



**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)

**Stevens Roofing Systems
9 Sullivan Road
Holyoke, MA 01040**

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 the BCCO and accepted by the Building Code and Product Review Committee to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Stevens TPO Single Ply Roofing System 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 renews and revises NOA No. 01-0419.08 and consists of pages 1 through 30.
The submitted documentation was reviewed by Jorge L. Acebo



**NOA No: 06-0207.08
Expiration Date: 05/17/11
Approval Date: 06/01/06
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ROOFING SYSTEM APPROVAL

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	Single Ply
<u>Material:</u>	TPO
<u>Deck Type:</u>	Recover
<u>Maximum Design Pressure:</u>	-427.5 psf
<u>Fire Classification:</u>	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>
Stevens FB4535	76 ½" x 100' (0.045" thick)	TAS 114	Membrane laminated with a 3.5 oz/yd ² spun bonded polypropylene fleece.
Stevens FB4560	76 ½" x 100' (0.045" thick)	TAS 114	Membrane laminated with a 6oz/yd ² spun bonded polypropylene fleece.
Stevens FB6035	76 ½" x 100' (0.060" thick)	TAS 114	Membrane laminated with a 3.5 oz/yd ² spun bonded polypropylene fleece.
Stevens FB6060	76 ½" x 100' (0.060" thick)	TAS 114	Membrane laminated with a 6 oz/yd ² spun bonded polypropylene fleece.
Stevens FB636WB	5 gallons	TAS 114	Water based adhesive for fleece back membranes applied to substrate at 100ft ² /gal.
Stevens EP	various	ASTM D6878	Polyester reinforced, ethylene-propylene roofing membrane
Stevens EP-XL	various	ASTM D6878	Polyester reinforced, ethylene-propylene roofing membrane
Unsupported EP	36" x 50'	ASTM D6878	Flashing for surfaces whose geometry prohibits the use of reinforced membrane.
Stevens EP Walkway Roll	36" x 50'	N/A	Walkway pad
Stevens Purlin Fastener	various	TAS 114	Fasteners for membrane attachment (min. 16 ga. purlins)
Stevens Termination Bar	10'	N/A	Extruded aluminum termination bar
FR10	48" x 250'	ASTM E108	Fiberglass Fire Barrier
FR50	48" x 108'	ASTM E108	Fiberglass Fire Barrier
Stevens Inside Corners, Outside Corners, Pipe Boots & Vent Gloves	various	N/A	Prefabricated flashing
Stevens VRS Vent	various	N/A	Spun aluminum, one-way pressure relief valve



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Stevens EP Seam Cleaner	1 gallon	N/A	Membrane cleaner
Insta-Stik Insulation Adhesive	1 or 2-1/2 gallon	N/A	Insulation Adhesive
Pliodeck Insulation Adhesive	1 or 2-1/2 gallon	N/A	Insulation Adhesive
Stevens EP Bonding Adhesive	5 gallon	N/A	Membrane adhesive applied to both substrate and roof cover at 60ft ² /gal.
Pliodeck TPO Membrane Adhesive	1 or 2-1/2 gallon	N/A	Membrane adhesive applied in ½ - ¾ in. (13-19 mm) wide beads spaced 12 in. (305 mm) on center.
Stevens All-Purpose Sealant	10 oz. tube	N/A	Sealant
Stevens EP Cut Edge Sealant	32 oz.	N/A	Sealant for exposed scrim of Stevens EP membrane
Stevens Fascia	various	TAS 111	Extruded aluminum roof edge
Stevens Edge	various	TAS 111	Formed aluminum roof edge
Stevens Cap	various	TAS 111	Prefabricated metal coping system
Stevens EP Clad Metal	4'x10'	N/A	Unsupported membrane laminated to galvanized steel. For applicator forming of flashing details

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Stevens ISO 2000, ISO 3000 Recover Board	Polyisocyanurate insulation	Stevens Roofing Systems
Contour Taper Tile	Tapered expanded polystyrene insulation	AFM
Perform 1, Perform Plus	Expanded polystyrene insulation	AFM
Perform 2	Expanded polystyrene with wood fiber topside insulation	AFM
DP Foam II, DP Foam III	Polyisocyanurate foam insulation	Dyplast Products
ACFoam II, ACFoam III, ACFoam Supreme	Polyisocyanurate foam insulation	Atlas Energy Products
EPS	Expanded polystyrene insulation	Generic
Type "X", Gypsum board	Gypsum board	Generic
Dens Deck Dens Deck Prime	Water-resistant gypsum board	Georgia Pacific



