



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 Conventional Built-Up Roof System for Lightweight Concrete Deck

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. 08-0221.05 and consists of pages 1 through 17.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 08-0922.03
Expiration Date: 11/14/13
Approval Date: 03/31/10
Page 1 of 17

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR
Deck Type: Lightweight Concrete
Maximum Design Pressure -112.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
LeakBuster™ Matrix™ 102 SBS Adhesive	5 gallons	ASTM D3019	Cold Applied Modified SEBS Asphalt Adhesive
LeakBuster™ Matrix™ 103 Cold Process Adhesive	5 gallons	ASTM D3019	Cold Applied 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
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.
LeakBuster™ Matrix 213 Gun Grade Plastic Cement	5 gallons	ASTM D4586	Standard Plastic Asphalt Roofing Cement Caulk Grade.
LeakBuster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating	5 gallons	ASTM D 2824	Fibered aluminum coating.
LeakBuster™ Matrix™ 304 Non Fibered Aluminum Roof Coating	5 gallons	ASTM D2824, Type I	Non-fibered aluminum pigmented, asphalt roof coating.
Leak Buster™ Matrix™ 305 Fibered Asphalt Emulsion	5 gallons	ASTM 1227	Surface coating for smooth surfaced roofs.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
LeakBuster™ Matrix™ 531 Weathercote	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
TOPCOAT® Surface Seal SB	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
TOPCOAT® MB Plus	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
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
RUBEROID® Modified Bitumen Adhesive	5 gallons	ASTM D 3019 Type III	Fiber reinforced, rubberized Adhesive
GAF Mineral Shield® Granules	60 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.
GAFGLAS® Ply 4	39.37" (1 meter) wide	ASTM D 2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) wide	ASTM D 2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® #75 Base Sheet	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® 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 D 4897 D 3672	Fiberglass base sheet impregnated and 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.
GAFGLAS® STRATAVENT® Eliminator™ Nailable	39.37" (1 meter) wide	ASTM D 4897 D 3672	Fiberglass base sheet impregnated and 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.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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® 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® 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® 20	39.37" (1 meter) wide	ASTM D 6163 ASTM D 5147	SBS modified asphalt base sheet and interply sheet reinforce with a glass fiber mat.
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	39.37" (1 meter) wide	ASTM D 6164 ASTM D 5147	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
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 5147	Heavy duty, polyester reinforced, asphalt modified bitumen membrane, smooth surface.
RUBEROID® TORCH Granule	39.37" (1 meter) wide	ASTM D 5147	Asphalt impregnated, coated felt, surfaced with mineral granule.
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® 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.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
RUBEROID® 30 FR	39.37" (1 meter) wide	ASTM D 6163 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 6298 ASTM D 5147	Woven fiberglass mat coated with Polymer modified asphalt and 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 fire retardant, polymer modified asphalt and surfaced with mineral granules.
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.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ RA PolyIso Insulation, EnergyGuard™ RN PolyIso Insulation	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard™ Composite, EnergyGuard™ RA Composite	Polyisocyanurate foam insulation with high density fiberboard or perlite insulation.	GAF Materials Corp.
EnergyGuard™ Fiberboard	Fiberboard insulation.	GAF Materials Corp.
EnergyGuard™ Perlite	Perlite insulation board.	GAF Materials Corp.
EnergyGuard™ Perlite Cant Strip	Cut perlite board	GAF Materials Corp.
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF Materials Corp.
EnergyGuard™ Perlite Tapered Edge Strip	Tapered perlite board	GAF Materials Corp.
Structodeck®	Wood fiber insulation board	Blue Ridge Fiber Board
Structodek® TD	Flame Resistant High Density Wood Fiber board.	Blue Ridge Fiber Board
Dens Deck®	High Density Fire Resistant Insulation Boards	Georgia Pacific
Dens Deck® Prime	High Density Fire Resistant Insulation Boards	Georgia Pacific
Dens Deck® DuraGuard™	High Density Fire Resistant Insulation Boards	Georgia Pacific
SECUROCK®	High Density Fire Resistant Insulation Boards	USG



