



MIAMI-DADE COUNTY  
**PRODUCT CONTROL SECTION**  
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
 BOARD AND CODE ADMINISTRATION DIVISION

**NOTICE OF ACCEPTANCE (NOA)**

**Flex Membrane International, Corp.**  
**2670 Leiszcz's Bridge Road Suite 400**  
**Leesport, PA. 19533**

**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: Flex TPO Single Ply 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 renews NOA# 12-0529.18 and consists of pages 1 through 7.  
 The submitted documentation was reviewed by Alex Tigera.



NOA No.: 15-0410.02  
 Expiration Date: 09/22/20  
 Approval Date: 09/24/15  
 Page 1 of 7

**ROOFING SYSTEM APPROVAL**

**Category:** Roofing  
**Sub-Category:** Single Ply Roofing  
**Material:** TPO  
**Deck Type:** Wood  
**Maximum Design Pressure:** -52.5 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>
Flex TPO II	Various	ASTM D6878 TAS 131	Thermoplastic olefin reinforced single-ply membrane.
Flex TPO II FB	Various	ASTM D 6878 TAS 131	Thermoplastic olefin reinforced, fleece back single-ply membrane
Flex EG TPO Cut Edge Sealant	1 quart squeeze tube	Proprietary	Clear solvent based sealant for TPO cut edges.

**APPROVED INSULATIONS:**

**TABLE 2**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
Flex EG Polyiso	Polyisocyanurate foam insulation	GAF
DensDeck® Roof Board	Gypsum board	Georgia Pacific Gypsum LLC
SECUROCK® Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corporation
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corp.
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville



**APPROVED FASTENERS:**

**TABLE 3**

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	#14 Roofgrip	Truss head, self-drilling, pinch point, high thread fastener for use in steel, wood or concrete decks.	#14 x 16" max. Length, #3 Phillips head.	OMG, Inc.
2.	AccuTrac Flat Bottom	A2-SS aluminized steel plate for use with Drill-Tec™ fasteners.	3" square; .017" thick	OMG, Inc.
3.	OMG 2-3/8" Barbed XHD Plate	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.	2-3/8" round	OMG, Inc.
4.	OMG 2" Barbed Plate	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.	2" round	OMG, Inc.

**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
UL LLC	03CA38009	UL 790	01/21/04
	08CA37926	UL 790	09/23/09
	08CA49140	UL 790	09/23/09
	R1306	UL 790	05/22/13
	R10689	UL 790	03/14/13
	R19254	ASTM D226	09/13/01
Factory Mutual Research Corp.	3B9Q1.AM	FM 4470	01/08/98
	3020588	FM 4470	03/24/04
	3023458	FM 4470	07/18/06
	3026964	FM 4470	07/25/07
	3029832	FM 4470	05/11/07
	3033135	FM 4470	11/24/08
	3035658	FM 4470	09/16/09
	3038278	FM 4470	11/18/11
	3038318	FM 4470	12/10/10
	3036980	FM 4470	08/14/09
	3040738	FM 4470	11/16/10
	3041769	FM 4470	05/26/11
	3042905	FM 4470	01/10/12
	3045166	FM 4470	07/24/12
	3045363	FM 4470	10/12/12
3047636	FM 4470	08/08/13	



**EVIDENCE SUBMITTED:**

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
IRT-ARCON	02-005	TAS 114	01/24/02
	02-008	TAS 114	01/24/02
Atlantic & Caribbean Roof Consulting, LLC	08-022-R1	TAS 114	01/15/15
	11-056-R2	TAS 114	01/26/15
Exterior Research & Design, L.L.C.	01509.03.04-2	TAS 114-J	03/16/04
Trinity-ERD	G31360.03.10	ASTM D6164	03/31/10
	G34140.04.11-2	ASTM D6163	04/25/11
	G34140.04.11-4-R2	ASTM D4601	06/04/15
	G34140.04.11-5-R3	ASTM D4897	06/04/15
PRI Construction Materials Technologies, LLC	GAF-424-02-01	ASTM D6878/TAS 131	11/11/13
	GAF-425-02-01	ASTM D6878/TAS 131	11/11/13



**APPROVED ASSEMBLIES:**

- Membrane Type:** Single Ply, TPO
- Deck Type 1I:** Wood, Insulated
- Deck Description:** 19/32" or greater plywood secured 6 in. o.c. at panel end and intermediate supports to structural lumber joists spaced maximum 24 in. o.c using 8d ring shank nails or wood plank
- System Type D(1):** All insulation is loose laid with preliminary attachment to roof deck. Membrane is subsequently mechanically fastened through insulation to the wood deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

- Fire Barrier: (Optional)** VersaShield® Fire-Resistant Roof Deck Protection or VersaShield® Solo™ Fire-Resistant Slip Sheet applied per manufacturer instructions.

One or more layers of any of the following.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
DensDeck® Roof Board, SECUROCK® Gypsum-Fiber Roof Board Minimum 1/4" thick	N/A	N/A

**Insulation Note: Insulation layer(s) above shall have preliminary attachment prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft. and four fasteners for any insulation board having no dimension greater than 8 ft. All Insulation panels shall be mechanically fastened along with the roof membrane as specified below. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.**

- Membrane:** Flex TPO II or Flex TPO II FB is mechanically attached with #14 Roofgrip fasteners and OMG 2-3/8" Barbed XHD Plates spaced 6" o.c. within fastener rows spaced maximum 114.5" o.c. The minimum 5" wide side laps are sealed with minimum 1 3/4" wide heat welds for automatic machine welding and with minimum 2" wide welds for hand welding.

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



**Membrane Type:** Single Ply, TPO  
**Deck Type II:** Wood, Insulated  
**Deck Description:** 1<sup>9</sup>/<sub>32</sub>" or greater plywood attached to structural wood supports spaced maximum 24" o.c. using 8d common nails spaced 6" o.c. at all panel edges and intermediary supports.  
**System Type D(2):** All insulation is loose laid with preliminary attachment to wood deck. Membrane is subsequently mechanically fastened through insulation to the wood deck.

**All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.**

One or more layers of any of the following.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft<sup>2</sup></u>
Flex EG Polyiso, ACFoam-II, ENRGY 3 Minimum 1.5" thick	N/A	N/A

**Insulation Note: All insulation shall have preliminary attachment prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft. and four fasteners for any insulation board having no dimension greater than 8 ft. Please refer to Roofing Application Standard RAS 117 for insulation attachment requirements.**

**Membrane:** Flex TPO II or Flex TPO II FB mechanically fastened using #14 Roofgrip fasteners with OMG 2" Barbed Plates spaced 6" o.c. in rows spaced 55" o.c. The outside 1.75" of the 5" lap is heat welded and the fasteners are centered within the remaining 3.25" lap area.

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



## 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 and/or RAS 137. 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**