



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  
T (786)315-2590 F (786) 31525-99

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

**GAF**  
**1361 Alps Road**  
**Wayne, NJ 07470**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed 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 Ruberoid® Modified Bitumen Roof System 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. 13-0424.14 and consists of pages 1 through 29.  
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0611.01  
Expiration Date: 11/06/15  
Approval Date: 11/06/14  
Page 1 of 29

## ROOFING SYSTEM APPROVAL

<b>Category:</b>	Roofing
<b>Sub-Category:</b>	Modified Bitumen
<b>Material:</b>	APP/SBS
<b>Deck Type:</b>	Wood
<b>Maximum Design Pressure:</b>	-75 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>
Matrix™ 102 SBS Membrane Adhesive	5 gallons	ASTM D3019	Fiber reinforced rubberized cold-applied adhesive for modified bitumen roof systems.
GAFGLAS® #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, fiberglass base sheet.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® 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 with factory applied EnergyCote™
GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	Fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating with factory perforations.
GAFGLAS® Stratavent® Eliminator™ Perforated Nailable Venting Base Sheet	39.37" (1 meter) Wide	ASTM D4897	A nailable, fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
Ruberoid® SBS Heat-Weld™ Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® SBS Heat-Weld™ Granule	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
RoofMatch™ SBS Modified Granular	107 sq. ft. (9.9 m2)	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and surfaced with colored mineral granules.
Ruberoid® SBS Heat-Weld™ 170 FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant polymer-modified asphalt and surfaced with mineral granules.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Ruberoid® SBS Heat-Weld™ Plus	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® SBS Heat-Weld™ Plus FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant polymer-modified asphalt and surfaced with mineral granules and with factory applied EnergyCote.
Ruberoid® SBS Heat-Weld™ 25	39.37" (1 meter) Wide	ASTM D6163	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® Mop Granule	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® Mop Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and smooth surfaced.
Ruberoid® Mop Plus	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® Mop 170FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
Ruberoid® Mop FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® Torch Smooth	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and smooth surfaced.
Ruberoid® Torch Granule	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and surfaced with mineral granules
Ruberoid® EnergyCap™ Torch Granule FR	39.37" (1 meter) Wide	ASTM D6222	APP modified cap membrane with a torch grade bottom surface and a mineral granular top surface coated with factory applied EnergyCote™.
Ruberoid® EnergyCap™ Torch Granule Plus FR	39.37" (1 meter) Wide	ASTM D6222	APP modified cap membrane with a torch grade bottom surface and a mineral granular top surface coated with factory applied EnergyCote™.
RoofMatch™ APP Modified Granular	107 sq. ft. (9.9 m2)	ASTM D6222	Non-woven polyester mat coated with APP polymer-modified asphalt and surfaced with colored mineral granules.
Ruberoid® Torch FR	1 meter (39.37") Wide	ASTM D6222	Non-woven polyester mat, coated with fire retardant asphalt modified bitumen membrane with granule surface.



<b><u>Product</u></b>	<b><u>Dimensions</u></b>	<b><u>Test Specification</u></b>	<b><u>Product Description</u></b>
Ruberoid® 20	1 meter (39.37") Wide	ASTM D6163	SBS modified asphalt base sheet reinforce with a glass fiber mat.
Ruberoid® 30	1 meter (39.37") Wide	ASTM D6163	Non-woven fiberglass mat coated with polymer modified asphalt and surfaced with mineral granules.
Ruberoid® 30 FR	1 meter (39.37") Wide	ASTM D6163	Non-woven fiberglass mat coated with fire retardant, polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® EnergyCap™ 30 FR SBS Membrane	1 meter (39.37") Wide	ASTM D6163	Non-woven fiberglass mat coated with fire retardant, polymer-modified asphalt and surfaced with mineral granules and with factory applied EnergyCote.
Ruberoid® Dual FR	39.37" (1 meter) Wide	ASTM D6162	Non-woven polyester and fiberglass mat coated with fire retardant, polymer-modified asphalt and surfaced with mineral granules.
Topcoat® Elastomeric Roofing Membrane	1, 5 or 55 gallons	ASTM D6083	An acrylic, water based elastomeric membrane system designed to protect various types of roofing surfaces.
Topcoat® MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer used to block asphalt bleed-through.
Topcoat® Surface Seal SB	5 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase a roof's reflectivity.
FireOut™ Fire Barrier Coating	5, 55 gallons	Proprietary	Low VOC, water-based fire barrier coating.
VersaShield® Fire-Resistant Roof Deck Protection	42" x 100' rolls	ASTM D226	Non-Asphaltic, fire resistant fiberglass-based underlayment.

