



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 Systems for Wood Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews and revises NOA No. 14-1030.01 and consists of pages 1 through 27.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 18-0919.07
Expiration Date: 11/04/23
Approval Date: 11/08/18
Page 1 of 27

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR
Material: Fiberglass
Deck Type: Wood
Maximum Design Pressure: -97.5 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	Smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Smooth surfaced asphaltic ply sheet reinforced with fiberglass mat.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Smooth asphaltic base or base/ply sheet reinforced with fiberglass mat.
GAFGLAS® Stratavent® Perforated Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	Smooth surfaced asphaltic perforated venting base sheet reinforced with fiberglass mat.
GAFGLAS® Stratavent® Nailable Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	Smooth surfaced asphaltic nailable venting base sheet reinforced with fiberglass mat. Bottom side surfaced with granules.
Ruberoid® 20 Smooth	39.37" (1 meter) Wide	ASTM D6163	SBS polymer-modified asphalt base or anchor sheet reinforced with a fiberglass mat.
Ruberoid® Mop Smooth	39.37" (1 meter) wide	ASTM D6164	Smooth surfaced mop applied SBS base or anchor sheet reinforced with a polyester mat.
Ruberoid® Mop Smooth 1.5	39.37" (1 meter) wide	ASTM D6164	Smooth surfaced mop applied SBS base or anchor sheet reinforced with a polyester mat.
Ruberoid® Mop Plus Smooth	39.37" (1 meter) wide	ASTM D6164	Smooth surfaced mop applied SBS base or anchor sheet reinforced with a polyester mat.
Ruberoid® HW 25 Smooth	39.37" (1 meter) wide	ASTM D6163	Smooth surfaced torch applied SBS base or anchor sheet reinforced with a fiberglass 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® HW Smooth	39.37" (1 meter) wide	ASTM D6164	Smooth surfaced torch applied SBS base or anchor sheet reinforced with a polyester mat.
GAFGLAS® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Granule surfaced asphaltic cap sheet reinforced with fiberglass mat.
Tri-Ply® BUR Granule Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Granule surfaced asphaltic cap sheet reinforced with fiberglass mat.
GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Granule surfaced asphaltic cap sheet reinforced with fiberglass mat. Cap sheet is factory coated with TOPCOAT® EnergyCote™ Elastomeric Coating.
Topcoat® Surface Seal SB	5 or 55 gallons	ASTM D6083	Solvent-based thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase roof reflectivity.
Topcoat® Membrane	1, 5 or 55 gallons	ASTM D6083	Water-based elastomeric coating
Topcoat® MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer designed to block asphalt bleed-through.
Topcoat® FireOut™ Fire Barrier Coating	5 or 55 gallons	Proprietary	Low VOC, water based fire barrier coating.
VersaShield® Fire-Resistant Roof Deck Protection	12" x 100' rolls	ASTM D226	Non-asphaltic, fiberglass reinforced underlayment and/or fire barrier
VersaShield® Solo™ Fire-Resistant Slip Sheet	42" roll wide, 100 ft.	ASTM D146, D828, D4869, D6757	Non-asphaltic, fire resistant fiberglass underlayment
Topcoat® FlexSeal™	1, 5 gallons or 1 qt. tube	TAS 139	Solvent-based elastomeric sealant.



APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Ultra Polyiso Insulation	Glass-faced polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Composite Polyiso Insulation	Polyisocyanurate foam insulation with high density fiberboard or perlite	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Tapered Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Perlite Roof Insulation	Perlite insulation board	GAF
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF
Securock® Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corp.
Securock® Glass-Mat Roof Board	Glass faced gypsum board	United States Gypsum Corp.
Structodek® High Density Fiber Board Roof Insulation	High density fiberboard	Blue Ridge Fiberboard, Inc.
DensDeck® Prime Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Drill-Tec™ #12 Fastener	Phillips head, modified buttress thread, pinch point, carbon steel fastener for use in steel or wood decks. With CR-10 coating. Available with a pinch point or drill point.	#12 x 8" max. length, #3 Phillips head.	GAF
2.	Drill-Tec™ #14 Fastener	Truss head, self-drilling, pinch point, high thread fastener for use in steel, wood or concrete decks.	#14 x 16" max. length, #3 Phillips head.	GAF
3.	Drill-Tec™ ASAP 3S	Drill-Tec™ #12 Fastener with Drill-Tec™ 3" Standard Steel Plate.	See components	GAF
4.	Drill-Tec™ 3" Steel Plate	Round Galvalume® steel stress plate with reinforcing ribs and recessed for use with Drill-Tec™ fasteners.	3" Round	GAF
5.	Drill-Tec™ 3" Standard Steel Plate	Galvalume® coated steel stress plate for use with approved Drill-Tec™ fasteners.	3" Round	GAF
6.	Drill-Tec™ AccuTrac® Flat Plate	A2-SS aluminized steel plate for use with Drill-Tec™ fasteners.	3" square; .017" thick	GAF
7.	Drill-Tec™ AccuTrac® Recessed Plate	Galvalume® steel plate with recess for use with Drill-Tec™ fasteners.	3" square; .017" thick	GAF
8.	Drill-Tec 3 in. Ribbed Galvalume Plate (Flat)	Round Galvalume® plated steel stress plate with reinforcing ribs for use with Drill-Tec™ fasteners.	3" Round	GAF



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corp.	3014547	4470	05/22/03
	3029832	4470	05/11/07
	3033135	4470	11/24/08
	3034312	4470	04/09/09
	3036980	4470	08/14/09
	3038278	4470	11/18/11
	3040738	4470	11/16/10
	3041769	4470	05/26/11
	3042887	4470	11/14/11
	3042905	4470	01/10/12
	3046081	4470	02/13/13
	3046388	4470	09/24/12
	3047636	4470	08/08/13
	0D0A8.AM	4470	07/09/99
	0D1A8.AM	4470	07/29/94
	0Y9Q5.AM	4470	04/01/98
	1B9A8.AM	4470	09/04/97
	2B8A4.AM	4470	07/02/97
	3B9Q1.AM	4470	01/08/98
	3D4Q2.AM	4470	05/30/97
797-03221-267	4470	09/27/07	
797-03825-267	4470	07/21/08	
797-10228-267	4470	01/23/15	
UL LLC	R1306	UL 790	08/21/18
PRI Construction Materials Technologies, LLC	GAF-122-02-01	TAS 139	05/07/06
	GAF-270-02-02	ASTM D226	11/15/10
	GAF-276-02-01Rev	ASTM D6083	12/16/10
	GAF-276-02-02	ASTM D226	11/15/10
	GAF-306-02-01	ASTM E96	07/07/11
	GAF-314-02-01	ASTM D2178	08/23/11
	GAF-315-02-01	ASTM D2178	08/23/11
	GAF-369-02-01	ASTM C1289	10/22/12
	GAF-417-02-01	ASTM C1289	05/28/13
	GAF-464-02-01	ASTM C1289	10/22/12
	GAF-464-02-01	ASTM C1289	02/06/14
	GAF-499-02-01	ASTM D6083	03/12/14
	GAF-500-02-01	ASTM D6083	03/12/14
	GAF-549-02-01	TAS 114	08/08/14
	GAF-549-02-02	TAS 114	08/08/14
	GAF-559-02-01	TAS 117(B)	09/30/14
	GAF-559-02-04	ASTM D 1876	10/01/14
	GAF-559-02-05	ASTM D 1876	10/15/14
GAF-559-02-06	TAS 114(H)	10/02/14	
GAF-559-02-07	ASTM D 903	10/02/14	
GAF-559-02-08	ASTM D 903	10/02/14	



EVIDENCE SUBMITTED: (CONTINUED)

