



**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 Recover 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 revises NOA # 00-1208.06 and consists of pages 1 through 23.
The submitted documentation was reviewed by Frank Zuloaga, RRC



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ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: Thermoplastic
Deck Type: Recover
Maximum Design Pressure See Specific deck type
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, XT, LX XM, Xtreme	various	PA 114	thermoplastic, single ply membrane
FiberTite FB	54" x 100'	PA 114	thermoplastic, fleece-backed, single ply membrane
FTR Non-Reinforced	0.060" x 54" x 24'	PA 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' 1/4" x 24" x 48"	n/a	vinyl walk way vinyl protection pad

APPROVED INSULATIONS:

TABLE 2

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
FTR-Value	Isocyanurate Insulation	Seaman Corp.
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corp.
ACFoam II, III	Isocyanurate Insulation	Atlas Roofing Corp.
ISO 95+ GL, 95+ GW	Polyisocyanurate foam insulation	Firestone
EnergyGuard PolyIso	Polyisocyanurate foam insulation	GAF Materials Corp.



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APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
EnergyGuard Composite	Isocyanurate foam insulation with high density fiberboard or perlite insulation.	GAF Materials Corp.
Dens Deck, Dens Deck Prime	Silicon treated gypsum	G-P Products
Sturdi-Top	Wood fiber insulation board.	G-P Products
Wood Fiberboard	Regular Wood Fiber insulation board.	Generic
High Density Wood Fiberboard	High Density Wood Fiber insulation board.	Generic
Perlite Insulation Board	Perlite Insulation	Generic
Type X Gypsum	Gypsum Wallboard	Generic
ENRGY 2, ENERGY 3	Isocyanurate Insulation	Johns Manville
Strataguard	Gypsum Wallboard	Owens Corning
Multi-Max, FA	Polyisocyanurate foam insulation	Rmax, Inc.
Fiber Base	Asphalt coated wood fiber insulation	Temple Inland Forest Products Corp.
Structodeck	High Density Wood Fiber insulation board.	Wood Fiber Industries
Rocroof	Rockwool fire barrier	Tritex

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	FTR MAGNUM	Membrane fastener	Various	Seaman Corp.
2.	FTR #14 Fastener	Membrane 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" Dia.	Seaman Corp.
6.	FTR XL Plate	Galvalume AZ50 stress plate	2-3/8" Dia.	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	Preassembled fastener and Plate.	Various	Olympic Mfg. Group
12.	NTB Magnum	Fastener for cementitious and gypsum decks	Various	Olympic Mfg. Group
13.	NTB Plate	Round Galvalume AZ55 stress plate	3" round	Olympic Mfg. Group
14.	NTB Metal Barbed Stress Plate	Round Galvalume AZ55 stress plate	2" round	Olympic Mfg. Group



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APPROVED FASTENERS:

TABLE 3				
Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
15.	NTB Plastic Plate	Plastic plates for NTB 2" head fasteners.	3" round	Olympic Mfg. Group
16.	Powerlite	Insulation fastener for cementitious and gypsum decks	Various	Powers Fasteners Inc.
17.	Powerlite	Galvalume AZ55 stress plate	3" round	Powers Fasteners Inc.
18.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks	Various	SFS Intec, Inc.
19.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Intec, Inc.
20.	Insul-Fixx P	Polyethylene stress plate	3" round	SFS Intec, Inc.
21.	CF Tap-Grip Fasteners	Fastener for concrete decks		The Tru-Fast Corp.
22.	Tru-Fast Plates	Galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
23.	Tru-Fast Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp	Class 4470	J.I. #1Z2A5.AM	01/12/96
Factory Mutual Research Corp		J.I. 1Z3A8.AM	08/13/97
Factory Mutual Research Corp.	Class 4470	30003251	10/15/99
Factory Mutual Research Corp.	Class 4470	3006872	06/13/2000
Factory Mutual Research Corp.	Class 4470	3009071	01/03/02
Factory Mutual Research Corp.	Class 4470	3014050	07/08/03
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



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APPROVED ASSEMBLIES

- Membrane Type:** Single Ply, Thermoplastic
- Deck Type 7I:** Recover, Insulated
- Deck Description:** Concrete/lightweight concrete/cementitious wood fiber/wood/steel
- 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/ft²
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/ft²
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: Existing roof shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of base sheet. All insulation shall be adhered to the deck in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft² 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 ft² or FTR-390 asphalt based adhesive at 1 gal. per 60 ft².

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



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel

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

All General and System Limitations apply.

One or more layers of the following:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3		
Minimum 1.5" thick	Approved Fastener for Deck Type	1:2 ft²
Minimum 2" thick	Approved Fastener for Deck Type	1:4 ft²
Dens Deck, Dens Deck Prime		
Minimum ¼" thick	Approved Fastener for Deck Type	1:2 ft²
FTR-Value, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3		
Minimum 1.5" thick	N/A	N/A
Dens Deck, Dens Deck Prime		
Minimum ¼" thick	N/A	N/A

Note: Apply optional 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 ft² 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 ft². 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 FM approved vapor retarder applied to the existing roof or over a base layer of insulation.

