



**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 of the Florida Building Code.

DESCRIPTION: FiberTite Single Ply Roof Systems over Lightweight 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 No. 05-1220.07 and consists of pages 1 through 21.
The submitted documentation was reviewed by Jorge Acebo.



**NOA No.: 10-0719.03
Expiration Date: 01/05/12
Approval Date: 12/23/10
Page 1 of 21**

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: KEE
Deck Type: Lightweight Concrete
Maximum Design Pressure -405 psf

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, FiberTite-XT, FiberTite-SM, FiberTite-XTreme	various	TAS 114	KEE, single ply membrane
FiberTite FB	Various	TAS 114	KEE, fleece-backed, single ply membrane
FTR Non-Reinforced	0.060" x 48" x 24'	TAS 114	KEE flashing accessory
FTR 101		Proprietary	One part urethane sealant
FTR 201		Proprietary	Elastomeric (mastic) sealant
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 490		Proprietary	One side "substrate only" fleece backed water based adhesive
FTR 601		Proprietary	Elastomeric, one step foamable adhesive
FTR SL1		Proprietary	One part "pourable" urethane sealant
FiberClad	48" x 120"	n/a	Polymeric coated G-90 galvanized steel, stainless steel or aluminum
Tuff Trac	0.080" x 28" or 56" x 43' 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.
DensDeck, DensDeck Prime	Silicon treated gypsum	G-P Products
H-Shield	Polyisocyanurate Insulation	Hunter
ENRGY 3	Isocyanurate Insulation	Johns Manville
XPS, EPS	Extruded or Expanded Polystyrene	Generic
Multi-Max 3, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax, Inc.
SECUROCK Gypsum-Fiber Roof Board	Gypsum Coverboard	US Gypsum

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.	FTR #14 Fastener	Membrane fastener	Various	Seaman Corp.
4.	FTR Spike	Membrane/insulation fastener for concrete decks.	Various	Seaman Corp.
5.	FTR Magnum 2S	Barbed, galvalume AZ50 stress plate.	2-3/8" Dia.	Seaman Corp.
6.	FTR Magnum Belted System	Galvalume AZ50 stress plate, #15 belted fastener system.	2-3/8" Dia.	Seaman Corp.
7.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks.	Various	SFS Intec, Inc.
8.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Intec, Inc.
9.	Insul-Fixx P	Polyethylene stress plate	3" round	SFS Intec, Inc.



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
10.	Dekfast Galvalume Steel Round 2-3/8 in. 20-Ga. Barbed Plate	Barbed, Galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.
11.	Dekfast isofast IF-2.375-AI Membrane Plate	Galvalume AZ50 stress plate, #15 belted fastener system	2-3/8" Dia.	SFS Intec, Inc.
12.	Dekfast Fasteners	Insulation and membrane fasteners.	Various	SFS Intec, Inc.
13.	Dekfast Hex Plate	Galvalume AZ50 steel plate	2-7/8" x 3/4"	SFS Intec, Inc.
14.	CF Tap-Grip Fasteners	Fastener for concrete decks		The Tru-Fast Corp.
15.	Tru-Fast Plates	Galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
16.	Tru-Fast Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.
17.	Olympic ASAP Fastener	Preassembled fastener and plate.	3" round	Olympic Manufacturing Group
18.	CD-10	Membrane and Insulation Fastener.	Various	Olympic Manufacturing Group
19.	Olympic Fasteners	Membrane and Insulation fasteners	Various	Olympic Manufacturing Group

EVIDENCE SUBMITTED:

<u>Test Agency/Identifier</u>	<u>Name</u>	<u>Report</u>	<u>Date</u>
Factory Mutual Research Corp.	Class 4470	J.I. 1Z3A8.AM	08/13/97
	Class 4470	J.I. 4D5A4.AM	10/05/99
Underwriters Laboratories	Fire Resistance Testing	95NK20862	11/17/95
	Fire Resistance Testing	94NK40647	10/15/94
Exterior Research & Design, LLC.	TAS 114	4015.10.96-1-R1	07/20/10
	TAS 114	4006.07.97-1-R1	07/15/10
	TAS 114	02767.09.05-S2	09/27/05



APPROVED ASSEMBLIES

- Membrane Type:** Single Ply, KEE
- Deck Type 4I:** Lightweight Concrete, Insulated
- Deck Description:** Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over structural concrete
- System Type A(1):** One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer:</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
<u>Insulation Top Layer:</u> FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5 " thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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.

