



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) 31525-99

www.miamidade.gov/economy

Firestone Building Products Company, LLC
200 4th Ave South
Nashville, TN 37201

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: Firestone UltraPly TPO and TPO XR Single Ply Roof 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 NOA consists of pages 1 through 13.

The submitted documentation was reviewed by Hamley Pacheco, P.E.



NOA No.: 15-0428.15
Expiration Date: 09/05/24
Approval Date: 09/05/19
Page 1 of 13

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	TPO
Deck Type:	Cementitious Wood Fiber
Maximum Design Pressure	-160 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
UltraPly TPO	Various	TAS 131-95	Reinforced TPO .045" to .080" thick membrane
UltraPly TPO Flex Adhered	10' x 100'	TAS 131-95	Reinforced TPO 60 mil thick membrane
UltraPly TPO XR 100	Various	TAS 131-95	Reinforced Fleece-backed TPO
UltraPly TPO XR 115	Various	TAS 131-95	Reinforced Fleece-backed TPO
UltraPly TPO XR 135	Various	TAS 131-95	Reinforced Fleece-backed TPO
UltraPly TPO Reinforced Curb Corner	Various	TAS 131-95	TPO curb flashing
UltraPly 18" Curb Flashing	Various	TAS 131-95	TPO curb flashing
UltraPly TPO Inside/Outside Corner	Various	TAS 131-95	Molded TPO for corner flashing
UltraPly TPO Large Pipe Flashing	Various	TAS 131-95	TPO flashing for large round penetrations
UltraPly TPO T-Joint Cover	Various	TAS 131-95	TPO flashing for T-joints
UltraPly TPO Penetration Kit	Various	TAS 131-95	A penetration sealing kit for UltraPly TPO
UltraPly TPO Walkway Pad	Various	TAS 131-95	TPO walkway pad
UltraPly TPO Coated Metal	Various	TAS 131-95	TPO laminated to hot-dipped galvanized steel for flashing
UltraPly TPO Premium Walkway Pad	Various	TAS 131-95	TPO walkway pad
UltraPly TPO Reinforced Split Pipe Boot	Various	TAS 131-95	TPO flashing for round penetrations 1" to 9" in diameter
UltraPly TPO 8" Reinforced Cover Strip	Various	TAS 131-95	8" wide 60 mil TPO cover strip
UltraPly TPO Universal Pipe Boot	Various	TAS 131-95	TPO flashing for round penetrations 1" to 6" in diameter
UltraPly TPO Unsupported Flashing	Various	TAS 131-95	Unreinforced TPO used for flashing



TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
SBS Poly Base	39.4" x 50'	ASTM D 6164	Polyester reinforced SBS modified bitumen membrane with sanded surfaces.
SBS Smooth	39.4" x 33'6"	ASTM D 6164	Polyester reinforced, SBS modified membrane with sanded surfaces
SBS Base	39.4" x 50'	ASTM D 6163	Fiberglass reinforced, SBS modified bitumen ply with sanded surfaces
SBS Premium Base	39.4" x 50'	ASTM D6164	Fiberglass reinforced SBS modified bitumen with sanded surfaces.
MB Base	36" x 108"	ASTM D 4601	Fiberglass reinforced base sheet, asphalt coated on both sides. Applied in hot asphalt or mechanically attached.
UltraPly Bonding Adhesive	5 gal. pail	Proprietary	Solvent based adhesive
Single Ply LVOC Bonding Adhesive	5 gal. pail	Proprietary	Solvent based bonding adhesive
Single Ply LVOC Bonding Adhesive 1168	5 gal. pail	Proprietary	Solvent based bonding adhesive
XR Stick Membrane Adhesive	5 gal. pail	Proprietary	A low-rise polyurethane, low VOC, membrane adhesive.
XR Bonding Adhesive	5 gal. pail	Proprietary	Solvent based adhesive
Water Based Bonding Adhesive P	5 gal. pail	Proprietary	Water based bonding adhesive
I.S.O. Spray R	15gal pail & 55gal drum	Proprietary	A two-part polyurethane adhesive
I.S.O. Stick	5 gal & 1500 ml	Proprietary	A dual component polyurethane adhesive.
I.S.O. Twin Pack Insulation Adhesive	1500 ml	Proprietary	A dual component polyurethane adhesive.
I.S.O. Fix II	30 lbs.	Proprietary	A single component polyurethane adhesive.
Twin Jet	Part 1 and Part 2	Proprietary	A two-component, low-rise polyurethane adhesive



APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ISO 95+ GL ISO 95+ GL Tapered RESISTA and tapered	Polyisocyanurate foam insulation	Firestone Bldg. Products
Coated Glass Facer Coated Glass Facer Tapered	Polyisocyanurate foam core laminated to a coated fiberglass facer	Firestone Bldg. Products
ISO GARD HD	Polyisocyanurate foam core laminated to a coated fiberglass facer	Firestone Bldg. Products
GenFlex ISO Insulation GenFlex ISO Insulation Tapered	Polyisocyanurate foam insulation	Firestone Bldg. Products
GenFlex HD ISO	Polyisocyanurate with a coated fiberglass facer	Firestone Bldg. Products
DensDeck Prime SECUROCK Gypsum-Fiber Roof Board	Silicon treated gypsum Gypsum fiber roof board	Georgia Pacific Gypsum LLC USG Corporation
ISO GARD HD Composite	Polyisocyanurate with a coated fiberglass facer composite insulation.	Firestone Bldg. Products
GenFlex HD Composite ISO	Polyisocyanurate with a coated fiberglass facer composite insulation.	Firestone Bldg. Products

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Two-Piece Impact Nail	Base Ply fastening systems for new or existing cementitious wood fiber decks.	Various	Altenloh, Brinck & Co. U.S., Inc.
2.	Firestone Polymer	Fastener	Various	Firestone Building Products
3.	Firestone Polymer Fastener Insulation Plate	Insulation Plate	3"	Firestone Building Products
4.	PermaMop	Modified roofing asphalt.	100 lb container	Owens Corning Roofing and Asphalt LLC



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Underwriters Laboratories Inc.	UL R9516	UL 790	03/22/05
PRI Construction Materials Technologies, LLC	FBP-038-02-01	ASTM D 6164	12/27/10
	FBP-044-02-01.10	Component Substitution	03/15/18
	FBP-053-02-01	TAS 110	10/08/12
	FBP-058-02-01	ASTM D 4601	11/28/11
	FBP-059-02-01.5	Component Substitution	02/05/16
	FBP-076-02-01	TAS 110	10/23/12
	FBP-094-02-01	TAS 131/ASTM D6878	11/20/13
	FBP-145-02-01	ASTM D 6878 D	06/26/14
		ASTM D 6878 M	
	FBP-168-02-03	ASTM D 6164	07/14/14
	FBP-194-02-03	TAS 114 D	10/16/14
	FBP-238-02-01	TAS 114 J	07/01/15
	FBP-280-02-01	ASTM C 1289	04/27/16
	FBP-243-02-01	TAS 114 D	07/29/15
	FBP-315-02-01	ASTM C 1289	10/28/16
FBP-373-02-01	TAS 131	11/15/18	
FM Approvals	3044429	4470	04/12/12
	3047398	4470	08/15/13
	3038191	4470	08/04/11
	3062305	4470	1/11/19
Trinity ERD	F8300.11.08-R3	TAS 131/ ASTM D6878	02/25/11
	F45600.09.13-R1	TAS 131/ASTM 6878	12/30/13



APPROVED ASSEMBLIES:

Membrane Type:	Single Ply, TPO, Reinforced
Deck Type 5I:	Cementitious Wood Fiber, Insulated
Deck Description:	Cementitious Wood Fiber
System Type A(1):	One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

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.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer, ISOGARD HD, GenFlex HD ISO		
Minimum 1" thick	N/A	N/A
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5" thick	N/A	N/A
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with I.S.O. Twin Pack Insulation Adhesive applied in ½" to ¾" ribbons spaced 12" o.c. or I.S.O. Spray R applied in ¾" to 1" wide ribbons spaced 12" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO or UltraPly TPO Flex Adhered membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. Or with Water Based Bonding Adhesive P (not to UltraPly TPO Flex Adhered) applied at a rate of 100-120 ft²/gal. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.