**APPROVED INSULATIONS:**

<b>Product Name</b>	<b>Table 2 Product Description</b>	<b>Manufacturer (With Current NOA)</b>
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ Perlite Recover Board	Perlite recover board	GAF
EnergyGuard™ Perlite Roof Insulation	Perlite roof board	GAF
EnergyGuard™ RA Composite Polyiso Insulation	Polyisocyanurate/wood fiberboard or perlite composite	GAF
Structodek® High Density Fiber Board	High density wood fiber	Blue Ridge FiberBoard, Inc.
Securock® Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corp.

**APPROVED FASTENERS:**

<b>Fastener Number</b>	<b>Product Name</b>	<b>TABLE 3 Product Description</b>	<b>Dimensions</b>	<b>Manufacturer (With Current NOA)</b>
1.	Drill-Tec™ #12 Fastener	Carbon steel fastener used in steel or wood decks.	Various	GAF
2.	Drill-Tec™ #14 Fastener	Carbon steel fastener used in steel, wood or concrete decks.	Various	GAF
3.	Drill-Tec™ XHD Fastener	Carbon steel extra heavy duty fastener used in steel decks.	Various	GAF
4.	Drill-Tec™ AccuTrac® Flat Plate	AZ-SS aluminized steel plate for use with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ #15 Fastener.	3" x 3"	GAF
5.	Drill-Tec™ ASAP 3S	Drill-Tec™ #12 fastener with Drill-Tec™ 3" Standard Steel Plate.	Various	GAF
6.	Drill-Tec™ AccuTrac® Recessed Plate	Galvalume Steel plate for use with Drill-Tec™ fasteners.	3" x 3"	GAF
7.	Drill-Tec™ 3" Steel Plate	Round galvalume steel stress plate for use with Drill-Tec™ fasteners.	3"	GAF
8.	Drill-Tec™ 3" Standard Steel Plate	Round galvalume plated steel stress plate with reinforced ribs for use with Drill-Tec™ fasteners.	3"	GAF



**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corp.	3029832	FMRC 4470	05/11/07
	3010215	FMRC 4470	03/01/01
	3001276	FMRC 4470	01/28/99
	1B9A8.AM	FMRC 4470	09/04/97
	3D4Q2.AM	FMRC 4470	04/30/97
	0D1A8.AM	FMRC 4470	04/01/98
Underwriters Laboratories	R1306	UL 790	07/22/13
Trinity Engineering	4483.04 97-1	TAS 114	06/06/97
PRI Asphalt Technologies, Inc.	GAF-020-02-01	ASTM D249 ASTM D4977	02/01/02
	GAF 306-02-01	ASTM E96	07/07/11
	GAF 315-02-01	ASTM D2178	8/23/11
	GAF 314-02-01	ASTM D2178	8/23/11
IRT-ARCON Inc.	02-005	TAS 114	03/01/02
	02-014	TAS 114	04/08/02
	01-039	TAS 114	03/01/02
Trinity   ERD	G6850.08.08	ASTM D6164	08/29/08
	G6850.08.08	ASTM D6163	08/01/08
	G6850.10.08	ASTM D6222	10/06/08
	G6850.11.08	ASTM D6222	11/05/08
	G40620.07.12-2	ASTM D6222	07/17/12
	G34140.04.11-2	ASTM D6163	04/25/11
	G31360.03.10	ASTM D6164	03/31/10
	G34140.04.11-4	ASTM D4601	04/25/11
	G34140.04.11-5	ASTM D4897	04/25/11
	G33470.01.11	ASTM D6164	01/13/11
	G6850.08.07-1	ASTM D3909	08/13/07
	G30250.02.10-3-R1	ASTM D3909	11/26/12
PRI Construction Technologies LLC.	ASTM D2178	GAF-314-02-01	08/23/11
	ASTM D2178	GAF-315-02-01	08/23/11
	ASTM D6083	GAF-245-02-01	06/10/10
	ASTM D6083	GAF-084-02-01	07/08/05
	ASTM D6083	GAF-245-02-01	06/10/10
	ASTM D6083	GAF-084-02-01	07/08/05
Momentum Technologies, Inc.	ASTM D6162	AX04C9A	06/05/09



