



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

GAF

1 Campus Drive
Parsippany, NJ 07054

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF Conventional Built-Up-Roof System for 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. 13-0930.08 and consists of pages 1 through 39.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 15-0129.26
Expiration Date: 11/06/18
Approval Date: 04/23/15
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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR
Material: Fiberglass
Deck Type: Concrete
Maximum Design Pressure: -457.5 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>
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly 6 5L	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating. Used for five ply applications.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II asphalt impregnated and coated glass mat base sheet.
GAFGLAS® Stratavent® Eliminator Perforated Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	Fiberglass base sheet coated on both sides with asphalt and factory perforated. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
GAFGLAS® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
Tri-Ply® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGLAS® EnergyCap™ BUR Mineral Surface Cap Sheet	39.37" (1 meter) wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules and factory applied EnergyCote™
Ruberoid® 20	39.37" (1 meter) Wide	ASTM D6163	SBS polymer-modified asphalt base sheet reinforced with a glass fiber mat.



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>
Ruberoid® Mop Smooth	39.37” (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Ruberoid® Mop Smooth 1.5	39.37” (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Ruberoid® Dual Smooth	39.37” (1 meter) Wide	ASTM D6162	Fiberglass/polyester/composite mat coated with an SBS polymer-modified asphalt smooth-surfaced and used only as a base/ply sheet.
Ruberoid® Mop Plus Smooth	39.37” (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Matrix™ 307 Premium Asphalt Primer	3, 5, 55 gallons	ASTM D41	Asphalt concrete primer used to promote adhesion of all types of asphalt based roofing materials.
Topcoat® Membrane	1, 5 or 55 gallons	ASTM D6083	Acrylic, water based elastomeric membrane system designed to protect various types of roof surfaces.
Topcoat® Surface Seal SB	1, 5, 55 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant used to protect and restore aged roof surfaces and to increase roof reflectivity.
Topcoat® MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer used to block asphalt bleed-through.
Topcoat® FlexSeal	1, 5 gallons or 1 qt. tube	Proprietary	Solvent based flashing compound for gutters and other detailing.



APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF.
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Tapered PolyIso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Composite Polyiso Insulation.	Polyisocyanurate foam insulation with high density fiberboard or Permalite perlite insulation.	GAF
EnergyGuard™ Perlite Roof Insulation	Perlite insulation board	GAF
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF
Structodek® High Density Fiberboard	High density fiber board	Blue Ridge Fiberboard, Inc.
Securock® Gypsum-Fiber Roof Board	Gypsum board	USG
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® Prime® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® DuraGuard® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	N/A	N/A	N/A	N/A



EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date	
Factory Mutual Research Corp.	2B8A4.AM	FM 4470	07/02/97	
	3B9Q1.AM	FM 4470	01/08/98	
	0D0A8.AM	FM 4470	07/09/99	
	0D1A8.AM	FM 4470	07/29/94	
	0Y9Q5.AM	FM 4470	04/01/98	
	3017250	FM 4470	05/05/04	
	3036980	FM 4470	08/14/09	
	3035140	FM 4470	08/10/09	
	3023458	FM 4470	07/18/06	
	3010215	FM 4470	04/01/01	
	3034312	FM 4470	04/09/09	
	3042887	FM 4470	11/14/11	
	3032856	FM 4470	11/24/08	
	3040738	FM 4470	05/18/12	
	3046388	FM 4470	09/24/12	
	3042887	FM 4470	11/14/11	
	Underwriters Laboratories, Inc. Trinity ERD	R1306	UL 790	07/22/13
		G6850.08.07-1	ASTM D3909	08/13/07
		G34140.04.11-4	ASTM D4601	04/25/11
G30250.02.10-3-R1		ASTM D3909	11/26/12	
G40630.01.14-2A-1		ASTM D6164	01/07/14	
G34140.04.11-5-R1		ASTM D4897	10/18/13	
G34140.04.11-2		ASTM D6163	04/25/11	
C8500SC.11.07		ASTM D6862	11/30/07	
G31360.03.10		ASTM D6164	03/31/10	
G33470.01.11		ASTM D6164	01/13/11	
PRI Construction Materials Technologies LLC		GAF-314-02-01	ASTM D2178	08/23/11
	GAF-315-02-01	ASTM D2178	08/23/11	
	GAF-082-02-01	ASTM D6083	05/09/06	
	GAF-084-02-01	ASTM D6083	05/09/06	
	GAF-369-02-01	ASTM D1289	10/23/12	
	GAF-464-02-01	ASTM D1289	02/06/14	
	GAF-499-02-01	ASTM D6083	03/12/14	
	GAF-245-02-01	ASTM D6083	05/07/06	
	GAF-500-02-01	ASTM D6083	03/12/14	
Atlantic & Caribbean Roof Consulting. LLC Momentum Technologies, Inc	11-048	TAS 114-D	08/10/11	
	11-049	TAS 114-D	08/10/11	
	AX04C9A	ASTM D6162	06/05/09	



APPROVED ASSEMBLIES:

Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(1): Insulation layer adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.75" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® Mineral Surfaced Cap Sheet or (Optional) 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gals./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -140 psf. (See General Limitation #9.)