Or

UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Stick or I.S.O. Spray R applied in ¾" to 1" wide beads spaced 12" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. or with Twin Jet spatter applied at a rate of 5.8 lbs./sq. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.

Or

(To DensDeck Prime or SECUROCK only) UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with hot asphalt or PermaMop applied at a rate of 25 – 40 lbs/100 ft². or with XR Bonding Adhesive applied at a rate of 70 to 90 ft²/gal. applied to the substrate only. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressure:

-75 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(2): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

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 the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer Minimum 1/2" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer, ISOGARD HD, GenFlex HD ISO Minimum 1/2" thick	N/A	N/A
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	N/A	N/A
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: All insulation layers shall be adhered to the deck with I.S.O. Twin Pack Insulation Adhesive applied in 1/2" to 3/4" ribbons spaced 12" o.c. or I.S.O. Spray R applied in 3/4" to 1" wide ribbons spaced 12" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO or UltraPly TPO Flex Adhered membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. Or with Water Based Bonding Adhesive P (not to UltraPly TPO Flex Adhered) applied at a rate of 100-120 ft²/gal. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.
 Or
 UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Stick or I.S.O. Spray R applied in 3/4" to 1" wide beads spaced 12" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. or with Twin Jet spatter applied at a rate of 5.8 lbs./sq. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.
 Or
 (To DensDeck Prime or SECUROCK only) UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with hot asphalt or PermaMop applied at a rate of 25 – 40 lbs/100 ft². or with XR Bonding Adhesive applied at a rate of 70 to 90 ft²/gal. applied to the substrate only. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressure: -92.5 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(3): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

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 the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer Minimum 1/2" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum 1/4" thick	N/A	N/A
ISOGARD HD, GenFlex HD ISO Minimum 1/2" thick	N/A	N/A
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered with I.S.O. Fix II or I.S.O. Stick applied in 3/4" to 1" wide ribbons spaced 6" o.c. or I.S.O. Twin Pack Insulation Adhesive applied in 1/2" to 3/4" wide ribbons spaced 6" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. Or with Water Based Bonding Adhesive P applied at a rate of 100-120 ft²/gal. The 3" wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.
 Or
 UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Stick applied in 3/4" to 1" wide beads spaced 6" o.c. or with I.S.O. Spray R applied with 3/4" to 1" wide ribbons spaced 12" o.c. or with Twin Jet applied in 1" to 1.25" wide ribbons spaced 12" o.c. or with Twin Jet spatter applied at a rate of 5.8 lbs./sq. The 3" wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.
 Or
 (To DensDeck Prime or SECUROCK only) UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with hot asphalt or PermaMop applied at a rate of 25 – 40 lbs/100 ft². or with XR Bonding Adhesive applied at a rate of 70 to 90 ft²/gal. applied to the substrate only. The 3" wide roof cover side and end laps are sealed with a minimum 1.5" heat weld.

Maximum Design Pressure: -160 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(4): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

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 the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer, ISOGARD HD, GenFlex HD ISO		
Minimum ½” thick	N/A	N/A
ISOGARD HD Composite, GenFlex HD Composite ISO		
Minimum 1.5” thick	N/A	N/A
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board		
Minimum ¼” thick	N/A	N/A

Note: Insulation shall be adhered to the deck with I.S.O. Fix II, or I.S.O. Stick applied in ¾” to 1” wide ribbons spaced 6” o.c. or with I.S.O. Twin Pack Insulation Adhesive applied in ½” to ¾” wide ribbons spaced 6” o.c. or with Twin Jet applied in 1” to 1.25” wide ribbons spaced 12” o.c. or with I.S.O. Spray R applied in ¾” to 1” wide ribbons spaced 12” o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO or UltraPly TPO Flex Adhered membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. Or with Water Based Bonding Adhesive P (not to UltraPly TPO Flex Adhered) applied at a rate of 100-120 ft²/gal. The 3” wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.
 Or
 UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Stick applied in ¾” to 1” wide beads spaced 6” o.c. or with ISO Spray R applied in ¾” to 1” wide beads spaced 12” o.c. The 3” wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.
 Or
 (To DensDeck Prime or SECUROCK only) UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with hot asphalt or PermaMop applied at a rate of 25 – 40 lbs/100 ft². or with XR Bonding Adhesive applied at a rate of 70 to 90 ft²/gal. applied to the substrate only. The 3” wide roof cover side and end laps are sealed with a minimum 1.5” heat weld.

