



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 Liberty™ SBS Self-Adhering Modified Bitumen Roofing Systems Over 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 revises NOA No. 14-0102.12 and consists of pages 1 through 17.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 15-0203.05
Expiration Date: 02/22/17
Approval Date: 04/23/15
Page 1 of 17

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	APP/SBS
Deck Type:	Wood
Maximum Design Pressure:	-60 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Liberty™ SBS Self-Adhering Base/Ply Sheet	39.375" x 66'	ASTM D4601	Self-adhered, SBS modified base or ply sheet with glass reinforced mat.
Liberty™ MA Mechanically Attached Base Sheet	39.375" x 66'	ASTM D4601	SBS base sheet with a glass reinforced mat coated with a polymer-modified asphalt.
Liberty™ SBS Self-Adhering Cap Sheet	39.375" x 34'	ASTM D6164	Granule surfaced self-adhering SBS modified membrane reinforced with polyester mat, coated with polymer-modified asphalt.
GAFGLAS® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
Tri-Ply® Ply 4	39.37" (1 meter) Wide	ASTM D2178	Type IV asphalt impregnated glass felt with asphalt coating.
GAFGLAS® FlexPly™ 6	39.37" (1 meter) Wide	ASTM D2178	Type VI asphalt impregnated glass felt with asphalt coating.
GAFGLAS® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II, asphalt impregnated and coated glass mat base sheet.
Tri-Ply® #75 Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II, asphalt impregnated and coated glass mat base sheet.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) Wide	ASTM D4601	Type II, asphalt impregnated and coated, fiberglass base sheet.
GAFGLAS® Stratavent® Eliminator™ 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™ 25	39.37" (1 meter) Wide	ASTM D6163	SBS modified asphalt base sheet reinforced with a glass fiber mat and smooth surfaced.
Ruberoid® SBS Heat-Weld™ Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.



Product	Dimensions	Test Specification	Product Description
Ruberoid® SBS Heat-Weld™ Granule	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® SBS Heat-Weld™ 170 FR	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with fire retardant SBS polymer-modified asphalt and surfaced with mineral granules.
Ruberoid® SBS Heat-Weld™ Plus	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS 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 SBS 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 SBS polymer-modified asphalt and surfaced with mineral granules with factory applied EnergyCote™.
Ruberoid® Torch Smooth	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and smooth surfaced.
Tri-Ply® TP-4	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® Torch 180	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and surfaced with mineral granules
RoofMatch™ APP Modified Granular	107 sq. ft. (9.9 m2)	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and surfaced with colored mineral granules.
Tri-Ply® TP-4G	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with APP modified asphalt and surfaced with mineral granules.
Ruberoid® Torch FR	39.37" (1 meter) Wide	ASTM D6222	Non-woven polyester mat coated with fire retardant APP modified asphalt surfaced with mineral granules.



Product	Dimensions	Test Specification	Product Description
Ruberoid® EnergyCap™ Torch 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™.
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® 20	39.37" (1 meter) Wide	ASTM D6163	SBS polymer-modified asphalt base sheet reinforced with a glass fiber mat.
Ruberoid® Mop Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Ruberoid® Mop Smooth 1.5	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Ruberoid® Mop Plus Smooth	39.37" (1 meter) Wide	ASTM D6164	Non-woven polyester mat coated with SBS polymer-modified asphalt and smooth surfaced.
Ruberoid® Dual Smooth	39.37" (1 meter) Wide	ASTM D6162	Fiberglass/polyester/composite mat coated with SBS polymer-modified asphalt and smooth-surfaced. For use only as a base/ply sheet.
GAFGLAS® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
Tri-Ply® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules and factory applied EnergyCote™.
VersaShield® Fire-Resistant Roof Deck Protection	42" X 100' rolls	ASTM D 226	Non-Asphaltic fiberglass based underlayment and/or fire barrier.
WeatherWatch® XT	36" x 50' rolls 36" x 66.7' rolls	ASTM D1970	Mat surfaced SBS modified, fiberglass reinforced, bituminous sheet material used as a leak barrier underlayment.
StormSafe™ Anchor Sheet	40" Wide	ASTM D4601	Synthetic anchor sheet.
Topcoat® Surface Seal SB	5 or 55 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase roof reflectivity.



