MIAMI-DADE

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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Fibertite Single Ply Roof Systems over Concrete 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 # 04-0618.04 and consists of pages 1 through 17.
The submitted documentation was reviewed by Jorge Acebo.

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	Thermoplastic
Deck Type:	Concrete
Maximum Design Pressure	-572.5 psf
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
FiberTite, XT, LX, SM, Xtreme	Various	TAS 114	Thermoplastic, single ply membrane
FiberTite FB	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 101		proprietary	one part urethane sealant
FTR 201		proprietary	elastomeric (mastic) sealant
FTR 401		proprietary	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' ¼" x 24" x 48"	n/a	vinyl walk way vinyl protection pad

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
FTR-Value	Isocyanurate Insulation	Seaman Corp.
ACFoam II, ACFoam III	Isocyanurate Insulation	Atlas Roofing Corp.
EnergyGuard PolyIso	Polyisocyanurate foam insulation	GAF Materials Corp.
EnergyGuard Composite	Polyisocyanurate foam insulation with high density fiberboard or perlite insulation.	GAF Materials Corp.
Dens Deck, Dens Deck Prime	Silicon treated gypsum	G-P Products

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ENRGY 2, ENERGY 3, PSI-25	Isocyanurate Insulation	Johns Manville
ENRGY 2 Composite	Polyisocyanurate foam/perlite composite insulation	Johns Manville
Fesco Foam	Polyisocyanurate foam/perlite composite 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 #14 Fastener	Membrane/Insulation fastener	Various	Seaman Corp.
3.	FTR Spike	Membrane/insulation fastener for concrete decks.	Various	Seaman Corp.
4.	FTR MAGNUM Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	Seaman Corp.
5.	FTR Barbed Plate	Galvalume AZ50 stress plate	2" Diameter	Seaman Corp.
6.	FTR XL Plate	Galvalume AZ50 stress plate	2-3/8" Diameter	Seaman Corp.
7.	Olympic Fasteners	Insulation and membrane fastener	Various	Olympic Mfg. Group
8.	Olympic CD-10	Insulation fastener for concrete decks.	Various	Olympic Mfg. Group
9.	Olympic Standard	Galvalume AZ55 stress plate	3" round	Olympic Mfg. Group
10.	Olympic Plastic Plastic	Plastic plates for fasteners.	3" round	Olympic Mfg. Group
11.	Olympic ASAP	Pre-Assembled fastener and Plate.	Various	Olympic Mfg. Group
12.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks	Various	SFS Intec, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
13.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Intec, Inc.
14.	Insul-Fixx P	Polyethylene stress plate	3" round	SFS Intec, Inc.
15.	CF Tap-Grip Fasteners	Fastener for concrete decks		The Tru-Fast Corp.
16.	Tru-Fast Plates	Galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
17.	Tru-Fast Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	FMRC 4470	J.I. #1Z2A5.AM	01/12/96
Factory Mutual Research Corp.	FMRC 4470	J.I. #1Z3A8.AM	08/13.97
Factory Mutual Research Corp.	FM Letter for Approval Listing	FM Approval Guide	10/06/99
Factory Mutual Research Corp.	FMRC 4470	3003251	10/05/99
Factory Mutual Research Corp.	FMRC 4470	J.I. #4D5A4.AM	10/05/99
Factory Mutual Research Corp.	FMRC 4470	3002471	10/06/99
Underwriters Laboratories	Fire Resistance Testing	95NK17212	08/21/98
Underwriters Laboratories	Fire Resistance Testing	94NK12810	8/11/98
Exterior Research & Design, LLC	TAS 114	#4015.10.96-1	10/02/96
Exterior Research & Design, LLC	TAS 114	#4006.07.97-1	10/02/96
Exterior Research & Design, LLC	TAS 114	#4020.08.99-1	08/30/99
Exterior Research & Design, LLC	TAS 114	#4006.08.00-1	08/17/00

APPROVED ASSEMBLIES

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(1): One or more layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3 Minimum 1.5" thick	**N/A**	**N/A**
Dens Deck Prime Minimum ¼" thick	**N/A**	**N/A**

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Vapor Retarders: (Optional) Asphaltic Vapor Retarder.