- Membrane:** FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
Maximum Design Pressure: -210 psf for Celcore or Mearlcrete
Maximum Design Pressure: -180 psf for Elastizell
 or
 FiberTite FB roof cover adhered with FTR-290 adhesive at 1 gal/sq.
Maximum Design Pressure: -105 psf for Celcore, Mearlcrete or Elastizell
 or
 FiberTite FB roof cover adhered with FTR-390 adhesive at 1 gal. per 60 ft2.
Maximum Design Pressure: -67.5 psf for Celcore, Mearlcrete or Elastizell
- Maximum Design Pressure:** See Membrane Options above (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over structural concrete
System Type A(2): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer:</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
<u>Insulation Top Layer:</u> FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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.

Membrane: FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
Maximum Design Pressure: -117 psf
 or
 FiberTite FB roof cover adhered with FTR-290 adhesive at 1 gal/sq.
Maximum Design Pressure: -105 psf
 or
 FiberTite FB roof cover adhered with FTR-390 adhesive at 1 gal. per 60 ft².
Maximum Design Pressure: -67.5 psf

Maximum Design Pressure: See Membrane Options above (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over structural concrete
System Type A(3): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer (Optional):</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
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FTR-Value, ACfoam II, Multi-Max FA-3, H-Shield, ENRGY 3 or Approved ASTM C578 expanded or extruded polystyrene (min. 2.0 pcf)		
Minimum: 1.5" thick	N/A	N/A

Insulation Top Layer:

DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum: ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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: None

Membrane: FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
 Or
 FiberTite-FB roof cover adhered with hot asphalt at 25 lbs/sq.

Maximum Design Pressure: -240.0 psf (for Mearlcrete) (See General Limitation #9)
 -222.5 psf (for Celcore) (See General Limitation #9)
 -180.0 psf (for Elastizell) (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over structural concrete
System Type A(4): One or more layers of insulation adhered with approved adhesive , membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer:</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
Approved ASTM C578 Type IX expanded polystyrene (min. 1.8 pcf) or Type IV extruded polystyrene (min 1.6 pcf)		
Minimum: 1.5" thick	N/A	N/A
<u>Insulation Top Layer:</u>		
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum: ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or vapor barrier in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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: None

Membrane: FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
 Or
 FiberTite-FB roof cover adhered with hot asphalt at 25 lbs/sq.

Maximum Design Pressure: -180 psf (See General Limitation #9)



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over steel deck
System Type A(5): One or more layers of insulation adhered with approved adhesive , membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer:</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Minimum: 1.5" thick	N/A	N/A
<u>Insulation Top Layer (Optional):</u> FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 Tapered	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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.

Membrane: FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
Maximum Design Pressure: -117.0 psf
 or
 FiberTite FB roof cover adhered with hot asphalt at 25 lbs/sq., with FTR-290 adhesive at 1 gal/sq. or with FTR-390 adhesive at 1 gal. per 60 ft2.
Maximum Design Pressure: -105.0 psf

Maximum Design Pressure: Roof Cover/Insulation Maximum Pressure per Membrane Option Above.
 (See General Limitation #9)
 Refer to LWIC Deck manufacturer's current NOA for maximum design pressure in steel deck applications.



Membrane Type: Single Ply, KEE
Deck Type 4I: Lightweight Concrete, Insulated
Deck Description: Min. 200 psi Celcore, Mearlcrete or Elastizell LWIC cast over steel deck
System Type A(6): One or more layers of insulation adhered with approved adhesive, membrane adhered.

All General and System Limitations apply.

<u>Insulation Base Layer (Optional):</u>	<u>Fastener Density</u>	<u>Fastener Type</u>
FTR-Value, ACFoam II, Multi-Max FA-3, H-Shield, ENRGY 3 or Approved ASTM C578 Type IX expanded polystyrene (min. 1.8 pcf) or Type IV extruded polystyrene (min 1.6 pcf) Minimum: 1.5" thick	N/A	N/A
<u>Insulation Top Layer:</u> DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum: 1/4" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in TITE-SET Roofing Adhesive applied in continuous 3-inch ribbons spaced 12" o.c. 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.

Membrane: FiberTite, FiberTite-SM, FiberTite-XT or FiberTite-XTreme roof cover adhered with FTR-190 adhesive applied at a rate of 1 gal/sq. to the back side of the membrane and to the substrate.
 Or
 FiberTite-FB roof cover adhered with hot asphalt at 25 lbs/sq.

Maximum Design Pressure: Roof Cover/Insulation Maximum Pressure
 -240.0 psf (for Mearlcrete) (See General Limitation #9)
 -225.0 psf (for Celcore) (See General Limitation #9)
 -180.0 psf (for Elastizell) (See General Limitation #9)
 Refer to LWIC Deck manufacturer's current NOA for maximum design pressure in steel deck applications



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 200 psi Approved Cellular Lightweight Concrete
System Type E(1): Membrane mechanically attached to deck.

All General and System Limitations apply.