Product	Dimensions	Test Specification	Product Description
Topcoat® Membrane	1, 5 or 55 gallons	ASTM D6083	An acrylic, water based elastomeric membrane system designed to protect various types of roof surfaces.
Topcoat® MB Plus	5 or 55 gallons	Proprietary	Water based, low VOC primer used to block asphalt bleed-through.
Topcoat® FlexSeal	1, 5 gallons or 1 qt. tube	Proprietary	Solvent based flashing compound for gutters and other detailing.
Topcoat® FireOut™ Fire Barrier Coating	5 or 55 gallons	ASTM D6083	Low VOC, water-based fire barrier coating.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RA Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RH Polyiso Insulation	Polyisocyanurate foam insulation	GAF
EnergyGuard™ RN Polyiso Insulation	Polyisocyanurate foam insulation	GAF
DensDeck® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® Prime® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
DensDeck® DuraGuard® Roof Board	Gypsum board	Georgia-Pacific Gypsum LLC
Securock™ Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corporation



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
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™ ASAP® 3S	Drill-Tec™ #12 fastener with Drill-Tec™ 3" Standard Steel Plate.	Various	GAF
4.	Drill-Tec™ 3" Steel Plates	Round galvalume plated steel stress plate with reinforced ribs for use with Drill-Tec™ fasteners.	3" round	GAF
5.	Drill-Tec™ 3" Standard Steel Plates	Round galvalume stress plate used with Drill-Tec™ fasteners.	3" round	GAF
6.	Drill-Tec™ AccuTrac® Recessed Plates	Galvalume steel plate for use with Drill-Tec™ fasteners.	3" x 3"	GAF
7.	Drill-Tec™ AccuTrac® Flat Plates	AZ-SS aluminized steel plate for use with Drill-Tec™ #12 Fastener, Drill-Tec™ #14 Fastener and Drill-Tec™ XHD Fastener.	3" x 3"	GAF
8.	Annular Ring Shank Nails & Tin Caps	Galvanized steel Ring shank roofing nails with Galvanized steel tin caps.	Nail: Minimum 12 Ga. Various lengths Tin Caps: Minimum 32 Ga. 1½" Diameter	Generic (Dade County Approved)



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Name</u>	<u>Report Identifier</u>	<u>Date</u>
IRT-ARCON, Inc.	TAS 114	02-005	01/18/02
	TAS 114	02-014	03/22/02
UL LLC	UL 790	R10689	03/14/13
	UL 790	R1306	05/22/13
Factory Mutual Research Corp.	4470	3024805	11/20/06
	4470	3036225	08/10/09
	4470	3035140	08/10/09
	4470	3040738	11/16/10
	4470	3036980	08/14/09
	4470	3044688	03/16/12
	4470	3038278	11/18/11
	4470	3032811	12/11/08
Trinity ERD	ASTM D4897	G34140.04.11-5	04/25/11
	ASTM D4601	G121110.12.08	12/02/08
	ASTM D4601	G34140.04.11-4	04/25/11
	ASTM D6163	G34140.04.11-2	04/25/11
	ASTM D6862	C8500SC.11.07	11/30/07
	ASTM D6164	G33470.01.11	01/13/11
	ASTM D6164	G31360.03.10	03/31/10
	ASTM D6222	G43190.11.13-1	11/15/13
	ASTM D6163	G40630.01.14-1	01/06/14
	ASTM D6164	G40630.01.14-2A	01/07/14
	ASTM D6164	G40630.01.14-2B	01/07/14
	ASTM D6164	G40630.01.14-2C	01/07/14
	ASTM D4601	G43180.01.14-1	01/10/14
	ASTM D6164	G6850.08.08-R1	04/14/11
	ASTM D6222	G6850.11.08	11/05/08
	ASTM D6222	G6850.10.08	10/06/08
	ASTM D3909	G6850.08.07-1	08/13/07
	ASTM D3909	G30250.02.10-3-R1	11/26/12
	ASTM D6222	G40620.07.12-2	07/17/12
	ASTM D6163	G12210.06.09	08/03/09
ASTM D6222	G30250.02.10-2	05/11/10	
Exterior Research and Design, LLC	TAS 114	18035.12.02-2	12/24/02
	ASTM D5147	18034.03.03-2	04/23/03
	TAS 114	01501.04.03	04/03/03
	TAS 114	01516.04.06	04/20/06
	TAS 114	G4280LAB.10.06	10/20/06
Atlantic & Caribbean Roof Consulting, LLC	TAS 114	07-079	12/13/07
	TAS 114	08-044	07/01/08
PRI Construction Material Technologies LLC	ASTM E96	GAF-306-02-01	07/07/11
	ASTM E2178	GAF-276-02-01	01/04/11
	ASTM D2178	GAF-314-02-01	08/23/11
	ASTM D2178	GAF-315-02-01	08/23/11
	ASTM D226	GAF-270-02-02	11/15/10
	ASTM D6083	GAF-084-02-01	05/07/06
Momentum Technologies Inc.	ASTM D6083	GAF-276-02-01REV	01/03/11
	ASTM D6162	AX04C9A	06/05/09



