



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

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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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 Liberty™ SBS Self-Adhering Modified Bitumen Roofing Systems Over Lightweight Insulating Concrete Decks.

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

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

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

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

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

This NOA renews and revises NOA No. 08-0303.10 and consists of pages 1 through 8.
The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 14-0204.03
Expiration Date: 04/22/19
Approval Date: 03/27/14
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ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	APP/SBS
Deck Type:	Lightweight Concrete
Maximum Design Pressure:	-137.5 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Liberty™ SBS Self-Adhering Base/Ply Sheet	39.375" x 66'	ASTM D6163	Self-adhering, SBS modified base or ply sheet with glass reinforced mat.
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 SBS polymer-modified asphalt.
StormSafe™ Anchor Sheet	40" wide	ASTM D4601	A synthetic anchor sheet manufactured of polypropylene woven fabric coated on both sides with polypropylene.
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 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 polymer-modified asphalt surfaced with mineral granules.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
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™.
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 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™.
Tri-Ply® Mineral Surfaced Cap Sheet	39.37" (1 meter) Wide	ASTM D3909	Asphalt coated, glass fiber mat cap sheet surfaced with mineral granules.
Topcoat Membrane	1, 5 or 55 gallons	ASTM D6083	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 designed to block asphalt bleed-through.
Topcoat® Surface Seal SB	5, 55 gallons	ASTM D6083	Solvent based sprayable thermoplastic rubber sealant designed to protect and restore aged roof surfaces and to increase roof reflectivity.
Matrix™ 307 Premium Asphalt Primer	3, 5, 55 gallons	ASTM D41	Asphalt concrete primer used to promote adhesion of all types of asphalt-based roofing materials.

APPROVED INSULATIONS:

		TABLE 2	
Product Name		Product Description	Manufacturer (With Current NOA)
N/A		N/A	N/A

APPROVED FASTENERS:

					TABLE 3
Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)	
1.	Drill-Tec™ Base Sheet Fastener (1.2 in.)	G-90 galvanized fastener with plate for base sheet attachment to gypsum decks and on lightweight insulating concrete decks less than 2" thick. Coated with R-10 fluorocarbon coating.	1.125" head x 1.2" length 2.75" Galvalume® steel stress plate	GAF	
2.	Drill-Tec™ Base Sheet Fastener E (1.2 in.)	G-90 galvanized fastener with plate for base sheet attachment to gypsum decks and on lightweight insulating concrete decks less than 2" thick. Coated with R-10 fluorocarbon coating.	1.125" head x 1.2" length 2.75" Galvalume® steel stress plate	GAF	



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp	4470	3029832	05/11/07
	4470	3024805	11/20/06
	4470	3036980	08/14/09
	4470	3044688	03/01/12
UL LLC	UL 790	R10689	03/14/13
	UL 790	R1306	05/22/13
Atlantic & Caribbean Roof Consulting	TAS 114-95	07-018	04/20/07
		07-030	05/09/07
		07-044	10/05/07
		07-028	05/08/07
IRT-Arcon Inc	TAS 114-95	01-036	01/23/02
		04-008	01/26/04
Florida Testing Engineering & Consulting, Inc.	TAS 114-95	08-050181	06/26/08
		08-050188	06/28/08
Exterior Research & Design	TAS 114	G420LAB.10.06-RI 02764.09.05	10/20/06 09/09/05
Trinity ERD	ASTM D6401	G121110.12.08	12/02/08
	ASTM D6163	G43180.01.14-1	01/10/14
	ASTM D6222	G40620.07.12-2	07/17/12
	ASTM D6222	G30250.02.10-2	11/11/10
	ASTM D6222	G43190.11.13-1	11/15/13
	ASTM D3909	G30250.02.10-3-R1	11/26/12
	ASTM D3909	G6850.08.07-1	08/13/07
	ASTM D3909/D4798	G43610.01.14	01/22/14
	ASTM D6222	G6850.11.08	02/17/09
	ASTM D6222	G6850.10.08	10/06/08
	ASTM D6222/D4798	G43190.03.14-1	03/06/14
	ASTM D6222/D4798	G43190.03.14-2	03/06/14
	ASTM D6164	G43180.03.14	03/03/14
PRI Construction Materials Technologies, LLC	ASTM D1970	GAF-343.02-01	04/23/12
	ASTM D6083	GAF 082-02-01	05/07/06
	ASTM D6083	GAF-209-211-02-01	05/05/09
	ASTM D6083	GAF-084-02-01	05/07/06
	ASTM D6083	GAF-499-02-01	03/12/14
Momentum Technologies Inc.	ASTM D6083	EX14A3A	02/26/04

APPROVED ASSEMBLIES:

- Membrane Type:** SBS
- Deck Type 4:** Lightweight Insulating Concrete, Non-Insulated
- Deck Description:** Mearlcrete Lightweight Insulating Concrete with a minimum compressive strength of 300 psi over minimum 22 gauge, 1.5 in. deep, Type B steel deck attached to supports with 5/8" puddle welds and the deck side laps attached with #10 TEK screws at 6" o.c. with a maximum 6 ft. bar joist spacing.
- System Type E:** Membrane and/or anchor sheet mechanically attached to roof deck.
- Base Sheet:** StormSafe™ Anchor Sheet mechanically fastened as described below.
- Fasteners:** Drill Tec™ Base Sheet Fastener (1.2 in.) or Drill Tec™ Base Sheet Fastener E (1.2 in.) one row on the 4" laps at 7.5" o.c. and three rows in the center of the sheet staggered at 12" o.c.
- Ply Sheet:
(Optional)** One or more layers of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered with minimum 3" wide laps in accordance with manufacturer's instructions and rolled with a weighted roller.
- Cap Sheet:** One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4" wide laps in accordance with manufacturer's instructions and rolled with a weighted roller.
- Surfacing:** **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing 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, Tri-Ply® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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. 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. A fibered aluminum coating applied in accordance with manufacturer's application instructions.
- Maximum Design Pressure:** -52.5 psf. (See General Limitation #7)



- Membrane Type:** APP/SBS
- Deck Type 4:** Lightweight Insulating Concrete, Non-Insulated
- Deck Description:** Elastizel Lightweight Insulating Concrete with a minimum of 2" thickness and a compressive strength of 250 psi over structural concrete.
- System Type F:** Membrane and ply sheet are adhered to the deck.
- Base/Ply Sheet:** One or more layers of Liberty™ SBS Self-Adhering Base/Ply Sheet self-adhered to lightweight insulating concreted primed with Matrix™ 307 Premium Asphalt Primer. Minimum 3" wide laps in accordance with manufacturer's instructions and rolled with a weighted roller.
- Cap Sheet:** One layer of Liberty™ SBS Self-Adhering Cap Sheet self-adhered with minimum 4" wide laps in accordance with manufacturer's instructions and rolled with a weighted roller.
OR
One or more plies of 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. Membrane is torch adhered to the self-adhering base/ply in accordance with manufacturer's application instructions.
- Surfacing:** **Chosen components must be applied in accordance with manufacturer's application instructions. Any coating listed below used as a surfacing 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, Tri-Ply® Mineral Surfaced Cap Sheet or GAFGLAS® EnergyCap™ BUR 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. 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. A fibered aluminum coating applied in accordance with manufacturer's application instructions.
- Maximum Design Pressure:** -137.5 psf. (See General Limitation #9)



LIGHTWEIGHT INSULATING CONCRETE SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be minimum 22 gage, 33 ksi, attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

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 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 14-0204.03
Expiration Date: 04/22/19
Approval Date: 03/27/14
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