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
PRI Construction Materials Technologies, LLC	GAF-559-02-09	ASTM D 903	10/02/14
	GAF-559-02-11	TAS 114	10/14/14
	GAF-559-02-12	TAS 114	10/14/14
	GAF-559-02-13	TAS 114	10/15/14
	GAF-559-02-14	TAS 114	10/15/14
	GAF-559-02-15	TAS 114	10/15/14
	GAF-559-02-16	TAS 114	10/15/14
	GAF-559-02-18	TAS 114	10/15/14
	GAF-559-02-19	TAS 114	04/16/15
	GAF-628-02-01	ASTM C1289	05/31/16
	IRT of S. Fl.	02-005	TAS 114
02-014		TAS 114	03/22/02
Trinity ERD	C8500SC.11.07	TAS 117	11/30/07
	G30250.02.10-3-R2	ASTM D3909	06/03/15
	G31360.03.10	ASTM D6164	03/31/10
	G33470.01.11	ASTM D6164	11/16/11
	G34140.04.11-2	ASTM D6163	04/25/11
	G34140.04.11-4-R2	ASTM D6401	06/04/15
	G34140.04.11-5-R3	ASTM D4897	06/04/15
	G36780.07.11-R1	4470-TAS 114	07/18/11
	G40630.01.14-1	ASTM D6163	01/06/14
	G40630.01.14-2A	ASTM D6164	01/07/14
	G40630.01.14-2A-1-R1	ASTM D6164	04/10/14
	G43610.01.14	ASTM D3909	01/22/14
	G6850.08.07-1	ASTM D3909	08/13/07
	SC6870.08.14-R1	ASTM D3909	09/04/14
	SC9700.08.15-R1	ASTM D2178	8/31/2015
	SC10680.05.16	ASTM D6163	5/10/2016
SC13105.03.17-R1	ASTM D6164	3/23/2017	
Dynatech Engineering Corporation	#4482.02.95-1	TAS 114	09/01/95
Atlantic & Caribbean Roof Consultants, LLC	11-053	TAS 114	08/12/11



APPROVED ASSEMBLIES

Membrane Type:	BUR
Deck Type 1I:	Wood, Insulated
Deck Description:	Min. 19/32" or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type A(1):	All insulation layers are adhered, to a mechanically attached anchor sheet. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: (optional)	Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection, VersaShield® Solo™ Fire-Resistant Slip Sheet, DensDeck® Roof Board, Securock® Glass-Mat Roof Board or Securock® Gypsum Fiber Roof Board installed per manufacturer's installation instructions.
Anchor sheet:	GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Nailable Venting Base Sheet or Ruberoid® 20 Smooth mechanically fastened as described below.
Fastening Option #1:	GAFGLAS® Ply 4, GAFGLAS® Flex Ply™ 6, GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the lap staggered and in two rows 18" o.c. in the field. <u>Not for use with DensDeck or Securock Fire Barrier</u> <i>(Maximum Design Pressure –45 psf. See General Limitation #9)</i>
Fastening Option #2:	GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 3 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 12" o.c. in the field of the sheet. <i>(Maximum Design Pressure –45 psf. See General Limitation #9)</i>
Fastening Option #3:	GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet or any of above anchor sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the 4" lap staggered and in two rows 9" o.c. in the field. <u>Not for use with DensDeck or Securock Fire Barrier</u> <i>(Maximum Design Pressure –52.5 psf. See General Limitation #7)</i>
Fastening Option #4:	Any of the above anchor sheets attached to deck with approved 1¼" annular ring shank nails and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane. <u>Not for use with DensDeck or Securock Fire Barrier</u> <i>(Maximum Design Pressure –60 psf. See General Limitation #7)</i>
Fastening Option #5:	GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 12" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet. <i>(Maximum Design Pressure –45 psf. See General Limitation #9)</i>

Fastening (Continued) Option #6: Any of above anchor sheets attached to deck approved annular ring shank nails and 3” inverted Drill-Tec™ insulation plates at a fastener spacing of 9” o.c. at the 4” lap staggered in two rows 9” in the field. Not for use with DensDeck or Securock Fire Barrier
(Maximum Design Pressure –60 psf. See General Limitation #7)

Fastening Option #7: GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and 3” Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 8” o.c. in 4 rows. One row is in the 2” side lap. The other rows are equally spaced approximately 9” o.c. in the field of the sheet.
(Maximum Design Pressure –45 psf. See General Limitation #9)

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation, EnergyGuard RH Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1” thick	N/A	N/A
EnergyGuard™ Perlite Recover Board, DensDeck® Prime Roof Board Minimum ½” thick	N/A	N/A
EnergyGuard™ Perlite Roof Insulation Minimum ¾” 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. 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® Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate applications.