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Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(2): Insulation layer adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board Minimum 1" thick	N/A	N/A
Structodek® High Density Fiber Board, DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board Securock® Gypsum-Fiber Roof Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® Mineral Surfaced Cap Sheet or (Optional) 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat[®] Membrane, Topcoat[®] MB Plus (to be used as a primer with Topcoat[®] Membrane) or Topcoat[®] Surface Seal SB applied at 1 to 1.5 gals./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -270 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(3): Insulation layer adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 2” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board, Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -322.5 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(4): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board, Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board Minimum 0.75" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -135 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(5): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board, Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -125 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(6): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Structodek® High Density Fiber Board, Securock® Gypsum-Fiber Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). Apply layers of insulation in a full mopping of any approved mopping 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. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -140 psf. (See General Limitation #9.)



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Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(7): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.25" thick	N/A	N/A

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Structodek® High Density Fiber Board, Securock® Gypsum-Fiber Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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 used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -162.5 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(8): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board, Securock® Gypsum-Fiber Roof Board, DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board Minimum 0.75" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet. All insulation shall be adhered to the deck in full mopping of approved 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 used as a top layer shall be placed with the polyisocyanurate side facing down.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat[®] Membrane, Topcoat[®] MB Plus (to be used as a primer with Topcoat[®] Membrane) or Topcoat[®] Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -157.5 psf. (See General Limitation #9.)



Membrane Type: BUR
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(9): Anchor sheet adhered with approved asphalt; all layers of insulation adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, Minimum 1” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board, Securock® Gypsum-Fiber Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). 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.

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 Venting Base Sheet laid dry or a layer of EnergyGuard Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate insulation applications.

Anchor Sheet: (Optional) Install one or ply of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to primed deck adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Base Sheet: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the insulated substrate. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.
 Or
 GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet loose laid dry, followed by a mopped ply sheet listed below.



Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

**Cap Sheet:
(Optional)** One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -90 psf. (See General Limitation #9.)



Membrane Type: BUR
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(10): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ RA Polyiso Insulation Minimum 1.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck® DuraGuard Roof Board, DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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.

Base Sheet: GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet loose laid dry.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -187.5 psf. (See General Limitation #9)



Membrane Type: BUR
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(11): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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.

Base Sheet: GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet, loose laid dry.
Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.
Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® Mineral Surfaced Cap Sheet or (Optional) 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design Pressure: -240 psf. (See General Limitation #9)



Membrane Type: BUR

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(12): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Tapered Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation, EnergyGuard™ RN Tapered Polyiso Insulation, Minimum 1.5” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Recovery Board, Structodek® High Density Fiberboard, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum 0.75” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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.

Base Sheet: Install or more plies of GAFGLAS® #75 Base Sheet or Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth adhered with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: Any two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -172.5 psf. with **EnergyGuard™ Perlite Recovery Board** (See General Limitation #9.)
 -90 psf. with **Structodek® or EnergyGuard™ Perlite Roof Insulation** (See General Limitation #9.)



Membrane Type: BUR
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(13): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 2” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). Base insulation layer shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft², OlyBond 500® Adhesive, OlyBond 500® Green Adhesive or LRF Adhesive M. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Securock® Gypsum-Fiber Roof Board Minimum 0.75” thick	N/A	N/A

Note: Top Insulation adhered to the base insulation in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft², OlyBond 500® Adhesive, OlyBond 500® Green Adhesive or LRF Adhesive M. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth adhered with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions and broomed in.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -225 psf. (See General Limitation #9)



Membrane Type: BUR
Deck Type 2I: Structural Concrete, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(14): Insulation layers adhered with approved asphalt.

All General and System limitations apply

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). One or more layers of insulation layers shall be adhered to the deck or optional vapor barrier (when present) in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² per layer; with a maximum 12 inch insulation thickness. The base layer may be flat profiled or tapered. Intermediate layers (optional) are flat profiled when present. The top layer (optional) may be either flat profiled or tapered when present. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Fasteners (Table 3)	Fastener Density/ft ²
Structodek® High Density Fiberboard, EnergyGuard™ Perlite Recover Board Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum 0.75” thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.25” thick	N/A	N/A

Note: Top Insulation Layer is fully adhere in hot asphalt applied within the EVT range and at a rate of 20-25 lbs./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: Install one or more plies of GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, (Optional) GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.



**Cap Sheet:
(Optional)**

One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing:

Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -150 psf. (See General Limitation #9.)



Membrane Type: BUR
Deck Type 2I: Structural Concrete, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(15): Insulation layers adhered with approved asphalt.

All General and System limitations apply

Vapor Barrier: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). One or more layers of insulation layers shall be adhered to the deck or optional vapor barrier (when present) in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² per layer; with a maximum 12 inch insulation thickness. The base layer may be flat profiled or tapered. Intermediate layers (optional) are flat profiled when present. The top layer (optional) may be either flat profiled or tapered when present. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Fasteners (Table 3)	Fastener Density/ft²
Structodek® High Density Fiberboard, EnergyGuard™ Perlite Recover Board Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum 0.75” thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.25” thick	N/A	N/A

Note: Top Insulation Layer is fully adhere in hot asphalt at applied within the EVT range and at a rate of 20-25 lbs./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: Install one or more plies of GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.