APPROVED ASSEMBLIES:

- Membrane Type:** APP/SBS
- Deck Type II:** Wood, Insulated
- Deck Description:** 19/32" or greater plywood or wood plank
- System Type A:** All layers of insulation are adhered to a mechanically attached anchor sheet. Membrane fully or partially adhered.

All General and System Limitations apply.

- Fire Barrier:** Topcoat® FireOut™ Fire Barrier Coating, VersaShield® Fire-Resistant Roof Deck Protection, DensDeck® Roof Board or Securock® Gypsum-Fiber Roof Board. (Optional)
- Anchor sheet:** GAFGLAS® Ply 4, Tri-Ply® Ply 4, GAFGLAS® FlexPly™ 6, GAFGLAS® #75 Base Sheet, Tri-Ply® #75 Base Sheet, GAFGLAS® #80 Ultima™ Base Sheet, GAFGLAS® Stratavent® Eliminator™ Nailable Base Sheet, Ruberoid® 20, Ruberoid® Mop Smooth, Ruberoid® Mop Smooth 1.5, Ruberoid® Mop Plus Smooth or Ruberoid® Dual Smooth mechanically fastened to deck with Miami Dade 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.

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
DensDeck® Prime® Roof Board, DensDeck® DuraGuard® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: All layers of insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range at a rate of 20-40 lbs./100 sq. ft. or in 3/4" to 1" wide beads 6" o.c. of OlyBond 500® Adhesive or Olybond 500® Green applied in serpentine pattern with minimum 3/4" wide ribbons or OlyBond® Adhesive Fastener at a rate of 1 gal./100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment.

- Ply Sheet:** One or more layers of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions. (Optional)
- Or
- One layer of WeatherWatch® XT self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.

Note: WeatherWatch® XT may only be used with a torch adhered cap.



Membrane: One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)

OR

One or more layers of Ruberoid® SBS Heat-Weld™ 25, Ruberoid® SBS Heat-Weld™ Smooth, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR or Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR heat welded to the self-adhering base/ply sheet in accordance with manufacturer's instructions.

OR

Ruberoid® Torch Smooth, Tri-Ply® TP-4, Ruberoid® Torch Granule, Ruberoid® Torch 180, RoofMatch™ APP Modified Granular, Tri-Ply® TP-4G, Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® EnergyCap™ Torch Granule FR with minimum 3" wide laps and torch applied to the self-adhering base/ply in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be listed in a current NOA Approval and applied in accordance with manufacturer's instructions.**

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, Tri-Ply® 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® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
4. Fibered Aluminum Roof Coating.

Maximum Design

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



Membrane Type: APP/SBS

Deck Type II: Wood, Insulated

Deck Description: Min. 15/32" plywood attached to supports max. 24" o.c. with 8d common nails max. 6" o.c.

System Type C(1): Top layer of insulation is simultaneously mechanically attached with optional layer of base insulation to the deck. Membrane fully or partially adhered.

All General and System Limitations apply.

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

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™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation Minimum 1" thick (Loose laid)	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard™ Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation Minimum 1.5" thick	1 & 4, 5	1:2

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.
Or
One layer of WeatherWatch® XT self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.

Note: WeatherWatch® XT may only be used with a torch adhered cap.

Ply Sheet: One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered with (Optional) minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)



Membrane: One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4” wide laps and rolled with a weighted roller in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)

OR

One or more layers of Ruberoid® SBS Heat-Weld™ 25, Ruberoid® SBS Heat-Weld™ Smooth, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR or Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR heat welded to the self-adhering base/ply sheet in accordance with manufacturer's instructions.

OR

Ruberoid® Torch Smooth, Tri-Ply® TP-4, Ruberoid® Torch Granule, Ruberoid® Torch 180, RoofMatch™ APP Modified Granular, Tri-Ply® TP-4G, Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® EnergyCap™ Torch Granule FR with minimum 3” wide laps and torch applied to the self-adhering base/ply sheet in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be listed in a current NOA Approval and applied in accordance with manufacturer's instructions.**

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, Tri-Ply® 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® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
4. Fibered Aluminum Roof Coating.

Maximum Design

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



Membrane Type: APP/SBS

Deck Type II: Wood, Insulated

Deck Description: Min. 15/32" plywood attached to supports max. 24" o.c. with 8d common nails max. 6" o.c.

System Type C(2): Top layer of insulation is simultaneously mechanically attached with optional layer of base insulation to the deck. Membrane fully or partially adhered.

All General and System Limitations apply.

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

One or more layers of any of the following insulations.

Base Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
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EnergyGuard™ Polyiso Insulation, EnergyGuard™ RA Polyiso Insulation, EnergyGuard™ RH Polyiso Insulation, EnergyGuard™ RN Polyiso Insulation (Loose laid)	N/A	N/A
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Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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DensDeck® DuraGuard® Roof Board, Securock® Gypsum-Fiber Roof Board Minimum 1/2" thick	1 & 4, 5	1:2
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Note: All layers of insulation shall be mechanically attached using the fastener density listed above. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered in accordance with manufacturer's instructions.
OR
One layer of WeatherWatch® XT self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.

Note: WeatherWatch® XT may only be used with a torch adhered cap.

Ply Sheet: One or more layers of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)

Membrane: One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4" wide side laps and rolled with a weighted roller in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)
OR
Ruberoid® Torch Smooth, Tri-Ply® TP-4, Ruberoid® Torch Granule, Ruberoid® Torch 180, RoofMatch™ APP Modified Granular, Tri-Ply® TP-4G, Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® EnergyCap™ Torch Granule FR with minimum 3" wide laps and torch applied to the self-adhering base/ply sheet in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be listed in a current NOA Approval and applied in accordance with manufacturer's instructions.**

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, Tri-Ply® 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® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
4. Fibered Aluminum Roof Coating.

Maximum Design

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



Membrane Type: APP/SBS
Deck Type 1: Wood, Non-insulated
Deck Description: Min. 15/32" plywood attached to supports max. 24" o.c. with 8d common nails max. 6" o.c.
System Type E(1): Base Sheet is mechanically attached to the deck. Membrane fully or partially adhered.

All General and System Limitations shall apply.

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

Base Sheet: Liberty™ MA Mechanically Attached Base Sheet in accordance with manufacturer's instructions.

Fastening Options: Base sheet is mechanically attached to the deck with Drill-Tec™ #14 Fasteners and Drill-Tec™ 3" Steel Plates 8" o.c. in the 3" laps and 8" o.c. in two staggered rows in the field.