Base Sheet: (Optional) Install one ply of GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® 20 Smooth, Ruberoid® HW Smooth or Ruberoid® HW 25 Smooth directly over the top layer of insulation. Adhere with any approved mopping asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. applied in accordance with manufacturer’s instructions. (see General Limitation #4).
 OR
 GAFGLAS® Stratavent® Perforated Venting Base Sheet loose-laid dry (not for use with perlite top layer insulation or composite polyiso top layer insulation).

Ply Sheet: One or more plies GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer’s installation instructions.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Fiber Aluminum Roof Coating.

Maximum Design Pressure: See Fastening Options.



Membrane Type: BUR

Deck Type 1I: Wood, Insulated

Deck Description: Min. 15/32" thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.

System Type A(2): All insulation layers are adhered, to a mechanically attached anchor sheet. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.

Anchor sheet: GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth or GAFGLAS® Stratavent® Venting Nailable Base Sheet is secured as described below.

Fastening Option #1: Miami-Dade County Approved min. 12 ga. Annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -45 psf. See General Limitation #7)

Fastening Option #2: Miami-Dade County Approved min. 12 ga. Annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 6 in. o.c. in the min 4 in. wide anchor sheet side laps and 6 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #3: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 16 in. o.c. in the min. 4 in. wide anchor sheet side laps and 16 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #4: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 12 in. o.c. in the min 4 in. wide anchor sheet side laps and 12 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -60 psf. See General Limitation #7)

Fastening Option #5: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in three staggered rows.
(Maximum Design Pressure: -75 psf. See General Limitation #7)

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, EnergyGuard™ Ultra Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RH Tapered Polyiso Insulation Minimum 1" thick	N/A	N/A



Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Perlite Roof Insulation Minimum 3/4" thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation Minimum 1/2" thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime Roof Board Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered in a 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.

Base Sheet (Optional): GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer's installation instructions.

Ply Sheet: When optional base sheet and/or cap sheet is present:
Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer's installation instructions.

When optional base sheet and/or cap sheet is not present:
Three or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer's installation instructions.

Cap Sheet (Optional): GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of hot asphalt applied at 20 – 40 lbs./sq. installed per manufacturer's installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Aluminum Fiber Roof Coating.

Maximum Design Pressure: See fastening options above.



Membrane Type: BUR
Deck Type 1I: Wood, Insulated
Deck Description: Min. 15/32" thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type A(3): All insulation layers are adhered, to a mechanically attached anchor sheet. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.
(optional)

Anchor sheet: GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth or GAFGLAS® Stratavent® Venting Nailable Base Sheet is secured as described below.

Fastening Option #1: Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -45 psf. See General Limitation #7)

Fastening Option #2: Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 6 in. o.c. in the min 4 in. wide anchor sheet side laps and 6 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #3: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 16 in. o.c. in the min. 4 in. wide anchor sheet side laps and 16 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #4: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 12 in. o.c. in the min 4 in. wide anchor sheet side laps and 12 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -60 psf. See General Limitation #7)

Fastening Option #5: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in three staggered rows.
(Maximum Design Pressure: -75 psf. See General Limitation #7)



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™ Ultra Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RH Tapered Polyiso Insulation Minimum 1” thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Perlite Roof Insulation Minimum ¾” thick	N/A	N/A
Structodek® High Density Fiberboard Roof Insulation Minimum ½” thick	N/A	N/A
Securock® Gypsum-Fiber Roof Board, DensDeck® Prime Roof Board Minimum ¼” thick	N/A	N/A

Note: All insulation shall be adhered in a 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.

Base Sheet: Ruberoid® 20 Smooth adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq.
Cap Sheet: GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of hot asphalt applied at 20 – 40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Aluminum Fiber Roof Coating.

Maximum Design Pressure: See fastening options above.



Membrane Type: BUR
Deck Type 1I: Wood, Insulated
Deck Description: Min. 15/32" thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type A(4): All insulation layers are adhered, to a mechanically attached anchor sheet. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: TOPCOAT FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.
(optional)

Anchor sheet: GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth or GAFGLAS® Stratavent® Venting Nailable Base Sheet is secured as described below.