**APPROVED ASSEMBLIES**

- Membrane Type:** SBS
- Deck Type II:** Wood, Insulated
- Deck Description:** 19/32” or greater plywood or wood plank
- System Type A(1):** Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection or Securock® Gypsum-Fiber Roof Board.  
**(optional)**

**Anchor sheet:** GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 base sheet mechanically fastened to deck as described below.

**Fastening Options:** GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 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 12" o.c. in the field.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

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 or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

GAFGLAS® FlexPly™ 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 4” lap staggered and in two rows 9" o.c. in the field.

*(Maximum Design Pressure –52.5 psf. See General Limitation #7)*

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth base sheet 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*



**Fastening Options:**  
**(Continued)**

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.  
*(Maximum Design Pressure –60 psf. See General Limitation #7)*

GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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 –75 psf. See General Limitation #7)*

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
EnergyGuard™ Polyiso Insulation, EnergyGuard™ Polyiso RA Insulation, EnergyGuard™ Polyiso RN Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1” thick	N/A	N/A
Structodek® High Density Fiber Board, EnergyGuard™ Perlite Recover 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 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated 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, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 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. **(See General Limitation #4).**

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

**Membrane:** One or more plies of Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR, Ruberoid® Mop Smooth, Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop Plus, Ruberoid® Mop FR or Ruberoid® Dual FR fully adhered in an approved asphalt at an application rate of 25 lb./sq. ± 15%.





**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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design Pressure:**                    **See Fastening Options**



**Membrane Type:** APP/SBS Heat Weld  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type A(2):** Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection or Securock® Gypsum-Fiber Roof Board.  
**(optional)**

**Anchor sheet:** GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 base sheet mechanically fastened to deck as described below;

**Fastening Options:** GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 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 12" o.c. in the field.

***(Maximum Design Pressure –45 psf. See General Limitation #7)***

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 or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

***(Maximum Design Pressure –45 psf. See General Limitation #7)***

GAFGLAS® FlexPly™ 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 4" lap staggered and in two rows 9" o.c. in the field.

***(Maximum Design Pressure –52.5 psf. See General Limitation #7)***

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet 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.

***(Maximum Design Pressure –60 psf. See General Limitation #7)***

GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

***(Maximum Design Pressure –60 psf. See General Limitation #7)***



**Fastening Options: (Continued)**

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.  
*(Maximum Design Pressure –60 psf. See General Limitation #7)*

GAFGLAS® #75 Base Sheet or any of above anchor sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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 –75 psf. See General Limitation #7)*

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RA Composite Polyiso Insulation Minimum 1” thick	N/A	N/A
Structodek® High Density Fiber Board, EnergyGuard™ Perlite Recover 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 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. GAF requires either a ply of GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet laid dry or a layer of EnergyGuard™ Perlite Roof Insulation or wood fiber overlay board on all polyisocyanurate applications.

**Base Sheet:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 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.  
**(See General Limitation #4).**

**Ply Sheet:** (Optional except over Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25) One or more plies GAFGLAS® 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. or Ruberoid® Torch Smooth torch applied according to manufacturer’s application instructions.



**Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, Ruberoid® EnergyCap™ Torch Granule FR, RoofMatch™ APP Modified Granular, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

Or

One or more plies of Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ Smooth and Ruberoid® SBS Heat-Weld™ 25 applied according to manufacturer's application 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum**

**Design Pressure:** **See Fastening Options**



**Membrane Type:** SBS  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type B(1):** Optional base sheet laid dry; base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck  
**(optional)** Protection or Securock® Gypsum-Fiber Roof Board.

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ Polyiso Insulation Minimum 1.5" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:2 ft<sup>2</sup></b>
<b>Structodek® High Density Fiber Board Minimum 1" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:2 ft<sup>2</sup></b>

**Note:** Base layers of insulation shall be mechanically attached using the fastener density listed. The 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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Protocol TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment. 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 applications.

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any of the insulation listed for Base Layer, above.</b>		
<b>Structodek® High Density Fiber Board, EnergyGuard™ Perlite Recover Board Minimum ½" thick</b>	<b>N/A</b>	<b>N/A</b>

**Note:** Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.



**Base Sheet:** (Optional) Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth or Ruberoid® 20 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.; (See **General Limitation #4**).

**Ply Sheet:** (Optional) One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 sheet 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.

**Membrane:** One or more plies of Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR, Ruberoid® Mop Smooth, Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop Plus, Ruberoid® Mop FR or Ruberoid® Dual FR fully adhered in an approved asphalt at an application rate of 25 lb./sq. ± 15%.

**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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design**

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



**Membrane Type:** APP/SBS Heat Weld  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank.  
**System Type B(2):** Optional base sheet laid dry; base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection or Securock® Gypsum-Fiber Roof Board.  
**(optional)**

One or more layers of any of the following insulations.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ Polyiso Insulation Minimum 1.3" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:3 ft<sup>2</sup></b>
<b>EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:2 ft<sup>2</sup></b>
<b>Structodek® High Density Fiber Board Minimum 1" thick</b>	<b>1, 2, 3, 5, 6</b>	<b>1:2 ft<sup>2</sup></b>

**Note:** Base layers of insulation shall be mechanically attached using the fastener density listed. The 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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Protocol TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment. 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 applications.

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>Any of the insulation listed for Base Layer, above.</b>		
<b>Structodek® High Density Fiber Board, EnergyGuard™ Perlite Recover Board Minimum ½" thick</b>	<b>N/A</b>	<b>N/A</b>

**Note:** Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.



- Base Sheet:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 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.; **(See General Limitation #4).**
- Ply Sheet:** (Optional, required when using Ruberoid® 20) One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 sheet 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.
- Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, RoofMatch™ APP Modified Granular, Ruberoid® EnergyCap™ Torch Granule FR, Ruberoid® Torch Plus Granule or Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR torch applied according to manufacturer's application instructions.  
Or  
One or more plies of Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ Smooth and Ruberoid® SBS Heat-Weld™ 25 applied according to manufacturer's application 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
  3. 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.
- Maximum Design Pressure:** **-45 psf. (See General Limitation #7)**





**Membrane Type:** SBS  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type C(1):** One or more layers of insulation simultaneously attached; Base layer optional.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection  
**(optional)** or Securock® Gypsum-Fiber Roof Board.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1.3" thick</b>	N/A	N/A
<b>EnergyGuard™ Polyiso Insulation Minimum 1.4" thick</b>	N/A	N/A
<b>EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick</b>	N/A	N/A
<b>EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	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.

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard RA Polyiso Insulation Minimum 1.3" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ Polyiso Insulation Minimum 1.3" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	1, 2, 3, 5, 6	1:2 ft <sup>2</sup>
<b>Structodek® High Density Fiber Board Minimum 1" thick</b>	1, 2, 3, 5, 6	1:2 ft <sup>2</sup>

**Note:** 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® Eliminator™ 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:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth or Ruberoid® 20 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. If base sheet is applied directly to polyisocyanurate insulation only a spot or strip mopped application as detailed in this approval the use of an overlay board is approved; **(See General Limitation #4).**

**Ply Sheet:** (Optional) One or more plies GAFGLAS® 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.

**Membrane:** One or more plies of Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR, Ruberoid® Mop Smooth, Ruberoid® 170 FR, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop Plus, Ruberoid® Mop FR or Ruberoid® Dual FR fully adhered in an approved asphalt at an application rate of 20-40 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design**

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



**Membrane Type:** APP/SBS Heat Weld  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type C(2):** One or more layers of insulation simultaneously attached; Base layer optional.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection  
**(optional)** or Securock® Gypsum-Fiber Roof Board.