Barrier: (Optional) ¼" Dens Deck 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 ft² 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 ft² or Type X gypsum applied in ¾" to 1" wide beads of Insta-Stik Adhesive, 12" o.c.



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 ft² or FTR-390 asphalt based adhesive at 1 gal. per 60 ft².

Maximum Design Pressure: -67.5 psf (for 1.5" thick polyiso. at 1 fastener per 2 ft² over steel or concrete with FiberTite or FiberTite XT) (See General Limitation #9.)
-60 psf (for 2" thick polyiso. at 1 fastener per 4 ft² over steel or concrete with FiberTite or FiberTite XT) (See General Limitation #9.)
-45 psf (for all other substrates, insulation attachment options and with FiberTite FB applications) (See General Limitation #9.)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
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, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3 Minimum 1" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, Multi-Max FA, H-Shield, ENRGY-2, ENRGY-3 Minimum 1.5" thick	Approved Fastener for Deck Type	1:2 ft²
Minimum 2" thick	Approved Fastener for Deck Type	1:4 ft²
Dens Deck, Dens Deck Prime Minimum 1/2" thick	Approved Fastener for Deck Type	1:1.7 ft²
Minimum 1/4" thick	Approved Fastener for Deck Type	1:1.3 ft²

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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

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

Barrier: None.

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: -67.5 psf (for 1.5" thick polyiso. at 1 fastener per 2 ft² over steel or concrete with FiberTite or FiberTite XT)
-60 psf (for 2" thick polyiso. at 1 fastener per 4 ft² over steel or concrete with FiberTite or FiberTite XT)
-50 psf (for 1/4" thick Dens Deck at 1 fastener per 1.3 ft² over steel or concrete with FiberTite or FiberTite XT)
-45 psf (for all other substrates, insulation attachment options and with FiberTite FB applications)



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Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel

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

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
FTR-Value, ACFoam II Minimum 1" thick	N/A	N/A
ENRGY-2 Minimum 1.4" thick	N/A	N/A
Multi-Max, ACFoam Composite, EnergyGuard Composite, Thermarroof Composite, Fesco Foam, ENRGY-2 Composite Minimum 1.5" thick	N/A	N/A
Wood Fiberboard Minimum 1/2" thick	N/A	N/A
Perlite Minimum 3/4" 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 FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: (Optional) 1/4" 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 preliminary fastened insulation to the deck as specified below:

Fastening #1: Fasten with FTR #14 fasteners and FTR Barbed Stress or Olympic ASAP (wood, steel, concrete) or FTR Spikes (concrete) and FTR Barbed Stress Plates fasteners spaced 18" o.c. through the 3.5" head laps or fastening tabs spaced 48" o.c.
Maximum Design Pressure –45 psf (See General Limitation #9.)

Fastening #2: Fasten with FTR #14 fasteners and FTR Barbed Stress Plates or Olympic ASAP (wood, steel, concrete) or FTR ESL (wood, steel) fasteners or FTR Spikes (concrete) and FTR Barbed Stress Plates, fasteners spaced 6" o.c. through the 3.5" head laps or fastening tabs spaced 98" o.c.
Maximum Design Pressure –45 psf (See General Limitation #7.)



Fastening #3: (cementitious wood fiber and gypsum only) Fasten with NTB. fasteners with 2" diameter head or Powerlite fasteners and Powerlite Lap Plates stress plates 6" o.c. through the fastening tabs spaced 51" o.c.

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

Fastening #4: Fasten with FTR #14 fasteners (wood, steel, concrete) or FTR Spikes (concrete) and FTR Barbed Stress Plates or Olympic ASAP fasteners (wood, steel, concrete) 6" o.c. through the top of the roof cover at maximum intervals of 9 feet. Fastener rows are sealed by either welding a 6" cover strip or prefabricated 4.5" surface tab (closed lap configuration) over the fasteners. The edge of the stripping and/or surface tabs shall be welded a minimum of 1".

Maximum Design Pressure –52.5 psf (See General Limitation #7.)

Fastening #5: Fasten with FTR XL fasteners (steel, concrete) or FTR Spikes (concrete) and FTR XL stress plates 12" o.c. through the 3.5" head laps or fastening tabs spaced 53" o.c.

Maximum Design Pressure –52.5 psf (See General Limitation #7.)

Maximum Design
Pressures:

See Fastings Options Above



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

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

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 22 ga., 1.5" deep, ASTM A611, Grade E or ASTM A446, Grade E steel decking placed over minimum 0.25" thick structural supports having maximum 6 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 30" o.c.

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 12" o.c. through the tabs spaced a maximum of 24" o.c.

Maximum Design Pressures: -82.5 psf (See General Limitation #7.)