Fastening Option #1: Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -45 psf. See General Limitation #7)

Fastening Option #2: Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 6 in. o.c. in the min 4 in. wide anchor sheet side laps and 6 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #3: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 16 in. o.c. in the min. 4 in. wide anchor sheet side laps and 16 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

Fastening Option #4: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 12 in. o.c. in the min 4 in. wide anchor sheet side laps and 12 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -60 psf. See General Limitation #7)

Fastening Option #5: Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in three staggered rows.
(Maximum Design Pressure: -82.5 psf. See General Limitation #7)



One or more layers of any of the following insulations.

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

Note: All insulation shall be adhered in a 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.

Base Sheet: GAFGLAS® Stratavent® Perforated Venting Base Sheet is laid dry over the insulation.

Ply Sheet: When optional cap sheet is present:
Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer’s installation instructions.

When optional cap sheet is not present:
Three or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer’s installation instructions.

Cap Sheet (Optional): GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of hot asphalt applied at 20 – 40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Aluminum Fiber Roof Coating.

Maximum Design Pressure: See fastening options above.



Membrane Type: BUR

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" thick or greater or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.

System Type A(5): All insulation layers are adhered, to a mechanically attached anchor sheet. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® Solo™ Fire-Resistant Slip Sheet.

Anchor sheet: GAFGLAS® #75 Base Sheet or Tri-Ply® #75 Base Sheet is secured as described below with Dade County Approved min. 12 ga. galvanized ring shank nails and 32 ga., 1-5/8 in. diameter tin tabs.

Fastening: Nails and tabs are spaced 8 in. o.c. in the 4 in. wide side lap and 8 in. o.c. in two staggered rows in the field of the sheet.

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, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RH Tapered Polyiso Insulation Minimum 1" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Structodek® High Density Fiberboard Roof Insulation, Securock® Gypsum-Fiber Roof Board Minimum ½" thick	N/A	N/A

Note: All insulation shall be adhered in a 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.

Base Ply: Two or more plies of GAFGLAS® FlexPly™ 6 adhered with hot asphalt applied at 20-25 lbs./sq.

Cap Ply: GAFGLAS® Mineral Surfaced Cap Sheet adhered with hot asphalt applied at 20-25 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. 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)



Membrane Type: BUR

Deck Type II: Wood, Insulated

Deck Description: 19/32" or greater thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.

System Type C: All layers of insulation are mechanically attached to roof deck. Membrane is subsequently fully adhered to insulation.

All General and System Limitations shall apply.

Fire Barrier: FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® (optional) Solo™ Fire-Resistant Slip Sheet.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment. GAF requires either a ply of GAFGLAS® Stratavent® Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate applications.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
SECUROCK® Gypsum-Fiber Roof Board Minimum 1/4" thick	2, 8	1:1.78 ft ²

Base Ply: Two or more plies of GAFGLAS® FlexPly™ 6 adhered with hot asphalt applied at 20-25 lbs./sq. installed per manufacturer's installation instructions.

Cap Ply: GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered with hot asphalt applied at 20-25 lbs./sq. installed per manufacturer's installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Fiber Aluminum Roof Coating.

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



Membrane Type: BUR

Deck Type II: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.

System Type D: All insulation is loose laid with preliminary attachment to roof deck. Anchor sheet is subsequently mechanically fastened through insulation to the roof deck.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Ultra Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation		
Minimum 1.3" thick	N/A	N/A
Structodek® High Density Fiber Board		
Minimum 1" thick	N/A	N/A

Note: Insulation shall have preliminary attachment, prior to the installation of the base sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation, optional thermal barrier (when present) and base sheet shall be simultaneously fastened. See base sheet below for fasteners and density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Fire Barrier: FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection, VersaShield® Solo™ Fire-Resistant Slip Sheet, DensDeck® Roof Board, Securock™ Glass-Mat Roof Board or Securock™ Gypsum Fiber Roof Board.

