design Pressure –52.5 psf, See General Limitation #7)

Drill-Tec™ Locking Impact Nail or ES Twin Loc-Nail fasteners at a 4" side lap 9" o.c. and in two rows staggered in the center of the sheet 12" o.c.;
(Maximum Design Pressure –75 psf, See General Limitation #7)

Ply Sheet: (Optional, required if used with RUBEROID® 20 or perforated STRATAVENT®) one or more plies of GAFGLAS® PLY 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80, RUBEROID® Mop Smooth or RUBEROID® 20 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One or more plies of RUBEROID® Torch Smooth, RUBEROID® Torch Granule, RUBEROID® Torch Plus Granule or RUBEROID® Torch FR torch applied according to manufacturer's application instructions
Or
One or more plies of RUBEROID® SBS Heat-Weld™ PLUS, RUBEROID® SBS Heat-Weld™ PLUS FR, RUBEROID® SBS Heat-Weld™ 170 FR, RUBEROID® SBS Heat-Weld™, RUBEROID® SBS Heat-Weld™ Smooth, RUBEROID® UltraClad™ SBS and RUBEROID® SBS Heat-Weld™ 25 applied according to manufacturer's application instructions.

Surfacing: (Optional, required if RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth is top membrane)

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715 , Leak Buster™ Matrix™ 322, TOPCOAT® MB+, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design Pressure: See Fastening above.

Membrane Type: SBS

Deck Type 6: Poured Gypsum, Non-insulated

Deck Description: Poured gypsum concrete.

System Type E(2): Base sheet mechanically fastened.

All General and System Limitations shall apply.

Base sheet: One ply of STRATAVENT® Eliminator Perforated laid dry, GAFGLAS® #75, GAFGLAS® #80 ULTIMA™ Base Sheet, RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® HW 25, RUBEROID® HW Smooth mechanically fastened as described below:

Fastening Options: Drill-Tec CR 1.2" Base Sheet fasteners at a 4" side lap 7" o.c. and in three rows staggered in the center of the sheet 7" o.c.;
(Maximum Design Pressure –52.5 psf, See General Limitation #7)

Drill-Tec™ Locking Impact Nail or ES Twin Loc-Nail fasteners at a 4" side lap 9" o.c. and in two rows staggered in the center of the sheet 12" o.c.;
(Maximum Design Pressure –75 psf, See General Limitation #7)

Ply Sheet: (Optional), one or more plies of GAFGLAS® PLY 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80, RUBEROID® MOP Smooth or RUBEROID® 20 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One or more plies of RUBEROID® MOP Smooth, RUBEROID® Mop 170 FR, RUBEROID® Mop Granule, RUBEROID® Mop Plus Granule, RUBEROID® 20, RUBEROID® 30 or RUBEROID® 30 FR or RUBEROID® Mop FR, RUBEROID® Dual FR or RUBEROID® UltraClad™ SBS in adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or,
One or more plies of RUBEROID® MOP Smooth, RUBEROID® Mop Granule, RUBEROID® Mop 170 FR, RUBEROID® Mop Plus Granule, RUBEROID® 30, RUBEROID® 30 FR, RUBEROID® Mop FR or RUBEROID® Dual FR in RUBEROID® Modified Bitumen Adhesive at an application rate of 1-2 gal./sq.

Surfacing: (Optional, required if RUBEROID® Mop Smooth, RUBEROID® 20, RUBEROID® SBS Heat-Weld™ 25 or RUBEROID® SBS Heat-Weld™ Smooth is top membrane)

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715 , Leak Buster™ Matrix™ 322, TOPCOAT® MB+, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design Pressure: See Fastening above.

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. 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