Barrier: None.

Membrane: FiberTite, XT, SM or XTreme 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., or FTR-290 solvent adhesive at 1 gal. per 100 ft^2 or FTR-390 asphalt based adhesive at 1 gal. per 60 ft^2.

Maximum Design Pressure: -240 psf; (See General Limitation #9.)

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(2): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, ENRGY-2, Expanded Polystyrene Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer (Optional, require over EPS)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, ENRGY-2, Extruded or Expanded Polystyrene Minimum 1.5" thick	**N/A**	**N/A**
Dens Deck Prime Minimum ¼" thick	**N/A**	**N/A**

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in ¾" to 1" wide beads 12" o.c. of FTR 401 or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft^2.. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Vapor Retarders: None.

Barrier: None.

Membrane: FiberTite, XT, SM or XTreme 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 ft^2 or FTR-390 asphalt based adhesive at 1 gal. per 60 ft^2.

Maximum Design Pressure: -82.5 psf (for for FTR 401, Insta-Stik or OlyBond Fastener Adhesive)
(See General Limitation #9)
-90 psf (for for Insta-Stik & FiberTite FB Application)
(See General Limitation #9)
-120 psf (for for Insta-Stik & FiberTite, XT, SM or XTreme Application)
(See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(3): All layers of insulation adhered subsequently membrane fully adhered.

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Dens Deck Prime Minimum ¼" thick	**N/A**	**N/A**

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels used as a top layer shall be placed with the polyisocyanurate side facing down.

Membrane: FiberTite, XT, SM or XTreme roof cover adhered to the Dens-Deck with FTR-190 Bonding Adhesive applied at an application rate of 1 gal./sp. To the backside of the membrane and to the substrate.

Maximum Design Pressures: -420 psf (See General Limitation #9.)

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type B: Base layer of insulation mechanically attached, top layer adhered; membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3		
Minimum 1.5" thick	**2**	**1:2 ft^2**
Minimum 2" thick	**2**	**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).

Top Insulation Layer (Optional, require over EPS)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, ENRGY-2		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2 or ¾" to 1" wide beads 12" o.c. of FTR 401 or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft^2.. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

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

Barrier: (Optional) ¼" Dens Deck or Type X applied to the base or top insulation layer in a full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2 or in ¾" to 1" wide beads 12" o.c. of FTR 401 or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft^2.

Membrane: FiberTite, XT, SM or XTreme 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 ft^2 or FTR-390 asphalt based adhesive at 1 gal. per 60 ft^2.

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

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C: All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply.

One or more layers of the following insulations:

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

Note: All layers shall be simultaneously fastened; see top or base 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 the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam II, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3		
Minimum 1.5" thick	**2**	**1:2 ft^2**
Minimum 2" thick	**2**	**1:4 ft^2**
Dens Deck Prime		
Minimum ½" thick	**2**	**1:1.7 ft^2**
Minimum ¼" thick	**2**	**1:1.3 ft^2**

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

Barrier: (Optional) See Top Insulation Layer, above.

Membrane: FiberTite, XT, SM or XTreme 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 ft^2 or FTR-390 asphalt based adhesive at 1 gal. per 60 ft^2.

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

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(1): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FTR-Value, ACFoam, Multi-Max, H-Shield, ENRGY-2, ENRGY-3 Minimum 1.5" 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 Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet or Tritex Rocroof or 3 plies of Elk VersaShield loose laid.

Membrane: FiberTite, XT, SM, Xtreme, FB, or LX roof cover attached through the preliminary fastened insulation to the deck following one of the fastening methods specified below:

Fastening #1: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates 18" o.c. through tabs spaced 51" o.c.
Maximum Design Pressure -45 psf. (See General Limitation #7)

Fastening #2: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates 12" o.c. through tabs spaced 51" o.c.
Maximum Design Pressure -60 psf. (See General Limitation #7)

Fastening #3: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates 6" o.c. through the top of the roof cover at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configutration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1".
Maximum Design Pressure -75 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(2): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any approved polyisocyanurate Minimum 1" 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 Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet or Tritex Rocroof or 3 plies of Elk VersaShield loose laid.