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APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
GreenGuard PB6, PG38, PG39, GreenGuard Insulation Board	Extruded polystyrene insulation	Pactiv Building Products
STYROFOAM	Extruded polystyrene insulation	Dow Chemical Company
ISO 95+, ISO 95+GL	Polyisocyanurate insulation	Firestone Building Products
GAFTEMP® Permalite	Polyisocyanurate foam insulation	GAF Materials Corp.
ENRGY 3, ENRGY 3 Plus	Polyisocyanurate insulation	Johns Manville
Fesco-Foam	Polyisocyanurate/perlite insulation	Johns Manville
Fesco	Mineral fiber board (perlite)	Johns Manville
Structodek	High density fiberboard	Knight-Celotex
Multi-Max, Multi-Max FA	Polyisocyanurate insulation	R-Max Inc.
Fiberbase HD	High density fiberboard	Temple-Inland

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Stevens PIF Fasteners	Insulation fastening assembly	various	Stevens Roofing Systems
2.	Stevens #12 & #14 All- Purpose Fastener	Fasteners for insulation and membrane attachment	various	Stevens Roofing Systems
3.	Stevens #15 Deckgrip Fastener	Fasteners for insulation and membrane attachment	various	Stevens Roofing Systems
4.	Stevens SW Fastener	Fasteners for insulation and membrane attachment	various	Stevens Roofing Systems
5.	Stevens SW Seam Plate	Metal seam plate	2-3/8" dia.	Stevens Roofing Systems
6.	Stevens Deckgrip Seam Plate	Metal seam plate	2-3/8" dia.	Stevens Roofing Systems
7.	Stevens Metal or Plastic Insulation Plates	Metal or Plastic seam plate	2-7/8" or 3" dia.	Stevens Roofing Systems
8.	Stevens Metal or Plastic Barbed Seam Plates	Metal or Plastic insulation plate	2" or 2-3/8" dia.	Stevens Roofing Systems
9.	Stevens ASAP Fasteners	Membrane fastening assembly	various	Stevens Roofing Systems
10.	Stevens Preassembled XHD or XHD(M)	Membrane fastening assembly	various	Stevens Roofing Systems



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APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
11.	Stevens #15 XHD Fastener	Fasteners for insulation and membrane attachment	various	Stevens Roofing Systems
12.	Stevens CD-10	Membrane and insulation attachment	various	Stevens Roofing Systems
13.	Stevens Masonry Anchor	Zinc alloy and stainless steel (termination bar attachment only)	various	Stevens Roofing Systems
14.	Stevens NTB fastener	Glass reinforced nylon fasteners (cementitious wood fiber or gypsum decks)	various	Stevens Roofing Systems
15.	Stevens NTB Plates	Polypropylene Plastic insulation plate	3" dia.	Stevens Roofing Systems
16.	Stevens MaxFast Fasteners	Fasteners for membrane fastening	various	Stevens Roofing Systems
17.	Stevens MaxFast Plates	AZ 55 Galvalume stress plate	3" dia.	Stevens Roofing Systems

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Factory Mutual	J.I. 2X7AO.AM	Standard 4470	01/31/94
	J.I. 1X5A2.AM	Standard 4470	06/24/94
	J.I. 1Z8A7.AM	Standard 4470	06/10/96
	J.I. 3Z8A9.AM	Standard 4470	02/19/96
	J.I. 0D2A9.AM	Standard 4470	09/06/97
Underwriters Laboratories	File R10321	Fire Classification	Published Annually
	93 NK27934	Wind Uplift Testing	11/12/93
	94 NK 13394	Physical Property Testing	07/20/94
Factory Mutual	3003970	Standard 4470	05/12/00
	3013542	Standard 4470	04/04/02
	3009092	Standard 4470	12/13/00
	3008050	Standard 4470	12/15/00
	3015471	Standard 4470	12/3/02
	3013654	Standard 4470	1/28/2003
	3025307	Standard 4470	11/7/05



APPROVED ASSEMBLIES:

- Membrane Type:** Single Ply, Thermoplastic
- Deck Type 7I:** Recover, Insulated
- Deck Description:** Wood/ Steel/ Concrete/ Lightweight Concrete/ Cementitious Wood Fiber/ Gypsum
- System Type A(1):** One or more layers of insulation adhered with approved asphalt or adhesive

All General and System Limitations apply.

Insulation Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+, ENRGY 3, ACFoam II, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A
Insulation Top Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ISO 95+, ENRGY 3, ACFoam II, Stevens ISO 2000 Minimum 1" thick	N/A	N/A
Dens Deck, Dens Deck Prime Minimum ¼" thick	N/A	N/A

Note: Existing substrate shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier or insulation with hot asphalt. Deck may be unprimed for use of Insta-Stik adhesive. All insulation shall be adhered to the vapor barrier or primed deck in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or adhered to the deck in ¾" to 1" wide beads of Insta-Stik Adhesive, 12" o.c. Use of Insta-Stik Approved over existing smooth surface BUR only. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations 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 may be used as a top layer placed with the polyisocyanurate side facing down.