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec™ #12 Fastener	Insulation fastener for steel & wood decks.	various	GAF Materials Corp.
2.	Drill-Tec™ ASAP	Pre-assembled GAFTITE Fasteners and metal and plastic plates.	various	GAF Materials Corp.
3.	Drill-Tec™ CR Base Sheet Fastener and Plate	Base sheet fastening assembly.	various	GAF Materials Corp.
4.	Drill-Tec™ Galvalume Plates	Round galvalume stress plates.	3" and 3 ½"	GAF Materials Corp.
5.	Drill-Tec™ Polypropylene Plates	Round polypropylene stress plates.	3" and 3 ½"	GAF Materials Corp.
6.	Drill-Tec™ Locking Impact Nail	Base Sheet fastener for lightweight concrete, Gypsum & Tectum decks.	Fastener: Various lengths Plate: 2.7" diameter	GAF Materials Corp
7.	Drill-Tec™ AccuTrac Plate Steel Plates	Square galvalume stress plates.	3 x 3	GAF Materials Corp
8.	Drill-Tec™ Plastic	Round polypropylene stress plates.	Plate Diameter: 3" and 3 ½"	GAF Materials Corp.
9.	Drill-Tec™ CD-10	Insulation fastener and Base Ply fastener for concrete decks.	various	GAF Materials Corp.
10.	Drill-Tec™ #14 Fastener	Insulation fastener for steel decks.	various	GAF Materials Corp.
11.	Drill-Tec™ #15 XHD Fastener	Insulation fastener for steel decks.	various	GAF Materials Corp.



APPROVED SURFACING/COATING OPTIONS:

TABLE 4

System Number	Application
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.	Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
3.	Leak Buster™ Matrix™ 322, TOPCOAT® MB Plus, TOPCOAT® FireShield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
4.	EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
5.	TOPCOAT® Surface Seal, TOPCOAT® FireShield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.
6.	Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corp.	FMRC 1996	Current Insulation Attachment Requirements	01.01.96
	J.I. 2B8A4.AM	Wind Uplift	07.02.97
	J.I. 3B9Q1.AM	FMRC 44704	01.08.98
	J.I. 0D0A8.AM		07.09.99
	J.I. 0Y9Q5.AM	Wind Uplift	04.01.98
		FMRC 4470 - TAS 114	
IRT-Arcon, Inc.	3017250	4470	05.05.04
	00001 & 00002	Wind Uplift	04.05.00
	01-0136	TAS 114	12.18.01
Exterior Research & Design, LLC	4674.11.01-1	TAS 114	11.21.01
	J.I. 0D1A8.AM	FMRC 4470 - TAS 114	07.29.94
Trinity ERD	G6850.08.07-1	ASTM D 3909	08.13.07



APPROVED ASSEMBLIES

Deck Type : Lightweight Concrete, Insulated

Deck Description: Cellular or Aggregate Lightweight Concrete

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

Deck: 18-22 ga steel deck shall be secured 6” o.c. to structural supports spaced a maximum of 5 ft on centers with 5/8” puddle welds.

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/ft²
EnergyGuard™ PolyIso Insulation, EnergyGuard™ RA PolyIso Insulation, EnergyGuard™ RN PolyIso Insulation, EnergyGuard™ Composite, EnergyGuard RA Composite Minimum 1.5” thick	N/A	N/A
EnergyGuard™ Wood Fiber, EnergyGuard™ Recover Board, High Density Wood Fiber, EnergyGuard™ Fiberboard, EnergyGuard™ Perlite® Roof Insulation, Dens Deck®, Structodeck®, SECUROCK® Minimum 1/2” 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 ft². 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 insulation applications.