Membrane: FiberTite, XT, SM or XTreme roof cover attached through the presecured insulation to the deck using FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 6" o.c. through the tabs spaced a maximum of 51" o.c.

Maximum Design Pressures: -75 psf (See General Limitation #7.)

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(3): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any approved polyisocyanurate Minimum 1" 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 Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet or Tritex Rocroof or 3 plies of Elk VersaShield loose laid.

Membrane: FiberTite TopSider system consisting of FiberTite, XT, SM or XTreme roof cover attached through the presecured insulation to the deck using FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 6" o.c. through the top of the membrane at intervals of 51".

Maximum Design Pressures: -90 psf (See General Limitation #7.)

Membrane Type: Single Ply, Thermoplastic

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(4): Membrane mechanically attached over perliminary fastened insulation.

All General and System Limitations apply.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any approved polyisocyanurate Minimum 1.5" 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 Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet or Tritex Rocroof or 3 plies of Elk VersaShield loose laid.

Membrane: FiberTite, FiberTite XT, FiberTite SM or FiberTite XTreme secured through the preliminarily attached insulation as specified below.

Fastening #1: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 12" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -52.5 psf. (See General Limitation #7)

Fastening #2: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 6" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure –67.5 psf. (See General Limitation #7)

Fastening #3: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 12" o.c. in the 5" lap of membrane in rows spaced 72" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -45 psf. (See General Limitation #7)

Fastening #4 FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 6" o.c. in the 5" lap of membrane in rows spaced 96" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -52.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above

Membrane Type: Single Ply, Thermoplastic

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type E(1): Membrane mechanically attached to deck.

All General and System Limitations apply.

Vapor Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet.

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

Fastening #1: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 18" o.c. through tabs spaced 51" o.c.
Maximum Design Pressure -45 psf. (See General Limitation #7)

Fastening #2: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 12" o.c. through tabs spaced 51" o.c.
Maximum Design Pressure -60 psf. (See General Limitation #7)

Fastening #3: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 6" o.c. through the top of the roof cover at maximum intervals of 104.5" Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab.(closed lap configutration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1".
Maximum Design Pressure -75 psf. (See General Limitation #7)

Maximum Design Pressure: See Fastening Options above.

Membrane Type: Single Ply, Thermoplastic

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type E(2): Membrane mechanically attached to deck.

All General and System Limitations apply.

Vapor Retarders: (Optional) Any UL or FM approved vapor retarder applied to the roof deck.

Barrier: (Optional) ¼" Dens Deck attached with 4 fasteners per 4' x 8' sheet or Tritex Rocroof or 3 plies of Elk VersaShield loose laid.

Membrane: FiberTite, FiberTite XT, FiberTite SM or FiberTite XTreme secured through the preliminarily attached insulation as specified below.

Fastening #1: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 12" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -52.5 psf. (See General Limitation #7)

Fastening #2: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 6" o.c. in the 5" lap of membrane in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure –67.5 psf. (See General Limitation #7)

Fastening #3: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 12" o.c. in the 5" lap of membrane in rows spaced 72" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -45 psf. (See General Limitation #7)

Fastening #4 FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 Fasteners with MAGNUM Plates space 6" o.c. in the 5" lap of membrane in rows spaced 96" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -52.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above

Membrane Type: Single Ply, Thermoplastic

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F: Membrane adhered to roof deck.

All General and System Limitations apply.

Membrane: FiberTite FB roof cover adhered to the primed concrete deck with approved asphalt at 20-25 lbs./sq. ***(Meets –572.5 psf for hot asphalt. See General Limtation #9)***
Or
FTR 390 asphalt based adhesive at 1 gal per 60ft^2. ***(Meets –237.5 for FTR 390 application. See General Limtation #9)***
Or
FiberTite-FB roof cover adhered to conctete deck sealed with polyvinyl alcohol (PVA) with FTR 290 Adhesive. ***(Meets –377 psf for FTR 290 applicationa. See General Limtation #9)***

Maximum Design Pressure: See Applications Options above.

CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.

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.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE