



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Seaman Corporation
1000 Venture Boulevard
Wooster, OH 44691**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Fibertite Single Ply Roof 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 consists of pages 1 through 10.
The submitted documentation was reviewed by Frank Zuloaga, RRC



**NOA No.: 03-0325.02
Expiration Date: 03/17/08
Approval Date: 05/08/03
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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: Thermoplastic
Deck Type: Wood
Maximum Design Pressure -45 psf
Fire Classification: See General Limitation #1

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>
FiberTite (33 mil)	Assorted Pre-	TAS 114	thermoplastic, single ply membrane
FiberTite XT (45 mil)	Fabricated widths and lengths		
FiberTite FB (40 mil Fleece Back)	54" x 100'	TAS 114	thermoplastic, fleece-backed, single ply membrane
FTR Non-Reinforced	0.060" x 54" x 24'	TAS 114	thermoplastic flashing accessory
FTR Cones	1" to 8"	TAS 114	premolded "thermoplastic" pipe flashing
FTR Corners	2' x 2'	TAS 114	premolded "thermoplastic" corner flashing (4 per unit)
FTR 101		proprietary	one part urethane sealant
FTR 201		proprietary	elastomeric (mastic) sealant
FTR 301		proprietary	Asphalt/urethane adhesive
FTR 190		proprietary	two side "contact" bonding adhesive
FTR 290		proprietary	one side "substrate only" fleece back solvent based adhesive
FTR 390		proprietary	one side "substrate only" fleece back water based adhesive
FTR SL1		proprietary	one part "pourable" urethane sealant
FiberClad	48" x 120" □	n/a	polymeric coated G-90 galvanized steel or stainless steel
Tuff Trac	5/32" x 36" x 40'	n/a	vinyl walk way
	1/4" x 24" x 48"		vinyl protection pad
FTR Term. Bar	1/4" x 1" x 10'	TAS 114	aluminum "membrane" termination and/or retainer bar
FTR Term. Bar Fasteners	#14 x 1" SS-A 1/4" x 1 1/4" □	TAS 114	stainless steel screws zinc expansions anchors



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APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
FTR-Value	Isocyanurate Insulation	Seaman Corp.
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
Dens Deck	Silicon treated gypsum	G-P Products
Sturdi-Top	Wood fiber insulation board.	G-P Products
H-Shield	Isocyanurate Insulation	Hunter Panels LLC
ENRGY 2, ENERGY 3, PSI-25	Isocyanurate Insulation	Johns Manville
Wood Fiberboard	Regular wood fiber insulation	Generic
High Density Wood Fiberboard	High Density Wood Fiber insulation board.	Generic
Perlite Insulation Board	Perlite Insulation	Generic
Type X Gypsum	Gypsum Wallboard	Generic
Multi-Max, FA	Polyisocyanurate foam insulation	Rmax, Inc.
Rocroof	Rockwool fire barrier	Tritex

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	FTR MAGNUM Fastener	Membrane fastener	Various	Seaman Corp.
2.	FTR MAGNUM Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	Seaman Corp.
3.	Olympic Fasteners	Insulation and membrane fastener	Various	Olympic Mfg. Group
4.	Olympic Standard	Galvalume AZ55 stress plate	3" round	Olympic Mfg. Group
5.	Olympic Plastic Plastic	Plastic plates for fasteners.	3" round	Olympic Mfg. Group
6.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks	Various	SFS Stadler, Inc.
7.	Insul-Fixx S	3" round Galvalume AZ55 stress plate	3" round	SFS Stadler, Inc.
8.	Insul-Fixx P	3" round polyethylene stress plate	3" round	SFS Stadler, Inc.



EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	Wind Resistance (Mechanically Attached)	J.I. #0X5A7.AM	03/03/93
		J.I. #1X5A8.AM	07/03/93
		J.I.# 0R8A9.AM	03/12/94
		J.I. #2X2A2.AM	06/17/94
		J.I.#2Y0A4.AM (FMRC 4470 - PA 114)	11/01/94
Factory Mutual Research Corp.	Wind and Fire Resistance (Fully Adhered)	J.I.# 0Y7A2.AM	11/28/94
		J.I. #1Y7A5.AM (FMRC 4470 - PA 114)	12/29/95
Factory Mutual Research Corp.	Pull-Through Testing	J.I. #1Z2A5.AM (FMRC 4470 - PA 114)	01/12/96
Factory Mutual Research Corp.	Insulation Attachment Requirements	FM Approval Guide	Published Annually
Factory Mutual Research Corp.	Wind/Fire Resistance (Fleece Backed)	J.I. 1Z3A8.AM (FMRC 4470 - PA 114)	08/13/97
Factory Mutual Research Corp.	Wind Resistance (Mechanically Attached)	J.I. #30003251 (FMRC 4470 - PA 114)	10/15/99
Underwriters Laboratories	Fire Classifications	Listing R-10117	Published Annually
Underwriters Laboratories	Fire Resistance Testing	94NK40647	10/15/94
		95NK20862	11/17/95
		98NK12810	8/11/98
		98NK17212	8/21/98
Warnock Hersey	Fire Resistance Tests	495-R-0735	Published Annually
Trinity Engineering, Inc.	Dynamic Pull-Through Testing, PA 117(B)	#4730.12.95-1	12/03/95
Exterior Research & Design, LLC	Uplift Resistance PA 114(C) & PA 114(D)	#4015.10.96-1	10/02/96
Exterior Research & Design, LLC	Uplift Resistance PA 114(J)	#4006.07.97-1	10/02/96



