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

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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NOTICE OF ACCEPTANCE (NOA)

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 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 renews NOA #18-0109.03 and consists of pages 1 through 10.
The submitted documentation was reviewed by Alex Tigera.

ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Material: APP
Deck Type: Cementitious Wood Fiber
Maximum Design Pressure: -52.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
USP Base	36" x 108'	ASTM D 4601	An asphaltic, fiberglass reinforced base sheet
USP NVB	36" x 36'	ASTM D4897 Type II	Fiberglass reinforced venting base sheet.
USP Type IV Felt	36" X 180'	ASTM D 2178	An asphaltic, fiberglass reinforced, ASTM D2178 Type IV ply sheet.
USP Type VI Felt	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 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 / interplay 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 4M FR 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.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam-II, ACFoam-III	Polyisocyanurate Insulation	Atlas Roofing Corporation
Tapered ACFoam	Polyisocyanurate insulation with a coated glass mat.	Atlas Roofing Corporation
ENRGY 3	Polyisocyanurate Insulation	Johns Manville Corporation
FescoBoard	Rigid perlite roof insulation board	Johns Manville Corporation
H-Shield, Tapered H-Shield, H-Shield-CG, H-Shield WF	Polyisocyanurate foam insulation	Hunter Panels, LLC.
Multi-Max FA-3	Polyisocyanurate Insulation	Rmax Operating, Inc.
DensDeck, DensDeck Prime	Water resistant gypsum board	Georgia-Pacific Gypsum LLC.
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	United States Gypsum Corporation
Structodek High Density Fiberboard Roof Insulation	High Density Wood Fiber insulation board.	Blue Ridge Fiberboard, Inc.
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC

APPROVED FASTENERS/ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Trufast Twin Loc-Nail Assembled Fastener	Pre-assembled galvalume steel fastener/plate unit.	Various	Altenloh, Brinck & Co. U.S., Inc.
2.	PlyFast Double Lock Nail E	Pre-assembled, coated steel fastener with dual locking staple shanks	Various	U.S. Ply, Inc.
3.	OlyLok Locking Impact Nail	Coated, preassembled fastener	Various	OMG, Inc.
4.	PlyFast Double Lock Nail O	Coated, preassembled fastener	Various	U.S. Ply, Inc.
5.	ICP Adhesives CR-20	Dual component urethane adhesive.	Various	ICP Adhesives and Sealants, Inc.
6.	OMG OlyBond Adhesive	Spray Polyurethane Foam	Various	OMG, Inc.
7.	OMG OlyBond 500	Spray Polyurethane Foam	Various	OMG, Inc.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research	3026836	FM 4454	07/13/07
	3029993	FM 4470	09/21/07
Exterior Research & Design, LLC	2005.U0212.09.05-R1	FM 4470	03/31/10
	U11650.07.09	TAS 114	07/15/09
	U0215.05.06-2-R2	ASTM D6222	08/02/10
	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

APPROVED ASSEMBLIES

Membrane Type: APP

Deck Type 5I: Cementitious Wood Fiber, Insulated

Deck Description: Cementitious wood fiber

System Type A(1): Anchor sheet mechanically fastened; all layers of insulation fully adhered with approved asphalt.

All General and System limitations apply.

Anchor Sheet: One ply of USP NVB, USP Type IV Felt, USP Type VI Felt, or USP Base fastened to the deck with Trufast Twin Loc-Nail Assembled Fasteners or PlyFast Double Lock Nail E spaced 9" o.c. at the 2" side lap and 18" o.c. in two, equally spaced staggered rows.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 25 lbs/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet One ply of USP Base fully adhered in hot asphalt.

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: -45.0 psf (See General Limitation #9).

Membrane Type: APP

Deck Type 5I: Cementitious Wood Fiber, Insulated

Deck Description: Cementitious wood fiber

System Type A(2): All layers of insulation fully adhered with approved adhesive.

All General and System limitations apply.

Anchor Sheet: One or more plies of approved asphaltic base sheet secured OlyLok Locking Impact Nail or PlyFast Double Lock Nail O installed 9" o.c. along the 2" side lap and 18" o.c. in two, equally spaced staggered rows.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
H-Shield, ACFoam-II, ISO 95+ GL, ENRGY 3 Minimum 1.5" thick	**N/A**	**N/A**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: Base insulation may be adhered with OMG OlyBond Adhesive applied at 1 gal/sq (0.4 L/m²) or OMG OlyBond 500 applied in ¾" to 1" wide beads 12" o.c. Top insulation layer may be adhered with OMG OlyBond Adhesive or OMG OlyBond 500 applied in ¾" to 1" wide beads 12" o.c. Please refer to Roofing Application Standard RAs 117 for insulation attachment.

Base Sheet One ply of USP Base fully adhered in hot asphalt.

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: -45.0 psf (See General Limitation #9).

Membrane Type: APP

Deck Type 5I: Cementitious Wood Fiber, Insulated

Deck Description: Cementitious wood fiber

System Type A(3): All layers of insulation fully adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
H-Shield, H-Shield C, ACFoam-II, ACFoam-III, ISO 95+ GL, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall be adhered with ICP Adhesives CR-20 applied in 3" to 3½" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAs 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Base Sheet One ply of USP Base fully adhered in hot asphalt.

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: -52.5 psf (See General Limitation #9).

Membrane Type: APP

Deck Type 5I: Cementitious Wood Fiber, Insulated

Deck Description: Cementitious wood fiber

System Type C(1): Base layer of insulation mechanically fastened.

All General and System limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck **Minimum ¼"" thick**	**1 or 2**	**1: 2 ft^2**
Structodek High Density Fiberboard Roof Insulation **Minimum ½" thick**	**1 or 2**	**1 : 2 ft^2**
FescoBoard **Minimum ¾" thick**	**1 or 2**	**1 : 2 ft^2**

Note: Insulation 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base fully adhered in hot asphalt.

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: -45.0 psf (See General Limitation #9).

Membrane Type:	APP
Deck Type 5I:	Cementitious Wood Fiber, Insulated
Deck Description:	Cementitious wood fiber
System Type E(1):	Base sheet mechanically fastened.

All General and System Limitations apply.

Base Sheet:	One ply of USP NVB, USP Type IV Felt, USP Type VI Felt, or USP Base fastened to the deck with Trufast Twin Loc-Nail Assembled Fasteners or PlyFast Double Lock Nail E spaced 9” o.c. at the 2” side lap and 18” o.c. in two, equally spaced staggered rows.
Membrane:	One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.
Maximum Design Pressure:	-45.0 psf (See General Limitation #9).

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