

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) 315-2599 www.miamidade.gov/economy

US Ply, Inc. 2000 E. Richmond Ave. Fort Worth, TX 76104

## **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: US Ply APP 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 consists of pages 1 through 13. The submitted documentation was reviewed by Alex Tigera.

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## **ROOFING ASSEMBLY NOTICE OF ACCEPTANCE**

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	APP
Deck Type:	Wood
<b>Maximum Design Pressure:</b>	-75 psf

## TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT: TABLE 1

		Test	Product
<b>Product</b>	<b>Dimensions</b>	Specification	Description
USP Base Sheet	36" x 108'	ASTM D 4601	An asphaltic, fiberglass reinforced base sheet
USP Type IV	36" X 180'	ASTM D 2178	An asphaltic, fiberglass reinforced, ASTM D2178 Type IV ply sheet.
USP Type VI	36" X 180'	ASTM D 2178	An asphaltic, fiberglass reinforced, ASTM D2178 Type VI ply sheet.
USP APP 160S	39-3/8" X 32' 9"	ASTM D 6222 Type I, Grade S	Polyester reinforced, smooth surfaced, APP modified bitumen base / interply sheet.
USP APP 160S Plus	39-3/8" X 32' 9"	ASTM D 6222 Type I, Grade S	Torch applied, smooth surfaced, polyester reinforced, APP modified bitumen membrane
USP APP 160M	39-3/8" X 32' 9"	ASTM D 6222 Type I, Grade M	Polyester reinforced, mineral granule surfaced, APP modified bitumen cap sheet.
SafeWeld 180S APP	39-3/8 x 32' 9"	ASTM D 6222 Type I, Grade S	Smooth surfaced, polyester reinforced APP modified bitumen membrane with talc underside.
SafeWeld 180M APP	39-3/8 X 32' 9"	ASTM D 6222 Type I, Grade G	Smooth surfaced, polyester reinforced APP modified bitumen membrane with slag underside.
SafeWeld 180FR APP	39-3/8" x 32' 9"	ASTM D 6222 Type I, Grade G	Granule surfaced, polyester reinforced, fire resistant, APP modified bitumen membrane with slag underside.
DuraWeld 4S APP	39-3/8" x 32' 9"	ASTM D 6222 Type I, Grade S	Smooth surfaced, polyester reinforced, APP modified bitumen base / interply sheet.
DuraWeld 5S APP	39-3/8" x 32' 9"	ASTM D 6222 Type I, Grade S	Smooth surfaced, polyester reinforced, APP modified bitumen base / interply sheet.
DuraWeld 4M APP	39-3/8" x 32' 9"	ASTM D 6222 Type I, Grade G	Polyester reinforced, granule surfaced APP modified bitumen cap sheet.
DuraWeld 4MFR APP	39-3/8" X 32' 9"	ASTM D 6222 Type I, Grade G	Polyester reinforced, mineral granule surfaced, fire resistant, APP modified bitumen cap sheet.
USP #442 Fibered Aluminum Roof Coating	5 gal	ASTM D 2824 Type III	A hydrocarbon protective coating.



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## **APPROVED INSULATIONS:**

#### **Product Name**

ACFoam-II, ACFoam-III ACFoam IV, Tapered ACFoam

ENRGY 3, JM ISO 3 FescoBoard ISO 95+ GL

H-Shield, Tapered H-Shield, H-Shield-CG, H-Shield WF

Multi-Max-3, Multi-Max FA-3

DensDeck, DensDeck Prime, DensDeck DuraGuard Overlayment Board Overlayment Board

SECUROCK Gypsum-Fiber Roof Board

Structodek High Density Fiberboard Roof Insulation Roof Insulation

# TABLE 2Product Description

Polyisocyanurate Insulation Polyisocyanurate insulation with a coated glass mat. Polyisocyanurate Insulation Rigid perlite roof insulation board Polyisocyanurate foam insulation Polyisocuanurate foam insulation

Polyisocyanurate Insulation Water resistant gypsum board

Gypsum board

High Density Wood Fiber insulation board.

#### <u>Manufacturer</u> (With Current NOA)

Atlas Roofing Corporation Atlas Roofing Corporation

Johns Manville Corporation Johns Manville Corporation Firestone Building Products Company, LLC. Hunter Panels, LLC.

Rmax Operating, Inc. Georgia-Pacific Gypsum LLC.

United States Gypsum Corporation Blue Ridge Fiberboard, Inc.