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

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

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer

**Insulation Fasteners
(Table 3)**

**Fastener
Density/ft²**

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.

Deck : Structural Concrete or minimum 22 ga., type B, steel decking placed over minimum 0.25" thick structural supports having maximum 6 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.

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.)



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Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

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

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 22 ga., type B, steel decking placed over minimum 0.25" thick structural supports having maximum 5 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 18" o.c.

Membrane: FiberTite TopSider system consisting of FiberTite, XT, SM or XTreme attached 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 104.5".

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



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Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

System Type D(5): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 22 gage ASTM A 611 Grade E Type B Steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with Traxx/1 screws at a maximum spacing of 30 inches o.c.



- 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 and MAGNUM Plates space 18" o.c. within the 5" open laps in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
Maximum Design Pressure -45 psf. (See General Limitation #7)
- Fastening #2: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates space 12" o.c. in the 5" open laps in rows spaced 51" o.c. The outside 1.5" of the lap is heat welded.
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 configuration) 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)
- Fastening #4: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates space 6" o.c. within the 5" closed laps in rows spaced 104.5" o.c. The outside 1.5" of the laps is heat welded.
Maximum Design Pressure -82.5 psf. (See General Limitation #7)
- Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

System Type D(6): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 22 gage ASTM A653 SS Grade 33 Type B Steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec ¼-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

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 and 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 and 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 -60 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/steel

System Type D(7): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 22 gage ASTM A1008 SS Grade 80 Type B Steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec ¼-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.



- 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 and 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 -60 psf. (See General Limitation #7)
- Fastening #2: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and 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 #3: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and 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 7I: Recover, Insulated

Deck Description: Concrete/steel

System Type D(8): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
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.

Deck : Structural Concrete or minimum 20 gage ASTM A653 SS Grade 33 Type B Steel deck fastened to steel support at a maximum span of 6' o.c. Steel deck shall be fastened with SFS Intec Impax 5 or ITW Buildex Traxx/5 at a maximum spacing of 6" o.c. Side laps shall be fastened with SFS Intec ¼-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

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 and 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 and 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)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, Thermoplastic

Deck Type 7: Recover, Noninsulated

Deck Description: Concrete/steel

System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Deck Description: Structural Concrete or Minimum 22 ga., 1.5" deep, ASTM A611, Grade E or ASTM A446, Grade E steel decking placed over minimum 0.25" thick structural supports having maximum 6 ft spans. Deck shall be anchored with ITW Buildex Traxx/4 or Traxx/5 fasteners spaced at maximum 6" o.c. at supports. Deck side laps shall be secured with ITW Buildex Traxx/1 fasteners spaced at a maximum 30" o.c.

Membrane: FiberTite, XT, SM or XTreme roof cover attached through the existing roof to the deck as specified below:

Fastening #1: Fasten with FTR MAGNUM fasteners (steel, concrete) or FTR Spikes (concrete) and FTR MAGNUM stress plates 12" o.c. through the 3.5" head laps or fastening tabs spaced 24" o.c.

Maximum Design Pressure –82.5 psf (See General Limitation #7.)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7: Recover, Noninsulated
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Barrier: (Optional) Minimum ¼" Dens Deck, 5/8" Gypsum or ¾" Rockwool preliminary fastened with approved fasteners or one layer of Tritex Rocroof or two layers of Elk VersaShield Underlayment, loose laid.

Membrane: FiberTite, XT, SM or XTreme roof cover attached through the preliminary fastened insulation to the deck as specified below:

Fastening#1: Fasten with FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and 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 MAGNUM Plates 9" o.c. through tabs spaced 51" o.c.
Maximum Design Pressure –52.5 psf (See General Limitation #7.)

Maximum Design Pressure: See Fastening Options Above



Membrane Type: Single Ply, Thermoplastic
Deck Type 7: Recover, Noninsulated
Deck Description: Concrete/steel
System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Minimum 200 psi approved cellular lightweight concrete deck system.

Vapor Retarders: (Optional) Any UL or FMRC 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, min. ¾" Toprock attached with 2 fasteners per 4' x 4' sheet or Tritex Rocroof loose laid.
Membrane: FiberTite, XT, SM or XTreme roof cover attached through lightweight concrete to the deck using FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and MAGNUM Plates spaced 12" o.c. through the tabs spaced 51" o.c.
Maximum Design Pressures: -75 psf (See General Limitation #7.)

Membrane Type: Single Ply, Thermoplastic
Deck Type 7: Recover, Non-insulated
Deck Description: Concrete/lightweight concrete/cementitious wood fiber/wood/steel
System Type F: Membrane fully adhered to existing smooth surface BUR

All General and System Limitations apply.

Barrier: None.
Membrane: FiberTite FB roof cover adhered to the existing roof 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)



RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

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



NOA No.: 04-0618.09
Expiration Date: 01/04/06
Approval Date: 07/15/04
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