Cap Sheet: Apply a flood coat of hot asphalt applied at 60 lbs./sq. followed by gravel applied at 400 lbs./sq. or slag applied at a rate of 300 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
2. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -150 psf. (See General Limitation #9.)



Membrane Type: BUR
Deck Type 2I: Structural Concrete, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(16): Insulation layers adhered with approved asphalt.

All General and System limitations apply

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). One or more layers of insulation layers shall be adhered to the deck or optional vapor barrier (when present) in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² per layer; with a maximum 12 inch insulation thickness. The base layer may be flat profiled or tapered. Intermediate layers (optional) are flat profiled when present. The top layer (optional) may be either flat profiled or tapered when present. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Fasteners (Table 3)	Fastener Density/ft ²
Structodek® High Density Fiberboard, EnergyGuard™ Perlite Recover Board Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum 0.75” thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.25” thick	N/A	N/A

Note: Top Insulation Layer is fully adhered in hot asphalt applied within the EVT range and at a rate of 20-25 lbs./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Ply Sheet: Five plies of GAFGLAS® FlexPly™ 6 5L adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Or

Three or four plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: Apply a flood coat of hot asphalt applied at 60 lbs./sq. followed by gravel applied at 400 lbs./sq. or slag applied at a rate of 300 lbs./sq.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
2. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -150 psf. (See General Limitation #9.)



Membrane Type: BUR
Deck Type 2I: Structural Concrete, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A (17): Insulation layers adhered with approved asphalt.

All General and System limitations apply

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Tapered Polyiso Insulation Minimum 0.5” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). One or more layers of insulation layers shall be adhered to the deck or optional vapor barrier (when present) in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² per layer; with a maximum 12 inch insulation thickness. The base layer may be flat profiled or tapered. Intermediate layers (optional) are flat profiled when present. The top layer (optional) may be either flat profiled or tapered when present. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Fasteners (Table 3)	Fastener Density/ft²
Structodek® High Density Fiberboard, EnergyGuard™ Perlite Recover Board Minimum 0.5” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum 0.75” thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Roof Board, DensDeck® DuraGuard® Roof Board, DensDeck® Prime® Roof Board Minimum 0.25” thick	N/A	N/A

Note: Top Insulation Layer is fully adhere in hot asphalt at applied within the EVT range and at a rate of 20-25 lbs./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: Over a primed concrete deck (when optional vapor barrier is not present) one ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet loose laid dry.
Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.



Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

OR

Apply a flood coat of hot asphalt applied within the EVT range and at a rate of 60 lbs./sq. followed by gravel applied at 400 lbs./sq. or slag applied at a rate of 300 lbs./sq.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

1. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
2. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -150 psf. (See General Limitation #9)



Membrane Type: BUR
Deck Type 3I: Concrete Decks, Insulated
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(18): Insulation layers adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: (Optional) Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1” thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present). All insulation shall be adhered to the deck in full mopping of approved 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.

Base Sheet: GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet, loose laid dry.
Ply Sheet: Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.
Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer’s instructions.

Maximum Design Pressure: -292.5 psf. (See General Limitation #9)



Membrane Type: BUR

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(1): Base sheet adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhered with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present).

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Or

GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet loose laid dry, followed by a mopped ply sheet listed below.

Ply Sheet: (Optional, required when used with Ruberoid® 20 or GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet). One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® Mineral Surfaced Cap Sheet or (Optional) 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -90 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(2): Base sheet adhered with approved asphalt.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhered with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet.

Base Sheet: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth directly to the primed deck. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® Mineral Surfaced Cap Sheet or (Optional) 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -457.5 psf. (See General Limitation #9.)



Membrane Type: BUR

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(3): Base sheet GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet is loose laid dry.

All General and System Limitations shall apply.

Vapor Barrier: Install one or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, (Optional) Ruberoid® 20 or Ruberoid® Dual Smooth mopped directly to deck primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer. The primer must be allowed to dry then the vapor barrier is adhered with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Note: Concrete deck shall be primed with ASTM D41 asphalt primer or Matrix™ 307 Premium Asphalt Primer and allowed to dry prior to application of base sheet (when optional vapor barrier is not present).

Base Sheet: Over a primed concrete deck (when vapor barrier is not present) one ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet, loose laid dry.

Ply Sheet: Two plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® FlexPly™ 6 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. in accordance with manufacturer's instructions.

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® 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. in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be applied according to manufacturer's application instructions. All coatings must be listed within a current NOA.**

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.
2. Topcoat® Elastomeric Roofing Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Elastomeric Roofing Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
3. Fibered Aluminum Roof Coating applied accordance with manufacturer's instructions.

Maximum Design

Pressure: -185 psf. (See General Limitation #9.)



CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.

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, is 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 Professional Engineer, Registered 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 to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