Steel Deck: 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 min. 5/8" puddle welds or 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 to underlying steel deck using FTR MAGNUM Fasteners and Plates spaced 6" o.c. through the top of the membrane at intervals of 104.5".

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

Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Minimum 200 psi approved cellular lightweight concrete deck system.
System Type E(2): Membrane mechanically attached to steel deck.

All General and System Limitations apply.

Steel Deck: Minimum 18-22 ga. steel

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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet

Membrane: FiberTite, XT, SM or XTreme roof cover attached through lightweight concrete to the steel deck using FTR MAGNUM fasteners and 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, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Min. 200 psi lightweight concrete deck
System Type E(3): Membrane mechanically attached to steel deck.

All General and System Limitations apply.

Steel Deck: 18-22 ga. Steel deck

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” DensDeck or DensDeck Prime attached with 4 fasteners per 4’ x 8’ sheet.

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

Fastening #1: Fasten with Olympic ASAP fasteners 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 Olympic ASAP fasteners 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: Fasten with Olympic ASAP fasteners 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 #4: Fasten with FTR MAGNUM fasteners and 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, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Min. 200 psi lightweight concrete deck
System Type E(4): Membrane mechanically attached to steel deck.

All General and System Limitations apply.

Steel Deck: 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.

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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

Membrane: FiberTite, XT, SM or XTreme roof cover attached through the presecured insulation to the steel deck using FTR MAGNUM fasteners and 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, KEE
Deck Type 4I: Lightweight Concrete
Deck Description: Minimum 200 psi lightweight concrete
System Type E(5): Membrane mechanically attached to concrete deck.

All General and System Limitations apply.

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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

Membrane: FiberTite, XT, SM, Xtreme 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 or Olympic #14 and FTR MAGNUM Plates 6" o.c. through 5" wide open laps with a minimum 1.5" field weld or through 3.5" fastening tabs; spaced 51" o.c.
Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

Fastening #2: Fasten with FTR MAGNUM or Olympic #14 and FTR MAGNUM Plates 6" o.c. through roof cover in rows spaced 51" o.c. 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 tab or both edges of cover strip are heat welded min. 1.5".
Maximum Design Pressure: -112.5 psf. (See General Limitation #7)

Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Min. 200 psi lightweight concrete deck
System Type E(6): Membrane mechanically attached to steel/concrete deck.

All General and System Limitations apply.

Steel Deck: 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.

Concrete Deck: Minimum 2500 psi structural concrete deck.

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

Barrier: (Optional) 1/4" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.

Membrane: FiberTite TopSider system consisting of FiberTite, XT, SM or XTreme attached using FTR MAGNUM Fasteners and Plates spaced 6" o.c. through the top of the membrane at intervals of 104.5".

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

Or

FiberTite, XT, SM or XTreme roof cover attached through the presecured insulation to the deck using FTR MAGNUM fasteners and Plates spaced 6" o.c. through the tabs spaced a maximum of 51" o.c.

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

Maximum Design Pressures: See Membrane attachment above.



- Membrane Type:** Single Ply, KEE
- Deck Type 4:** Lightweight Concrete, Non-Insulated
- Deck Description:** Min. 200 psi lightweight concrete deck
- System Type E(7):** Membrane mechanically attached to steel/concrete deck.

All General and System Limitations apply.

- Steel Deck:** 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.
- Concrete Deck:** Minimum 2500 psi structural concrete deck.
- 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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.
- Membrane:** FiberTite, FiberTite XT, FiberTite SM or FiberTite XTreme secured through the preliminarily attached insulation as specified below.
- Fastening #1:** FTR MAGNUM, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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 FTR MAGNUM Plates 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 FTR MAGNUM Plates 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, KEE
- Deck Type 4:** Lightweight Concrete, Non-Insulated
- Deck Description:** Min. 200 psi lightweight concrete deck
- System Type E(8):** Membrane mechanically attached to steel or concrete deck.

All General and System Limitations apply.

- 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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.
- Membrane:** FiberTite, FiberTite XT, FiberTite SM or FiberTite XTreme secured through the lightweight concrete as specified below.
- Deck:** Minimum 2500 psi structural concrete deck 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.
- Fastening #1:** FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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 FTR MAGNUM Plates spaced 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)
- Deck:** Minimum 2500 psi structural concrete deck 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.
- Fastening #3:** FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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 #4:** FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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 #5: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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)

Deck: Minimum 2500 psi structural concrete deck 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 1/4-14 Lap Tek or Traxx/1 screws at a maximum spacing of 30 inches o.c.

Fastening #6: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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 #7: FTR MAGNUM, FTR Spike, Tap-Grip, Olympic CD-10 fasteners and FTR MAGNUM Plates spaced 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, KEE
Deck Type 4: Lightweight Concrete, Non-Insulated
Deck Description: Min. 200 psi lightweight concrete deck
System Type E(9): Membrane mechanically attached to steel or concrete deck.

