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 of the Florida Building Code.

DESCRIPTION: Fibertite Single Ply Roof Systems over Steel 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. 05-1220.06 and consists of pages 1 through 17.
The submitted documentation was reviewed by Jorge Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	KEE
Deck Type:	Steel
Maximum Design Pressure	-105 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
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'	n/a	Vinyl walk way
	¼" x 24" x 48"		Vinyl protection pad

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
FTR-Value	Isocyanurate Insulation	Seaman Corp.
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corp.
EnergyGuard Composite	Polyisocyanurate foam insulation with high density fiberboard or perlite insulation.	GAF Materials Corp.
DensDeck, DensDeck Prime	Silicon treated gypsum	G-P Products
Type X Gypsum	Gypsum Wallboard	Generic
Multi-Max-3, Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax, Inc.
Thermaroof Composite	Polyisocyanurate/perlite composite 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	Membrane fastener	Various	Seaman Corp.
2.	FTR #14 Fastener	Membrane fastener	Various	Seaman Corp.
3.	FTR MAGNUM Plate	Galvalume AZ50 stress plate	1.5" x 2.5"	Seaman Corp.
4.	FTR Magnum 2s	Barbed, galvalume AZ50 stress plate	2-3/8" Dia.	Seaman Corp.
5.	FTR Magnum Belted System	Galvalume AZ50 stress plate, #15 belted fasteners	2-3/8" Dia.	Seaman Corp.
6.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks	Various	SFS Intec, Inc.
7.	Insul-Fixx S	Galvalume AZ55 stress plate	3" round	SFS Intec, Inc.
8.	Insul-Fixx P	Polyethylene stress plate	3" round	SFS Intec, Inc.
9.	Dekfast Galvalume Steel Round 2-3/8 in 20-Ga. Barbed Plate	Barbed, galvalume AZ50 stress plate	2-3/8" Dia.	SFS Intec, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
10.	Dekfast Isofast IF-2.375-AI Membrane Plate	Galvalume AZ50 stress plate, #15 belted fasteners	2-3/8" Dia.	SFS Intec, Inc.
11.	Dekfast Fasteners	Insulation and membrane fasteners	Various	SFS Intec, Inc.
12.	Dekfast Hex	Galvalume AZ50 steel plate	2 7/8" x 3 ¼"	SFS Intec, Inc.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	FMRC 4470	J.I. #1Z2A5.AM	01/12/96
	Insulation Attachment Requiremetns	FM Approval Guide	Published Annually
	Class 4470	J.I. 1Z3A8.AM	08/13/97
	Class 4470	30003251	10/15/99
	Class 4470	3006872	06/13/2000
	Class 4470	3009071	01/03/02
	Class 4470	3014050	07/08/03
Underwriters Laboratories	Fire Resistance Testing	98NK12810	8/11/98
		98NK17212	8/21/98
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	4006.08.00-1-R1	10/18/05
	TAS 114	02843.02.05-08	02/04/05

APPROVED ASSEMBLIES

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. steel

System Type B(1): Base layer of insulation mechanically attached, top layer adhered; membrane adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
FTR-Value, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	2 or 10 (#14)	1:2 ft^2
Minimum 2" thick	2 or 10 (#14)	1:4 ft^2
DensDeck, DensDeck Prime		
Minimum 0.25" thick	2 or 10 (#14)	1:2 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	Insulation Fasteners (Table 3)	Fastener Density/ft^2
(Optional) FTR-Value, ACFoam II, Multi-Max FA		
Minimum 1.5" 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 ft^2 or in ¾" to 1" wide beads 12" o.c. of FTR 601 or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft^2. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.

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

Barrier: (Optional) ¼" DensDeck or DensDeck Prime 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 601 or Insta-Stik Adhesive or OlyBond Adhesive Fastener at application rate of 1gal/100 ft^2 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 ft^2 or FTR-390 asphalt based adhesive at 1 gal. per 60 ft^2.

Maximum Design Pressure:

-67.5 psf (for 1.5" thick insulation attached at 1 fastener per 2 ft^2 with FiberTite or FiberTite XT) (See General Limitation #9.)

-60 psf (for 2" thick insulation attached at 1 fastener per 4 ft^2 with FiberTite or FiberTite XT) (See General Limitation #9.)

-45 psf (for FiberTite FB applications)(See General Limitation #9.)