Anchor sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, STRATAVENT® Eliminator™ Nailable base sheet or RUBEROID® 20 mechanically fastened as described below;

Fasteners: Drill-Tec™ CR-Base Sheet Fasteners at a fastener spacing of 9” o.c. at the 2” wide side laps and 9” o.c. in two equally spaced rows in the field of the base sheet.
Or
Drill-Tec™ CR-Base Sheet Fasteners at a fastener spacing of 12” o.c. at the 2” wide side laps and 9” o.c. in three equally spaced rows in the field of the base sheet.

Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® STRATAVENT® Eliminator™ Perforated, GAFGLAS® #80 Ultima™ Base Sheet, RUBEROID® 20, RUBEROID® Modified Base Sheet or GAFGLAS® #75 Base Sheet adhered to the insulation in a full mopping of an approved asphalt at an application rate of 25 lbs./sq. ± 15% or adhered in a strip or spot mopping of an approved asphalt; see General Limitation #4.



- Ply Sheet: One or more plies GAFGLAS® PLY 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80 Ultima, RUBEROID® Mop Smooth or RUBEROID® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -45 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Insulated

Deck Description: Cellular or Aggregate Lightweight Concrete

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

Deck: 18-22 ga steel deck shall be secured 6" o.c. to structural supports spaced a maximum of 5 ft on centers with 5/8" puddle welds.

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ PolyIso Insulation, EnergyGuard™ RA PolyIso Insulation ,EnergyGuard™ RN PolyIso Insulation, EnergyGuard™ Composite, EnergyGuard RA Composite Minimum 1½" thick	N/A	N/A
EnergyGuard™ Wood Fiber, EnergyGuard™ Perlite Recover Board, High Density Wood Fiber, EnergyGuard™ Fiberboard, EnergyGuard™ Perlite® Roof Insulation, Dens Deck®, Structodeck®, SECUROCK® 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 ft². 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 Roof Insulation or wood fiber overlay board on all polyisocyanurate insulation applications.

Anchor Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® STRATAVENT® Eliminator™ Nailable mechanically fastened as described below.

Fastening: Drill-Tec™ CR-Base Sheet Fasteners spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.

Base Sheet: One ply of GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80 Ultima™ Base Sheet, RUBEROID® 20, RUBEROID® Modified Base Sheet or GAFGLAS® #75 Base Sheet adhered to the insulation in a full mopping of an approved asphalt at an application rate of 25 lbs./sq. ± 15% or adhered in a strip or spot mopping of an approved asphalt; see General Limitation #4.

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

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.



Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -75 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Cellular or aggregate lightweight concrete

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

Deck: Structural Concrete or 18-22 ga steel deck shall be secured 6" o.c. to structural supports spaced a maximum of 5 ft on centers with 5/8" puddle welds.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® STRATAVENT® Eliminator™ Nailable mechanically fastened as described below.

Fasteners: Drill-Tec™ CR-Base Sheet Fasteners at a fastener spacing of 9" o.c. at the 2" wide side laps and 9" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -45 psf, See General Limitation #7)
Or
Drill-Tec™ CR-Base Sheet Fasteners at a fastener spacing of 12" o.c. at the 2" wide side laps and 9" o.c. in three equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -45 psf, See General Limitation #7)
Or
Drill-Tec™ Locking Impact Nail fastened at a spacing of 9" o.c. at the 4" wide side laps and 9" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -60 psf, See General Limitation #7)
Or
Drill-Tec™ CR-Base Sheet Fasteners spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.
(Maximum Design Pressure -75 psf, See General Limitation #7)

Ply Sheet: Two or more plies of GAFGLAS® PLY 4 or GAFGLAS® FlexPly™ 6 ply sheet
Or
One or more plies of GAFGLAS® #80 Ultima™, RUBEROID® Mop Smooth or RUBEROID® 20 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq..

Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design
Pressure: See Fastening Above



Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Celcore Lightweight Insulating Concrete

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

Deck : Structural Concrete deck or Min. 22 ga., Type B steel decking over 1/4" thick steel supports spaced max. 6 ft o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Steel deck is covered with a Celcore lightweight concrete pour consisting of a 1/8" slurry coat, min. 2" thick Holey Board and a min. 2" thick top coat.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet or GAFGLAS® STRATAVENT® Eliminator™ Nailable mechanically fastened as described below.

Fasteners: Drill-Tec™ CR 1.7 Base Sheet Fasteners and plates fastened at a spacing of 7" o.c. at the 3" wide side laps and 7" o.c. in two equally spaced rows in the field of the base sheet.

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

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -60 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell Lightweight Insulating Concrete

System Type E(3):Base sheet mechanically attached.

Deck : Min. 22 ga., Type B steel decking over ¼” thick steel supports spaced max. 6 ft o.c. attached 6” o.c. using min. 5/8” diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 18” o.c. using Traxx/1 fasteners. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8” slurry coat, min. 2” thick Holey Board and a min. 2” thick top coat.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® #80 Ultima™ Base Sheet mechanically fastened as described below.

Fasteners: Drill-Tec™ CR 1.7 Base Sheet Fasteners and plates fastened at a spacing of 7” o.c. at the 3" wide side laps and 7” o.c. in two equally spaced rows in the field of the base sheet.

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

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: Required if no Cap Sheet is used. Per manufacturer’s instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -82.5 psf (See General Limitation #7)



Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell Lightweight Insulating Concrete

System Type E(4): Base sheet mechanically attached.

Deck : Structural Concrete Deck or Min. 22 ga., Type B steel decking over 1/4" thick steel supports spaced max. 5 ft o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8" slurry coat, min. 1" thick Holey Board and a min. 2" thick top coat.

All General and System Limitations shall apply.

Fireboard: (Optional) Fireboard min 1/4" Dens Deck™ or minimum 1/4" Securock® loose laid.

Base Sheet: Install one ply of RUBEROID® Mop Smooth, RUBEROID® Mop Granule, RUBEROID® SBS Heat-Weld Smooth or RUBEROID® SBS Heat-Weld Granule with granular surfaces faced down with 4" heat welded side lap and mechanically fastened as described below.

Fasteners: Drill-Tec™ #12 Fasteners and 3" plates fastened through lightweight concrete to the structural deck at a spacing of 12" o.c. at the 4" wide side laps and 12" o.c. in two equally spaced rows in the field of the base sheet.

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

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -97.5 psf (See General Limitation #7)



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Deck Type : Lightweight Concrete, Non-insulated

Deck Description: Elastizell (II Special Mix min 350 psi) with Zell-Crete Lightweight Insulating Concrete

System Type F(1):Base sheet adhered.

Deck : Structural Concrete Deck or Min. 22 ga., Type B steel decking over ¼" thick steel supports spaced max. 5 ft o.c. attached 6" o.c. using min. 5/8" diameter puddle welds with washers or Traxx/5 fasteners. Deck side laps are attached 24" o.c. using Traxx/1 fasteners. Deck surface shall be treated with Zell-Erator and allowed to dry prior to pouring Lightweight concrete. Steel deck is covered with a Range II Elastizell lightweight concrete pour consisting of a 1/8" slurry coat, min. 2" thick Holey Board and a min. 2" thick top coat. Lightweight insulating deck shall be primed with ASTM D 41 at an application rate of 1-2 gal/sq. prior to the installation of membrane.

All General and System Limitations shall apply.

Base Sheet: Install one ply of GAFGLAS® Stratavent® Eliminator™ Perforated loose laid dry over the deck adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

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

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: Required if no Cap Sheet is used. Per manufacturer's instructions apply any surfacing/coating option listed in Table 4.

Note: Chosen components must be applied according to manufacturer's application instructions.

Maximum Design

Pressure: -112.5 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, 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.
3. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 250 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. 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



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