

**Liberty™ SBS Self-Adhering
Modified Bitumen Roofing Systems
Over Cementitious Wood Fiber Decks**

**Miami-Dade County
Notice of Acceptance (NOA)**

Updated: 4/09



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**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
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(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

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

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by the BCCO and accepted by the Building Code and Product Review Committee to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: GAF Liberty™ SBS Self-Adhering Modified Bitumen Roofing Systems Over Cementitious Wood Fiber 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 new NOA consists of pages 1 through 8.

The submitted documentation was reviewed by Jorge L. Acebo.



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ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Self-adhering, SBS Modified Bitumen
Deck Type:	Cementitious Wood Fiber
Maximum Design Pressure	-280 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>
Liberty™ SBS Self-Adhering Base/Ply Sheet	39.375" x 66'	ASTM D-6163 ASTM D 5147	Self-adhered, SBS modified, fiberglass reinforced membrane for base or ply sheet applications.
Liberty™ Base Sheet MA	39.375" x 66'	ASTM D 4601, Type II	Mechanically attached, SBS modified, fiberglass reinforced base sheet.
Liberty™ SBS Self-Adhering Cap Sheet	39.375" x 34'	ASTM D-6162 ASTM D 5147	Self-adhering, SBS modified, polyester / fiberglass composite reinforced cap sheet
Liberty™ FR SBS Self-Adhering Cap Sheet	39.375" x 34'	ASTM D-6162 ASTM D 5147	Self-adhering, SBS modified, polyester / fiberglass composite reinforced cap sheet with fire retardants.
RUBEROID® SBS Heat-Weld™ Granule	39.37" (1 meter) wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and surfaced with mineral granules.
RUBEROID® SBS Heat-Weld™ Smooth	39.37" (1 meter) wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced.
RUBEROID® SBS Heat-Weld™ 170 FR	39.37" (1 meter) wide	ASTM D-6164	Non-Woven Polyester mat coated with fire retardant polymer modified asphalt and surfaced with mineral granules.
RUBEROID® SBS Heat-Weld™ Plus	39.37" (1 meter) wide	ASTM D-6164	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 D-6164	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™ 25	39.37” (1 meter) wide	ASTM D-6164	Non-Woven Polyester mat coated with polymer modified asphalt and smooth surfaced.
GAFGLAS® Mineral Surfaced Cap Sheet	39.37” (1 meter) Wide	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
GAFGLAS® EnergyCap™ BUR Mineral Surfaced Cap Sheet	39.37” (1 meter) Wide	ASTM D 3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules and reflective EnergyCote™ coating.
Leak Buster™ Matrix™ 322 Elastomeric Roof Coating	5, 55 gallons	ASTM D-1653 ASTM D-412 ASTM E-470 ASTM D-6038	Styrene acrylic-based roof coating that forms a seamless and flexible layer of protection for your roof.
Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane	5, 55 gallons	ASTM D-412 ASTM B-117 ASTM C-794 ASTM G-21 FTMS 141.6271 ASTM D-21 ASTM D-1475 ASTM E-1644	Surface coating for smooth surfaced and mineral surfaced roofs.
Leak Buster™ Matrix™ 715 MB Elastomeric Roofing Membrane	5, 55 gallons	ASTM D-412, ASTM D-21 ASTM D-1475, ASTM E-1644	Surface coating for smooth surfaced and mineral surfaced roofs.
TOPCOAT® MB Plus	5, 55 gallons	ASTM D-412 ASTM D-21 ASTM D-1475 ASTM E-1644	Water-based, low VOC, sprayable polymeric liquid, which cures to form a seamless rubber membrane.
TOPCOAT® Surface Seal SB	5, 55 gallons	ASTM D-412 ASTM B-117 ASTM C-794 ASTM G-21 FTMS141.6271 ASTM D-21 ASTM D-1475 ASTM E-1644	Solvent-based, sprayable thermoplastic rubber liquid, which cures to form a seamless rubber membrane.
TOPCOAT® SB-900	1,5gal.or 1qt. tube	ASTM D-412, ASTM D-21 ASTM D-1475 ASTM E-1644	Solvent-based, synthetic rubber sealant.
TOPCOAT® Flexseal®	1,5gal.or 1qt. tube	TAS 139	Solvent based flashing compound for gutters and other detailing



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
TOPCOAT® Topester Fabric	4",6",12" or 36"	N/A	Non-woven polyester reinforcing fabric
TOPCOAT® Flashing Grade	1,5 gal.or qt. Tubes	TAS 139	Water-based flashing compound
GAFGLAS® #75 Base Sheet	39.37" (1 meter) wide	ASTM D 4601	Asphalt impregnated and coated glass mat base sheet.
GAFGLAS® #80 Ultima™ Base Sheet	39.37" (1 meter) wide	ASTM D4601	Asphalt impregnated and coated, glass base sheet.
GAFGLAS® Stratavent® Eliminator™ Nailable	39.37" (1 meter) wide	ASTM D3672 ASTM D 4897 ASTM D4601	Fiberglass base sheet coated on both sides with asphalt. Surfaced on the bottom side with mineral granules embedded in asphaltic coating.
RUBEROID® 20	39.37" (1 meter) wide	ASTM D 6163 ASTM D 5147	SBS modified asphalt base sheet reinforce with a glass fiber mat.
RUBEROID® Mop Smooth	39.37" (1 meter) wide	ASTM D5147 ASTM D6298	Non-woven polyester mat coated with polymer modified asphalt. Does not have a factory applied surfacing.
FireOut™	5, 55 gallons	Proprietary	Low VOC, fire barrier coating
TOPCOAT® FireShield® SB	5, 55 gallons	ASTM D-412 ASTM D-21 ASTM D1475 ASTM E-1644	Elastomeric roofing membrane



APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard™ PolyIso	Polyisocyanurate foam insulation	GAF
DensDeck DuraGuard™	Modified Gypsum Roof Board	GAF
Dens Deck®	Water-resistant gypsum board	GAF
Dens Deck Prime®		
EnergyGuard™ RA, EnergyGuard™ RN, EnergyGuard™ Ultra	Polyisocyanurate foam insulation	GAF
Securock®	Fiber reinforced roof board	USG Corporation
Structodek® TD	Flame Resistant High Density Wood Fiber board.	Knight-Celotex
Structodek®	Insulation board	Knight-Celotex

APPROVED FASTENERS:

TABLE 3

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

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	FMRC 4470	J.I.2B8A4.AM	07/02/1997
	FMRC 4470	J.I.3B9Q1.AM	01/08/1998
	FMRC 4470	J.I.0D0A8.AM	07/09/1999
	FMRC 4470	J.I.0Y9Q5.AM	04/01/1998
IRT – ARCON, Inc.	TAS 114	02-026	07/26/2002
	TAS 114	18035.12.02-2	12/24/02
	ASTM D 5147	18034.03.03-2	04/23/03
	TAS 114	01501.04.03	04/03/03
	TAS 117	4670.03.01-1	03/7/01
Exterior Research and Design, LLC	TAS 114	4674.11.01-1	11/21/01
	TAS 114-D	07-033	5/10/07
	TAS 114-D	07-081	1/10/08
Atlantic & Caribbean Roof Consulting, LLC			



Deck Type 5I: Cementitious Wood Fiber, Insulated

Deck Description: Cementitious wood fiber

System Type A(1): All layers of insulation and the membrane are adhered.

All General and System Limitations apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Structodek[®] Minimum 1/2" thick	N/A	N/A

Note: All layers of insulation shall be adhered to the deck with OlyBond 500™ Adhesive beads 3/4" to 1" wide and spaced 6" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base sheet: One or more plies of GAF Liberty™ SBS SA to be self adhered to the insulation board.

Membrane: One or more plies of RUBEROID[®] EnergyCap SBS Heat Weld Plus FR, RUBEROID[®] SBS Heat-Weld™ 170 FR, RUBEROID[®]-SBS Heat-Weld™ Granule, and RUBEROID[®] SBS Heat-Weld™ Smooth applied according to manufacturer's application instructions.

Surfacing: (Optional, required over RUBEROID[®] SBS Heat-Weld™ Smooth) Install one of the following:

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS[®] Mineral Surfaced Cap Sheet, GAFGLAS[®] EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715, Leak Buster™ Matrix™ 322, TOPCOAT[®] MB Plus, TOPCOAT[®] Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT[®] Surface Seal, TOPCOAT[®] Fireshield[®] SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminate solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design

Pressure: -200 psf; (See General Limitation #9)



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Deck Type 5I: Cementitious Wood Fiber
Deck Description: Cementitious wood fiber
System Type A(2): All layers of insulation and membrane are adhered .

All General and System Limitations apply.

One or more layers of any of the following insulations.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
EnergyGuard™ PolyIso Minimum 1.5" thick	N/A	N/A

Note: All layers of insulation shall be adhered to the deck with OlyBond 500™ Adhesive beads 3/4" to 1" wide and spaced 8" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base sheet: One or more plies of GAF Liberty™ SBS SA to be self adhered to the insulation board.

Membrane: One or more plies of RUBEROID® EnergyCap SBS Heat Weld Plus FR RUBEROID® SBS Heat-Weld™ 170 FR, RUBEROID®-SBS Heat-Weld™ Granule, RUBEROID® SBS Heat-Weld™ Smooth applied according to manufacturer's application instructions.

Surfacing: (Optional, required over RUBEROID® SBS Heat-Weld™ Smooth) Install one of the following:

1. Gravel or slag applied at 400 lbs./sq. and 300 lbs./sq. respectively in a flood coat of approved asphalt at 60 lbs./sq. or applied in a flood coat of Leak Buster™ Matrix™ 103 Cold Process Adhesive applied at a rate of 3 gal./sq.
2. GAFGLAS® Mineral Surfaced Cap Sheet, GAFGLAS® EnergyCap™ Mineral Surfaced Capsheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
3. Leak Buster™ Matrix™ 303 Premium Fibered Aluminum Roof Coating, at 1.5 gal./sq.
4. Leak Buster™ Matrix™ 715, Leak Buster™ Matrix™ 322, TOPCOAT® MB Plus, TOPCOAT® Fireshield Elastomeric Roofing Membrane, applied at 1 to 1.5 gal./sq.
5. Leak Buster™ Matrix™ 602 MB Xtra Elastomeric Roofing Membrane, EnergyCote™ roof coating applied at 1 to 1.5 gal./sq.
6. TOPCOAT® Surface Seal, TOPCOAT® Fireshield® SB Solvent based Elastomeric Roofing Membrane applied at 1 to 1.5 gal./sq.
7. Advance Green Technologies Photovoltaic Laminated solar energy collector auxiliary roof equipment installed in compliance with manufacturer's specifications and applicable Building Codes.

Maximum Design Pressure: -280 psf;(See General Limitation #9)



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GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.
Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



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