Base Sheet: Install one ply of GAFGLAS® #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Nailable Venting Base Sheet or Ruberoid® 20 Smooth applied over the loose laid insulation with 2" side laps mechanically fastened as described below;

Fastening Option #1: Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec 3 in. Ribbed Galvalume Plate (Flat), Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate is installed through the base sheet and insulation in 3 rows 12" o.c. One row is in the 2" side lap. The other rows are equally spaced approximately 12" o.c. in the field of the sheet.
(Maximum Design Pressure –45 psf. See General Limitation #9)

Fastening Option #2: Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec 3 in. Ribbed Galvalume Plate (Flat), Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate is installed through the base sheet and insulation in 4 rows 8" o.c. One row is in the 2" side lap. The other 3 rows are equally spaced approximately 9" o.c. in the field of the sheet.
(Maximum Design Pressure –75 psf. See General Limitation #9)

Fastening Option #3: GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20 Smooth, Ruberoid® Mop Smooth attached to deck with approved annular ring shank nails with a minimum embedment of 1" into the wood substrate and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane. Not for use with DensDeck or Securock Fire Barrier
(Maximum Design Pressure –60 psf. See General Limitation #7)



Fastening (Continued) Option #4: Drill-Tec™ #12 Fastener or Drill-Tec™ #14 Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec 3 in. Ribbed Galvalume Plate (Flat), Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate in 4 rows 12” o.c. One row is in the 2” side lap. The other rows are equally spaced approximately 9” o.c. in the field of the sheet.
(Maximum Design Pressure –60 psf. See General Limitation #9)

Ply Sheet: One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer’s installation instructions.

Cap Sheet: (Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Fiber Aluminum Roof Coating.

Maximum Design Pressure: See Fastening Options



Membrane Type:	BUR
Deck Type 1:	Wood, Non-insulated
Deck Description:	19/32" or greater plywood or wood plank decks secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type E(1):	Anchor sheet mechanically attached to roof deck.
All General and System Limitations shall apply.	
Fire Barrier: (optional)	Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection, VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.
Base sheet:	GAFGLAS® #80 Ultima™ Base Sheet, Stratavent® Nailable Venting Base Sheet, Ruberoid® 20 Smooth, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 base sheet mechanically fastened to deck as described below;
Fastening Option #1:	GAFGLAS® Flex Ply™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet or any of the above anchor sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the 4" lap staggered and in two rows 9" o.c. in the field. <i>(Maximum Design Pressure –52.5 psf. See General Limitation #7)</i>
Fastening Option #2:	GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20 Smooth or Ruberoid® Mop Smooth attached to deck with approved 1¼" annular ring shank nails and inverted 3" steel plate at a fastener spacing of 9" o.c. at the 4" lap and in two rows staggered with a fastener spacing of 9" o.c. in the center of the membrane. <i>(Maximum Design Pressure –60 psf. See General Limitation #7)</i>
Ply Sheet:	One or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4 or GAFGLAS® #80 Ultima Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer's installation instructions.
Cap Sheet:	(Optional) One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer's installation 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. <ol style="list-style-type: none"> 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq. OR Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq. 3. Fiber Aluminum Roof Coating.
Maximum Design Pressure:	See Fastening Options



Membrane Type: BUR
Deck Type 1: Wood, Non-insulated
Deck Description: 19/32" or greater plywood or wood plank decks secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type E(2): Anchor sheet mechanically attached to roof deck.

All General and System Limitations shall apply.

**Fire Barrier:
(optional)** Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire Resistant Roof Deck Protection, VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.

Anchor sheet: GAFGLAS® #80 Ultima Base Sheet mechanically attached with Miami-Dade County Approved min. 1¼ long, 12 ga., annular ring shank nails and 1-5/8" diameter tin caps spaced 7" o.c. in the min 4" wide side laps and in 3 staggered rows in the field of the sheet.

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

Cap Sheet: One ply of GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS® EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. installed per manufacturer's installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.

**Maximum Design
Pressure:** -82.5 psf. (See General Limitation #7)



Membrane Type: BUR
Deck Type 1I: Wood, Non Insulated
Deck Description: Min. 15/32" thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
System Type E(3): Anchor sheet mechanically attached to roof deck.

All General and System Limitations shall apply.

**Fire Barrier:
(optional)** TOPCOAT FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet or VersaShield® Solo™ Fire-Resistant Slip Sheet installed per manufacturer's installation instructions.

Anchor sheet: GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth or GAFGLAS® Stratavent® Venting Nailable Base Sheet is secured as described below.