<b>Base Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1.3" thick</b>	N/A	N/A
<b>EnergyGuard™ Polyiso Insulation Minimum 1.4" thick</b>	N/A	N/A
<b>EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick</b>	N/A	N/A
<b>EnergyGuard™ Perlite Roof Insulation, EnergyGuard™ Perlite Recover Board Minimum ¾" thick</b>	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.

<b>Top Insulation Layer</b>	<b>Insulation Fasteners (Table 3)</b>	<b>Fastener Density/ft<sup>2</sup></b>
<b>EnergyGuard™ RA Polyiso Insulation Minimum 1.3" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ RN Polyiso Insulation Minimum 1.4" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ Polyiso Insulation Minimum 1.3" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ RA Composite Polyiso Insulation Minimum 1.5" thick</b>	1, 2, 3, 5, 6	1:3 ft <sup>2</sup>
<b>EnergyGuard™ Perlite Roof Insulation Minimum ¾" thick</b>	1, 2, 3, 5, 6	1:2 ft <sup>2</sup>
<b>Structodek® High Density Fiber Minimum 1" thick</b>	1, 2, 3, 5, 6	1:2 ft <sup>2</sup>

**Note:** 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® Eliminator™ 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:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet (laid dry), Ruberoid® Mop Smooth or Ruberoid® 20 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. If base sheet is applied directly to polyisocyanurate insulation only a spot or strip mopped application as detailed in this approval the use of an overlay board is approved; **(See General Limitation #4).**
- Ply Sheet:** (Optional, required when using Ruberoid® 20) One or more plies GAFGLAS® 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.
- Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, RoofMatch™ APP Modified Granular, Ruberoid® EnergyCap™ Torch Granule FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.  
Or  
One or more plies of Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ Smooth and Ruberoid® SBS Heat-Weld™ 25 applied according to manufacturer's application 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
  3. 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.
- Maximum Design Pressure:** -45 psf. (See General Limitation #7)

**Membrane Type:** SBS/SBS Cold Applied  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type D(1):** Insulation and Base sheet simultaneously attached

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck  
**(optional)** Protection or Securock® Gypsum-Fiber Roof Board.

One or more layers of any of the following insulations.

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

**Base Sheet:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet or Ruberoid® 20 applied over the loose laid insulation with 2" side laps mechanically fastened to deck as described below;

**Fastening Options:** Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 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 #7)*

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet 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.  
*(Maximum Design Pressure –60 psf. See General Limitation #7)*

Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plates 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 #7)*

Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 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 #7)*



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

**Membrane:** One or more plies of Ruberoid® Mop Smooth, Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop Plus Granule, Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR or Ruberoid® Mop FR in adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
Or  
One or more plies of Ruberoid® Mop Smooth, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop 170 FR, Ruberoid® Mop Plus Granule, Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ FR 30 SBS Membrane, Ruberoid® 30 FR or Ruberoid® Mop FR adhered in Matrix™ 102 SBS Membrane Adhesive at an application rate of 1-2 gal./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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design Pressure:** See Fastening Options



**Membrane Type:** APP/SBS Heat Weld  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 19/32" or greater plywood or wood plank  
**System Type D(2):** Insulation and Base sheet simultaneously attached

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection or Securock® Gypsum-Fiber Roof Board.  
**(optional)**

One or more layers of any of the following insulations.

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

**Base Sheet:** Install one ply of GAFGLAS® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Perforated Venting Base Sheet or Ruberoid® 20 base sheet applied over the loose laid insulation with 2" side laps mechanically fastened to deck as described below;

**Fastening Options:** Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate 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 #7)*

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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 #7)*

Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate 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 #7)*



**Ply Sheet:** (Optional, required when using Ruberoid® 20) One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6 sheet 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.

**Membrane:** One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, RoofMatch™ APP Modified Granular, Ruberoid® EnergyCap™ Torch Granule FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

Or

One or more plies of Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ Smooth and Ruberoid® SBS Heat-Weld™ 25 applied according to manufacturer's application 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design**

**Pressure:** See Fastening Options





**Membrane Type:** SBS/SBS Cold Applied  
**Deck Type 1:** Wood, Non-insulated  
**Deck Description:** 19/32" or greater plywood or wood plank decks  
**System Type E(1):** Base sheet mechanically fastened to roof deck.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck  
**(optional)** Protection or Securock® Gypsum-Fiber Roof Board.