Maximum Design Pressure: -142.5 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type A(5): One or more layers of insulation mechanically attached; membrane fully adhered.

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.

Vapor Barrier (Optional): One ply of MB Base, SBS Base, SBS Poly Base, SBS Premium Base, or SBS Smooth is mechanically fastened to the deck with Two-Piece Impact Nails. Fasteners are spaced 12" o.c. rows spaced 37-3/8" and 18" o.c along two staggered rows evenly spaced in the field of the sheet.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation, RESISTA, Coated Glass Facer Minimum 1" thick	N/A	N/A
ISOGARD HD, GenFlex HD ISO Minimum 1/2" thick	N/A	N/A
ISOGARD HD Composite, GenFlex HD Composite ISO Minimum 1.5" thick	N/A	N/A
DensDeck Prime, SECUROCK Gypsum Fiber Roof Board Minimum 1/4" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with I.S.O. Twin Pack Insulation Adhesive applied in 3/4" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO or UltraPly TPO Flex Adhered membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. or with Water Based Bonding Adhesive P applied at a rate of 120 ft²/gal to both the substrate and the underside of the roof cover. The minimum 3" wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Or

UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Bonding Adhesive applied to the substrate only at a rate of 70 – 90 ft² /gallon. The minimum 3" wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Maximum Design Pressure: -45 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO
Deck Type 5I: Cementitious Wood Fiber, Insulated
Deck Description: Cementitious Wood Fiber
System Type C(1): One or more layers of insulation mechanically attached; membrane fully adhered.

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 the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+ GL, GenFlex ISO Insulation Minimum 1” thick	2 with 3	1:2.1 ft²
ISOGARD HD, GenFlex HD ISO Minimum ½” thick	2 with 3	1:2.1 ft²

Note: All layers shall be simultaneously fastened. See above for fasteners and density. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Minimum 45 mil UltraPly TPO or UltraPly TPO Flex Adhered membrane fully adhered to the insulation layer with UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply Bonding Adhesive 1168 applied at a rate of 45 – 60 ft²/gal to both the substrate and the underside of the roof cover. or with Water Based Bonding Adhesive P applied at a rate of 120 ft²/gal to both the substrate and the underside of the roof cover. The minimum 3” wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Or

UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly TPO XR 135 adhered with XR Bonding Adhesive applied to the substrate only at a rate of 70 – 90 ft² /gallon. The minimum 3” wide roof cover side and end laps are sealed with a minimum 1.5 in. heat weld.

Maximum Design Pressure: -45 psf. (See General Limitation #9)



Membrane Type: Single Ply, TPO Reinforced
Deck Type 5: Cementitious Wood Fiber
Deck Description: Minimum 3” thick cementitious wood fiber panels installed over structural supports spaced 4 ft o.c. with three (3) Dekfast 14 fasteners with 2” diameter metal plates installed along each support and panel edge. Fasteners located 3.5” from edge and centered between edge fasteners.
System Type E(1): Base Sheet mechanically fastened, Membrane adhered

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.

Base Sheet: SBS Poly Base, SBS Premium Base or SBS Smooth attached with 1.8” Two-Piece Impact Nail secured 7” o.c. in the 3-3/8” wide side lap and 7” o.c. in two equally spaced, staggered rows in the field.
Membrane: Min. UltraPly TPO XR 100, UltraPly TPO XR 115, or UltraPly TPO XR 135 membrane adhered with I.S.O. Spray R applied with 3/4” to 1” ribbons spaced 12” o.c. The 2.5” wide roof cover side and end laps are sealed with a minimum 1.5” heat weld.
Maximum Design Pressure: -90 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 Professional Engineer, Registered 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 9N-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