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga. steel

System Type B(2): Base layer of insulation mechanically attached, top layer adhered; membrane 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 Minimum 2" thick	OMG (HD #14) or Dekfast (#14)	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

	Insulation Fasteners (Table 3)	Fastener Density/ft^2
SECUROCK Gypsum-Fiber Roof Board Minimum 0.5" 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 25 lbs/100 ft^2 or Olybond applied in a full coating application of 1gal/100 ft^2 or ¾" to 1" wide beads 12" o.c. of FTR 601, Olybond 500, Millennium One Step Foamable Insulation Adhesive or Insta-Stik Adhesive. 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.

Membrane: FiberTite, XT, SM or XTreme roof cover adhered to the insulation with FTR-190 Bonding Adhesive applied at an application rate of 50 ft²/gal.

Or

FiberTite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FTR-290 solvent adhesive at 90 ft^2/gal or FTR-490 water based adhesive at 100 ft²/gal.

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

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel Decks, Insulated

Deck Description: Min. 18-22 ga. steel

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

All General and System Limitations apply.

One or more layers of the following.

Base Insulation Layer		**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
(Optional) Any Insulation, Approved for use with Roof Cover Minimum 0.25" thick		**N/A**	**N/A**
Top Insulation Layer		**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board			
Fastening #1:	Minimum 0.25" thick	OMG (HD #14)	1:1.33 ft^2
Fastening #2:	Minimum 0.25" thick	OMG (HD #14)	1:3.2 ft^2
Fastening #3:	Minimum 0.375" thick	OMG (HD #14) or Dekfast (#14)	1:2.7 ft^2
Fastening #4:	Minimum 0.625" thick	OMG (HD #14)	1:1.6 ft^2

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.

Membrane: FiberTite, XT, SM or XTreme roof cover adhered to the insulation with FTR-190 Bonding Adhesive applied at an application rate of 50 ft²/gal.

Or

FiberTite FB roof cover adhered to the insulation with approved asphalt at 20-25 lbs./sq., FTR-290 solvent adhesive at 90 ft^2/gal or FTR-490 water based adhesive at 100 ft²/gal.

Maximum Design Pressures:

-105.0 psf for Fastening # 1 (See General Limitation #7.)

-45 psf for Fastening #2 (See General Limitation #9)

-45 psf for Fastening #3 (See General Limitation # 9)

-82.5 psf for Fastening #4 (See General Limitation #7)

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. steel

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

All General and System Limitations apply.

Insulation Layer

	Insulation Fasteners (Table 3)	Fastener Density/ft^2
(Optional) FTR-Value, ACFoam II Minimum 1" thick	N/A	N/A
ENRGY-3 Minimum 1.4" thick	N/A	N/A
(Optional) Multi-Max-3, ACFoam Composite, EnergyGuard Composite, Thermaroof Composite, ENRGY-3 Composite 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 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 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 2I: Steel, Insulated

Deck Description: 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.

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 1.5" 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 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 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 2I: Steel, Insulated

Deck Description: 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.

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" 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 Pressures:-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 Pressures:-75 psf (See General Limitation #7)

Maximum Design Pressures: See Membrane attachment above.

Membrane Type: Single Ply, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 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.

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" 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 Fasteners with 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 Fasteners with 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 Fasteners and 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)

Fastening #4: FTR MAGNUM Fasteners with 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, KEE

Deck Type 2I: Steel, Insulated

Deck Description: 18-22 ga. Steel (See Specific Deck type below)

System Type D(5): 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" 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.

Deck: 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 Fasteners with 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 Fasteners with 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)

Deck: 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 #1: FTR MAGNUM Fasteners with 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 Fasteners with 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 Fasteners with 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)***
Deck:	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.
Fastening #1:	FTR MAGNUM Fasteners with 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 Fasteners with 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, KEE

Deck Type 2I: Steel, Insulated

Deck Description: Minimum 18 - 22 gage steel

System Type D(6): 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.

Membrane: FiberTite, XT, SM or XTreme secured through the preliminarily attached insulation 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, spaced 6" o.c. within the 5" open 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, spaced 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, spaced 6" o.c. within the 5" open 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 2I:	Steel, Insulated
Deck Description:	18-22 ga. Steel
System Type E(1):	Membrane mechanically attached to steel 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" 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 2:	Steel, Insulated
Deck Description:	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 fasteenrs 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.
System Type E(2):	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" 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 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.)

STEEL 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 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.

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.)**

END OF THIS ACCEPTANCE