**Base sheet:** GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 base sheet mechanically fastened to deck as described below:

**Fastening Options:** GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base 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 12" o.c. in the field.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base 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.

*(Maximum Design Pressure –52.5 psf. See General Limitation #7)*

GAFGLAS® #80 Ultima™ Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

Any of above base 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*



- Fastening Options: (Continued)** GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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 –75 psf. See General Limitation #7)*
- Ply Sheet:** (Optional) One or more plies GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #80 Ultima Base Sheet, Ruberoid® Mop Smooth or Ruberoid® 20 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
- Membrane:** One or more plies of Ruberoid® Mop Smooth, Ruberoid® Mop 170 FR, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop Plus Granule, Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR or Ruberoid® Mop FR in adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.  
Or  
One or more plies of Ruberoid® Mop Smooth, Ruberoid® Mop Granule, RoofMatch™ SBS Modified Granular, Ruberoid® Mop 170 FR, Ruberoid® Mop Plus Granule, Ruberoid® 20, Ruberoid® 30, Ruberoid® EnergyCap™ 30 FR SBS Membrane, Ruberoid® 30 FR or Ruberoid® Mop FR adhered in Matrix™ 102 SBS Membrane Adhesive at an application rate of 1-2 gal./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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
  3. 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.
- Maximum Design Pressure:** See Fastening Options

**Membrane Type:** APP/SBS Heat Weld  
**Deck Type 1:** Wood, Non-insulated  
**Deck Description:** 19/32" or greater plywood or wood plank decks  
**System Type E(2):** Base sheet mechanically fastened.

**All General and System Limitations shall apply.**

**Fire Barrier:** FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck  
**(optional)** Protection or Securock® Gypsum-Fiber Roof Board.

**Base sheet:** GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Venting Base Sheet, Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25 mechanically fastened to deck as described below;

**Fastening Options:** GAFGLAS® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base 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 12" o.c. in the field.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

GAFGLAS® Ply 4, GAFGLAS FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –45 psf. See General Limitation #7)*

GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet or any of above base 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.

*(Maximum Design Pressure –52.5 psf. See General Limitation #7)*

GAFGLAS® #80 Ultima™ Base Sheets, Ruberoid® 20, Ruberoid® Mop Smooth, base sheet 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3" Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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.

*(Maximum Design Pressure –60 psf. See General Limitation #7)*

**Fastening  
Options:  
(Continued)**

Any of above base 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.

**(Maximum Design Pressure –60 psf. See General Limitation #7)**

GAFGLAS® #75 Base Sheet or any of above base sheets attached to deck with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener or Drill-Tec™ XHD Fastener and Drill-Tec™ 3” Steel Plate, Drill-Tec™ AccuTrac® Flat Plate or Drill-Tec™ AccuTrac® Recessed Plate installed 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 –75 psf. See General Limitation #7)**

**Ply Sheet:**

(Optional except over Ruberoid® Mop Smooth, Ruberoid® 20, Ruberoid® SBS Heat-Weld™ Smooth or Ruberoid® SBS Heat-Weld™ 25) One or more plies GAFGLAS® Ply 4 or GAFGLAS® FlexPly™ 6 sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or Ruberoid® Torch Smooth torch applied according to manufacturer’s application instructions.

**Membrane:**

One ply of Ruberoid® Torch Smooth, Ruberoid® Torch Granule, RoofMatch™ APP Modified Granular, Ruberoid® EnergyCap™ Torch Granule FR, Ruberoid® EnergyCap™ Torch Plus FR, or Ruberoid® Torch FR torch applied according to manufacturer's application instructions.

Or

One or more plies of Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ Smooth and Ruberoid® SBS Heat-Weld™ 25 applied according to manufacturer's application 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. GAFGLAS® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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.
3. 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.

**Maximum Design  
Pressure:**

**See Fastening Options**

## WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with GAFGLAS® Ply 4 and GAFGLAS® FlexPly™ 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 side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform 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.: 14-0611.01  
Expiration Date: 11/06/15  
Approval Date: 11/06/14  
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