**Fastening
Option #1:** Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -45 psf. See General Limitation #7)

**Fastening
Option #2:** Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 6 in. o.c. in the min 4 in. wide anchor sheet side laps and 6 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

**Fastening
Option #3:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 16 in. o.c. in the min. 4 in. wide anchor sheet side laps and 16 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -52.5 psf. See General Limitation #7)

**Fastening
Option #4:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 12 in. o.c. in the min 4 in. wide anchor sheet side laps and 12 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: -60 psf. See General Limitation #7)

**Fastening
Option #5:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in three staggered rows.
(Maximum Design Pressure: -97.5 psf. See General Limitation #7)

Ply Sheet: When optional cap sheet is present:
Two or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer's installation instructions.

When optional cap sheet is not present:
Three or more plies of GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® Flex Ply 6 adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer's installation instructions.



Cap Sheet: (Optional) GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of hot asphalt applied at 20 – 40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Fiber Aluminum Roof Coating.

Maximum Design Pressure: See Fastening Above.



- Membrane Type:** BUR
- Deck Type 1I:** Wood, Non Insulated
- Deck Description:** Min. 15/32” thick or greater plywood or wood plank secured 6 in. o.c. at panel end and intermediate supports with 8d ring shank nails to supports spaced 24 in. o.c. at max.
- System Type E(4):** Anchor sheet mechanically attached to roof deck.
- All General and System Limitations shall apply.**
- Fire Barrier:** TOPCOAT FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Slip Sheet
(optional) VersaShield® Solo™ Fire-Resistant Slip Sheet, installed per manufacturer’s installation instructions.
- Anchor sheet:** GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, Ruberoid® 20 Smooth or GAFGLAS® Stratavent® Venting Nailable Base Sheet is secured as described below.
- Fastening Option #1:** Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: –45 psf. See General Limitation #7)
- Fastening Option #2:** Miami-Dade County Approved min. 12 ga. annular ring shank nails and min. 1-5/8 in. diameter tin caps are spaced 6 in. o.c. in the min 4 in. wide anchor sheet side laps and 6 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: –52.5 psf. See General Limitation #7)
- Fastening Option #3:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 16 in. o.c. in the min. 4 in. wide anchor sheet side laps and 16 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: –52.5 psf. See General Limitation #7)
- Fastening Option #4:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 12 in. o.c. in the min 4 in. wide anchor sheet side laps and 12 in. o.c. in the field of the sheet in two staggered rows.
(Maximum Design Pressure: –60 psf. See General Limitation #7)
- Fastening Option #5:** Drill-Tec™ #14 Fasteners and Drill-Tec™ 3 in. Standard Steel Plates, Drill-Tec™ AccuTrac® Flat Plates or Drill-Tec™ 3 in. Ribbed Galvalume Plate (Flat) are spaced 8 in. o.c. in the min. 4 in. wide anchor sheet side laps and 8 in. o.c. in the field of the sheet in three staggered rows.
(Maximum Design Pressure: –97.5 psf. See General Limitation #7)
- Base Sheet:** Ruberoid® 20 Smooth adhered in a full mopping of hot asphalt applied at 20-40 lbs./sq. installed per manufacturer’s installation instructions.
- Cap Sheet:** GAFGLAS® Mineral Surfaced Cap Sheet, Tri-Ply® BUR Granule Cap Sheet or GAFGLAS EnergyCap™ Mineral Surfaced Cap Sheet adhered in a full mopping of hot asphalt applied at 20 – 40 lbs./sq. installed per manufacturer’s installation 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 or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
OR
Topcoat® MB Plus applied at 0.5 to 0.75 gal./sq.(to be used as a primer) followed by Topcoat® Membrane applied at 0.5 to 0.75 gal./sq.
3. Aluminum Fiber Roof Coating.

Maximum Design Pressure: See Fastening Above.



WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with GAFGLAS® Ply 4 and GAFGLAS® Flex Ply™ 6 when used as a mechanically fastened base or anchor sheet.
2. Minimum ¼” DensDeck™ Roof Board or ½” Type X gypsum board is acceptable to be installed directly over the wood deck.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered 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



NOA No.: 18-0919.07
Expiration Date: 11/04/23
Approval Date: 11/08/18
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