APPROVED ASSEMBLIES

- Membrane Type:** Single Ply, Thermoplastic
- Deck Type II:** Wood, Insulated, and New Construction, Re-roof
- Deck Description:** 19/32" or greater plywood or wood plank
- System Type B:** Base layer of insulation mechanically attached, top layer adhered; membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
FTR-Value, AC Foam II, Multi-Max FA, H-Shield, ENRGY-2		
Minimum 1.5" thick	6	1:2 ft ²
Minimum 2" thick	6	1:4 ft ²

Note: Base layer shall be mechanically attached with fasteners and density described above. 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).

(Optional) Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
FTR-Value, AC Foam II, Multi-Max FA, H-Shield, ENRGY-2		
Minimum 1.5" thick	N/A	N/A

Note: Apply optional top layer of insulation in 3/4" to 1" wide beads of FTR 301 Adhesive, 12" o.c., or a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² or in 3/4" to 1" wide beads of Insta-Stik Adhesive, 12" o.c. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.

Vapor Retarders: (Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: 1/4" Dens Deck applied to the base or top insulation layer in 3/4" to 1" wide beads of FTR 301 Insulation Adhesive, 12" o.c., or a full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./sq. or in 3/4" to 1" wide beads of Insta-Stik Adhesive, 12" o.c.



Membrane:

FiberTite or FiberTite XT roof cover adhered to the insulation with FTR-190 Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate.

or

FiberTite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FTR-290 solvent adhesive at 1 gal. per 100 ft² or FTR-390 asphalt based adhesive at 1 gal. per 60 ft².

Maximum Design
Pressure:

-45 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type II: Wood, Insulated, and New Construction, Re-roof
Deck Description: 1⁹/₃₂" or greater plywood or wood plank
System Type C: All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, ACFoam II, Multi-Max FA, H-Shield, ENRGY-2 Minimum 1" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Dens Deck		
Minimum 1/4" thick	3	1:1.7 ft ²
Minimum 1/4" thick	3	1:1.3 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. (See Roofing Application Standard RAS 117 for fastening details.)

Vapor Retarders: (Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: See Top Insulation Layer, above.

Membrane: FiberTite or FiberTite XT roof cover adhered to the insulation with FTR-190 Bonding Adhesive applied at an application rate of 1 gal./sq. to the backside of the membrane and to the substrate.
 or
 FiberTite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FTR-290 solvent adhesive at 1 gal. per 100 ft² or FTR-390 asphalt based adhesive at 1 gal. per 60 ft².

Maximum Design Pressure:
 -45 psf (See General Limitation #9)
 -50 psf (for Dens Deck fastened at 1:1.3ft²) (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 1I: Wood, Insulated, and New Construction, Re-roof
Deck Description: ¹⁹/₃₂" or greater plywood or wood plank
System Type D: Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, ACFoam II, Multi-Max FA, ENRGY-2 Minimum 1.5" thick	N/A	N/A
Wood Fiberboard Minimum ½" thick	N/A	N/A
Perlite Minimum ¾" thick	N/A	N/A

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.

Vapor Retarder: (Optional) Any UL or FMRC approved vapor retarder may be installed over the deck or the insulation.

Barrier: ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet, with joints staggered minimum 6" from plywood joints.

Membrane: FiberTite or FiberTite XT roof cover attached through the preliminary fastened insulation/barrier to the deck following one of the fastening methods specified below:

Fastening: Fasten with FTR MAGNUM fasteners and FTR MAGNUM Plates 18" o.c. through tabs spaced 51" o.c.

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



Membrane Type: Single Ply, Thermoplastic
Deck Type II: Wood, Non-Insulated, and New Construction, Re-roof
Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank
System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Barrier: Install one of the following barrier options:

1. $\frac{1}{4}$ " Dens Deck attached with 4 fasteners per 4' x 8' sheet, with joints staggered minimum 6" from plywood joints or min. $\frac{3}{4}$ " Rockwool attached with 2 fasteners per 4' x 4' sheet
2. One layer of Tritex RocRoof over a mechanically attached type G2 fiberglass base sheet;
3. $\frac{5}{8}$ " gypsum attached to deck with four fastener per 4' x 8' board. Increase or decrease fasteners in conjunction with the board size, maintaining the fastener density, but in no case shall there be less than two fasteners.
4. One layer of Roctex Rocroof, loose laid.

Membrane: FiberTite or FiberTite XT roof cover attached to the deck following one of the fastening methods specified below:

Fastening: Fasten with FTR MAGNUM fasteners and FTR MAGNUM Plates 18" o.c. through tabs spaced 51" o.c.

Maximum Design Pressure: -45 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 sidelap 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. **(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.)**

END OF THIS ACCEPTANCE



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