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## **APPROVED FASTENERS:**

#### **Product** Fastener Product Manufacturer Number Name Description Dimensions (With Current NOA) 1. #12 Standard Roofgrip self drilling, carbon steel fastener Various OMG, Inc. with a CR-10 coating 2. OMG 3" Galvalume Steel Galvalume coated steel plate 3" Round OMG, Inc. Plate Trufast 3" Metal Insulation 3. Galvalume steel stress plate 3" Diameter Altenloh, Brinck & CO. Plate U.S., Inc. 4. PlyFast 3" Metal Plate T Galvalume steel stress plate 3" Diameter U.S. Ply, Inc. 5. OMG Heavy Duty Self drilling fastener for steel used Various OMG, Inc. wood, steel or concrete decks 6 Trufast SIP TP Fastener Self-drilling, carbon steel fastener Various Altenloh, Brinck & CO. ued in steel and wood decks. Tru-U.S., Inc. Kote PC-3 coating. 7. Trufast #15 EHD Fastener Carbon steel fastener used in Various Altenloh, Brinck & CO. concrete, steel and wood decks. U.S., Inc. Tru-Kote PC-3 coating. 8. PlyFast #15 Fastener T Heavy duty corrosion resistant Various U.S. Ply, Inc. steel fastener. 9. Trufast #14 HD Fastener Self-drilling, carbon steel fastener Various Altenloh, Brinck & CO. used in concrete, steel and wood U.S., Inc. decks. Tru-Kote PC-3 coating. 10. PlyFast #14 Fastener T Fastener used in steel, concrete Various U.S. Ply, Inc. and wood decks. 11. PlyFast #12 Fastener O self drilling, carbon steel fastener Various U.S. Ply, Inc. with a CR-10 coating 12. PlyFast #14 Fastener O Self drilling fastener for steel used Various U.S. Ply, Inc. wood, steel or concrete decks

TABLE 3

MIAMI-DADE COUNTY APPROVED NOA No.: 10-1123.05 Expiration Date: 03/14/18 Approval Date: 03/14/13 Page 4 of 13

## **EVIDENCE SUBMITTED:**

<b>Test Agency</b>	<u>Test Identifier</u>	<b>Description</b>	Date
Factory Mutual Research Corp.	2D5A9.AM	FM 4450	06/22/99
-	3014751	FM 4450	08/27/03
	3032172	FM 4470	06/12/09
	3024311	FM 4470	11/01/06
	3024973	FM 4470	11/10/06
	3014692	FM 4470	08/05/03
	3023458	FM 4450	07/18/06
Exterior Research & Design, LLC	2005.U0212.09.05-R1	FM 4470	03/31/10
	U0215.05.06-2-R2	ASTM D6222	08/02/10
	U0210.05.06-R1	FM 4470	03/31/10
	U11650.07.09-1	FM 4470	07/15/09
	02762.03.05-R2	FM 4470	04/01/10
	U41790.05.12-1	ASTM D6222 & TAS 110	05/30/12
	U41790.05.12-2	ASTM D6222 & TAS 110	05/30/12
	U35910.12.11-1	TAS 117	12/21/11
	U35910.12.11-3	ASTM D1878	12/21/11

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#### **APPROVED ASSEMBLIES**

Membrane Type:	APP
Deck Type 1I:	Wood, Insulated
Deck Description:	$^{19}/_{32}$ " or greater plywood or wood plank mechanically attached at 24" spans with 8d ring shank nails spaced 6" o.c. at edges and intermediate supports.
System Type A(1):	Anchor sheet mechanically fastened, all layers of insulation adhered with approved asphalt.

#### All General and System limitations apply.

Anchor Sheet: One ply of Miami-Dade approved ASTM D4601 sheet, mechanically fastened to the wood deck with Trufast SIP TP Fasteners or Trufast #15 EHD Fasteners with Trufast 3" Metal Insulation Plates, PlyFast #15 Fastener T with PlyFast 3" Metal Plate T, PlyFast #12 Fastener O or PlyFast #14 Fastener O or #12 Standard Roofgrip or OMG Heavy Duty Fasteners with OMG 3" Galvalume Steel Plates spaced 6" o.c. in the 3" lap and 12" o.c. in two, equally spaced, staggered center rows.

One or more layers of any of the following insulations:

<b>Base Insulation Layer</b>	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> Density/ft <sup>2</sup>
Multi-Max FA-3, ACFoam-II		
Minimum 1.5" thick	N/A	N/A

Top Insulation LayerInsulation Fasteners(Table 3)	<u>Fastener</u> Density/ft <sup>2</sup>
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Structodek High Density Fiberboard Roof Insulation, SECUROCK Gypsum-Fiber Roof Board, DensDeckPrimeMinimum ½" thickN/A

FescoBoard Minimum ¾" thick

Note: Insulation shall be adhered with approved asphalt within the EVT range and at a rate of 25 lbs/sq<sup>2</sup>. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

**Base Sheet:** 

One ply of USP Type IV or USP Base Sheet, hot asphalt applied. Or

One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180SAPP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded only when used over DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.

N/A



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N/A

Ply Sheet:	One or more plies of USP Type IV or USP Base Sheet, hot asphalt applied. Or One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.
Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.
Surfacing:	For use on non FR membranes: USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.
Maximum Design Pressure:	- 75.0 psf (See General Limitation #7).