All General and System Limitations apply.

Steel Deck: Minimum 18-22 gage steel deck.
Concrete Deck: Minimum 2500 psi structural concrete deck.
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" DensDeck or DensDeck Prime attached with 4 fasteners per 4' x 8' sheet.
Membrane: FiberTite, XT, SM or XTreme secured through the lightweight concrete as specified below.
Fastening #1: FTR MAGNUM Fasteners with FTR Magnum 2_S Plates, or Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast #15 fasteners and Dekfast isofast IF-2.375-AI Membrane Plate, space 6" o.c. within the 5" over laps in rows spaced 144.0" o.c. The outside 1.5" of the lap is heat welded, or installed through integral 3-1/2" fastening tab.
Maximum Design Pressure: -45 psf. (See General Limitation #7)
Fastening #2: FTR MAGNUM Fasteners with FTR Magnum 2_S Plates, or Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast #15 fasteners and Dekfast isofast IF-2.375-AI Membrane Plate, space 6" o.c. through the top of the roof cover in rows spaced 144.0" o.c.. 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 tab or both edges of cover strip are heat welded min. 1.5".
Maximum Design Pressure: -52.5 psf. (See General Limitation #7)
Fastening #3: FTR MAGNUM Fasteners with FTR Magnum 2_S Plates, or Dekfast fasteners with Dekfast Galvalume Steel Round 2-3/8" 20-Ga. Barbed Plates or Dekfast #15 fasteners and Dekfast isofast IF-2.375-AI Membrane Plate, space 6" o.c. within the 5" over laps in rows spaced 72.0" o.c. The outside 1.5" of the lap is heat welded, or installed through integral 3-1/2" fastening tab.
Maximum Design Pressure: -67.5 psf. (See General Limitation #7)
Maximum Design Pressures: See Fastening Options Above



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Cellular Lightweight Concrete
System Type F(1): Membrane adhered to deck.

All General and System Limitations apply.

Steel Deck: 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 min. 5/8" puddle welds or 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.

Lightweight Concrete: Minimum 300 psi, Approved cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional minimum 1" thick Apache Corrugated EPS Board and a minimum 2" thick top coat.

Treatment: Polyvinyl Alcohol (PVA) applied to the deck top surface when walkable.

Membrane: 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; (See General Limitation #9.)

Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi approved Cellular Lightweight Concrete over Structural Concrete Deck.
System Type F(2): Membrane adhered to deck.

All General and System Limitations apply.

Treatment: Top surface of lightweight concrete shall be sealed with sodium silicate or PVA.

Membrane: FiberTite Fleece-Backed roof cover adhered to the sealed surface of the lightweight concrete in FTR-290 Adhesive at 1 gal./sq.

Maximum Design Pressure: -302.5 psf; (See General Limitation #9.)



Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi approved Cellular Lightweight Concrete over Structural Concrete Deck.
System Type F(3): Membrane adhered to deck.

All General and System Limitations apply.

Treatment: Top surface of lightweight concrete shall be sealed with sodium silicate or PVA.
Membrane: FiberTite Fleece-Backed roof cover adhered to the sealed surface of the lightweight concrete in FTR-390 Adhesive at 1 gal./sq.
Maximum Design Pressure: -272.5 psf; (See General Limitation #9.)

Membrane Type: Single Ply, KEE
Deck Type 4: Lightweight Concrete, Non-insulated
Deck Description: Minimum 300 psi Concrecel Lightweight Concrete
System Type F(4): Membrane adhered to deck.

All General and System Limitations apply.

Concrete Deck: Minimum 2500 psi, structural concrete deck or plank.
Vapor Barrier: (Optional) Any approved asphaltic vapor barrier.
Lightweight Concrete: Minimum 300 psi, Concrecel Lightweight Concrete applied with a minimum ¼” thick slurry coat followed by an optional minimum 1” thick Apache Holey Board and a minimum 2.25” thick top coat.
Treatment: Concrecel Curing Compound applied to the deck top surface when walkable, at a rate of 600 ft²/gal.
Membrane: FiberTite FB roof cover adhered to the insulation with FTR-290 solvent adhesive at 1 gal. per 75 ft² applied to substrate. Membrane rolled in with weighted roller.
Maximum Design Pressure: -405.0 psf; (no asphaltic vapor barrier) (See General Limitation #9.)
-375.0 psf; (with asphaltic vapor barrier) (See General Limitation #9)



LIGHTWEIGHT INSULATING CONCRETE 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 equivalent or enhanced 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 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For Systems where specific lightweight insulating concrete is referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

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 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 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.: 10-0719.03
Expiration Date: 01/05/12
Approval Date: 12/23/10
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