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

Base sheet is mechanically attached to the deck with Miami Dade approved tin-caps and nails at 8" o.c. in the 3" laps and 8" o.c. in three equally spaced, staggered rows in the field of the sheet.

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

Ply Sheet: One or more layers of Liberty™ SBS Self-Adhering Base/Ply Sheet in accordance with manufacturer's instructions.
(Optional)

OR

One layer of WeatherWatch® XT self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.

Note: WeatherWatch® XT may only be used with a torch adhered cap.

Membrane: One layer of Liberty SBS Self-Adhering Cap Sheet self-adhered in accordance with manufacturer's instructions. (Not for use with WeatherWatch® XT)

Or

One or more layers of Ruberoid® SBS Heat-Weld™ 25, Ruberoid® SBS Heat-Weld™ Smooth, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR or Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR heat welded in accordance with manufacturer's instructions.

OR

Ruberoid® Torch Smooth, Tri-Ply® TP-4, Ruberoid® Torch Granule, Ruberoid® Torch 180, RoofMatch™ APP Modified Granular, Tri-Ply® TP-4G, Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® EnergyCap™ Torch Granule FR with minimum 3" wide laps and torch applied in accordance with manufacturer's instructions.



Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be listed in a current NOA Approval and applied in accordance with manufacturer's instructions.**

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, Tri-Ply® 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® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
4. Fibered Aluminum Roof Coating.

Maximum Design

Pressure: See fastening options above



Membrane Type: APP/SBS

Deck Type 1: Wood, Non-insulated

Deck Description: Min. 19/32" CDX plywood nailed to 6" o.c. at the field of the sheet with #8 ring shank nails and 4" o.c. at the perimeter of the sheet with #10 ring shank nails. Plywood installed over wood rafters spaced 24" o.c.

System Type E(2): Base sheet is mechanically attached to the deck. Membrane fully or partially adhered.

All General and System Limitations shall apply.

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

Base Sheet: StormSafe™ Anchor Sheet is fastened to the plywood deck using Drill-Tec™ #12 Fasteners and 3" Drill-Tec™ Accutrak® Flat Plates or Drill-Tec™ AccuTrac® Recessed Plates spaced 9" o.c. at the 4" side laps and 3 rows spaced 9" o.c. in the field of the sheet.

Ply Sheet: One layer of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered with minimum 3" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.
(Optional)

Membrane: One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4" wide laps and rolled with a weighted roller in accordance with manufacturer's instructions.

Or

One or more layers of Ruberoid® SBS Heat-Weld™ 25, Ruberoid® SBS Heat-Weld™ Smooth, Ruberoid® SBS Heat-Weld™ Granule, Ruberoid® SBS Heat-Weld™ 170 FR, Ruberoid® SBS Heat-Weld™ Plus, Ruberoid® SBS Heat-Weld™ Plus FR or Ruberoid® EnergyCap™ SBS Heat-Weld™ Plus FR heat welded in accordance with manufacturer's instructions.

OR

Ruberoid® Torch Smooth, Tri-Ply® TP-4, Ruberoid® Torch Granule, Ruberoid® Torch 180, RoofMatch™ APP Modified Granular, Tri-Ply® TP-4G, Ruberoid® Torch FR, Ruberoid® EnergyCap™ Torch Plus FR or Ruberoid® EnergyCap™ Torch Granule FR with minimum 3" wide laps and torch applied in accordance with manufacturer's instructions.

Surfacing: **Optional on granular surfaced membranes; required for smooth membranes. Chosen components must be listed in a current NOA Approval and applied in accordance with manufacturer's instructions.**

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, Tri-Ply® 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® Membrane, Topcoat® MB Plus (to be used as a primer with Topcoat® Membrane) or Topcoat® Surface Seal SB applied at 1 to 1.5 gal./sq.
4. Fibered Aluminum Roof Coating.

Maximum Design

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



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WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with GAFGLAS® Ply 4, Tri-Ply® Ply 4 and GAFGLAS® FlexPly 6 when used as a mechanically fastened base or anchor sheet.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



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