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Membrane Type:	APP
Deck Type 1I:	Wood, Insulated
Deck Description:	$^{19}/_{32}$ " or greater plywood or wood plank mechanically attached at 24" spans with 8d ring shank nails spaced 6" o.c. at edges and intermediate supports.
System Type B(1):	Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

One or more layers of any of the following insulations:

<b>Base Insulation Layer</b>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft <sup>2</sup>
ISO 95+ GL, ACFoam-II, ENRGY 3 or Multi-Max FA-3 Minimum 1.5" thick	12, 5 with 2	1 : 1.33 ft <sup>2</sup>
ACFoam-II, ENRGY 3 Minimum 1.5" thick	3 with 9 4 with 10	1 : 1.33 ft <sup>2</sup>

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer	<u>Insulation Fasteners</u> (Table 3)	<u>Fastener</u> Density/ft <sup>2</sup>
Structodek High Density Fiberboard Roof Insulation, SEC Gypsum-Fiber Roof Board or DensDeck Prime, DensDeck		BOARD
Minimum <sup>1</sup> / <sub>2</sub> <sup>""</sup> thick	N/A	N/A
FescoBoard Minimum ¾" thick	N/A	N/A

Note: Top layer of insulation shall be adhered in full mopping of 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.

Base Sheet:	One ply of USP Type IV or USP Base Sheet, hot asphalt applied. Or One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded only when applied over DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.
Ply Sheet:	One or more plies of USP Type IV or USP Base Sheet, hot asphalt applied. Or One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

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Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.
Surfacing:	For use on non FR membranes: USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.
Maximum Design Pressure:	- 60.0 psf (See General Limitation #7).



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Membrane Type:	APP
Deck Type 1I:	Wood, Insulated
Deck Description:	$^{19}/_{32}$ " or greater plywood or wood plank mechanically attached at 24" spans with 8d ring shank nails spaced 6" o.c. at edges and intermediate supports
System Type C(1):	All layers of insulation simultaneously attached to roof deck. Membrane is subsequently fully or partially adhered to insulation.

One or more layers of any of the following insulations:

<b>Base Insulation Layer</b>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener</u> Density/ft <sup>2</sup>
Any Approved Polyisocyanurate Listed in Table 1 Minimum 1.5" thick	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 e same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Lay	er	Insulation Fasteners (Table 3)	<u>Fastener</u> Density/ft <sup>2</sup>
DensDeck Prime, S Minimum ¼" thick	ECUROCK Gypsum-Fiber Roof Board	3 with 6	1:1.33 ft <sup>2</sup>
Base Sheet:	One ply of USP Type IV, hot asphalt applied. Or One ply of USP APP 160S, USP APP 160S Plus, S DuraWeld 4S APP, heat welded.	SafeWeld 180S APP, DuraWel	d 5S APP or
Ply Sheet:	One or more plies of USP Type IV or USP Base SP Or One or more layers of USP APP 160S, USP APP 1 APP or DuraWeld 4S APP, heat welded.		P, DuraWeld 5S
Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.		
Surfacing:	For use on non FR membranes: USP #442 Fibered Aluminum Roof Coating applie	ed at a rate of 1.5 gal/sq.	
Maximum Design Pressure:	-60.0 (See General Limitation #7).		



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Membrane Type:	APP
Deck Type 1I:	Wood, Non-Insulated
<b>Deck Description:</b>	Min. 19/32" plywood or wood plank.
System Type E(1):	Base sheet mechanically fastened.

Base Sheet:	One ply of USP Base Sheet shall be mechanically fasted to the deck with 1-5/8" diameter Tin-Caps and 12 ga. ring shank nails spaced 8" o.c. in the 3" lap and 8" o.c. in three, equally spaced, staggered center rows.
Ply Sheet:	(Optional) One or more layers of USP APP 160S, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.
Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.
Surfacing:	For use on non FR membranes: USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.
Maximum Design Pressure:	- 60.0 psf (See General Limitation #7).



Membrane Type:	APP
Deck Type 1I:	Wood, Non-Insulated
<b>Deck Description:</b>	Min. 19/32" plywood or wood plank.
System Type E(2):	Base sheet mechanically fastened.

Base Sheet:	One ply of USP Base Sheet shall be mechanically fasted to the deck with 1-5/8" diameter Tin-Caps and 12 ga. ring shank nails spaced 6" o.c. in the 3" lap and 6" o.c. in three, equally spaced, staggered center rows
Ply Sheet:	(Optional) One or more layers of USP APP 160S, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.
Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.
Surfacing:	For use on non FR membranes: USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.
Maximum Design Pressure:	- 67.5 psf (See General Limitation #7).



## WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 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 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.)

## END OF THIS ACCEPTANCE



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