- Vapor (or Air) Retarder:** (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.
- Barrier:** (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼"), or Gypsum board (minimum thickness ½"), Overlayment board, with all joints staggered a minimum of 6 inches from the plywood joints; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.
- Membrane:** Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or *(for steel deck only)* Pliodeck TPO Membrane Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.
- Maximum Design Pressure:** -45 psf (See General Limitation #9.)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Min. 2500 psi structural concrete or concrete plank
System Type A(2): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
(Optional) ACFoam II, H-Shield, ENRGY 2, ENRGY 3, ISO 95+GL, Stevens ISO 2000 Minimum 1.0" thick	N/A	N/A
(Optional) DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in full coating of OlyBond Adhesive Fastener at a rate of 1 gal/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

Vapor Retarder: (Optional) Any FM or UL approved asphaltic vapor barrier
Membrane: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.
Maximum Design Pressure: -135.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Steel/ Concrete/ Cementitious Wood Fiber/ Lightweight Concrete/ Gypsum/ Wood
System Type A(3): One or more layers of insulation adhered with approved adhesive, membrane fully adhered.

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, ISO 95+GL, ENRGY3, Stevens ISO 2000		
Maximum 1" thick	N/A	N/A
DensDeck, DensDeck Prime		
Minimum 5/8" thick	N/A	N/A

Note: Insulation shall be adhered to the deck in full coating of OlyBond Adhesive Fastener at a rate of 1 gal/sq. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or *(for steel deck only)* Pliodeck TPO Membrane Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

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



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Cementitious Wood Fiber / Gypsum
System Type A(4): One or more layers of insulation adhered with approved adhesive, membrane fully adhered.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
(Optional) ACFoam II, H-Shield, ENRGY 3, Stevens ISO 2000 Minimum 1.0" thick	N/A	N/A
(Optional) DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in full coating of OlyBond Adhesive Fastener at a rate of 1 gal/sq. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -45.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Min. 2500 psi structural concrete or concrete plank
System Type A(5): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
(Optional) ACFoam II, H-Shield, ISO 95+GL, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
(Optional) DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -120.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Min. 2500 psi structural concrete or concrete plank
System Type A(6): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, AC Foam II, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -120.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Min. 2500 psi structural concrete or concrete plank
System Type A(7): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Foamular 250 Minimum 1.0" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -120.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Lightweight Concrete
System Type A(8): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, H-Shield, ISO 95+GL, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A
High Density Wood Fiberboard Minimum 0.5" thick	N/A	N/A
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -120.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Lightweight Concrete
System Type A(9): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, H-Shield, ENRGY 3, ISO 95+GL, Stevens ISO 2000 Minimum 1.0" thick or tapered	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -90.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Gypsum/ Cementitious Wood Fiber
System Type A(10): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
(Optional) ACFoam II, H-Shield, ENRGY 3, ISO 95+GL, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A
(Optional) High Density Wood Fiberboard Minimum 0.5" thick	N/A	N/A
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
DensDeck, DensDeck Prime Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -45.0 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Gypsum
System Type A(11): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, H-Shield, ENRGY 3, ISO 95+GL, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in ¾" – 1" wide beads 12" o.c. of OlyBond 500 or Spot Shot Adhesive Fastener. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -112.5 psf (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Min. 2500 psi structural concrete or concrete plank
System Type A(12): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, ENRGY 3, HY-Therm AP, ISO 95+GL, Multi-Max FA, Stevens ISO 2000 Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck in 0.5" wide ribbons spaced 6" o.c. of Pliodeck Insulation Adhesive. Subsequent layers of insulation must have ribbons applied perpendicular to preceding layers. 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: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

Maximum Design Pressure: -52.5 psf (over smooth surface BUR) (See General Limitation #9)
-135.0 psf (over mineral surface BUR) (See General Limitation #9)



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Wood/ Steel/ Concrete/ Cementitious Wood Fiber/ Gypsum
System Type B(1): Base layer of insulation mechanically attached, optional top layer adhered;
 membrane fully adhered

All General and System Limitations apply.

Insulation Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
High Density Wood Fiberboard Minimum ½" thick	1, 2 & 14	1:2 ft²
ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, ENRGY 3, ENRGY 3 Plus, PSI-25, Multi-Max FA Minimum 1.4" thick	1 & 2	1:2 ft²
ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, ENRGY 3, ENRGY 3 Plus, PSI-25, Multi-Max FA Minimum 1.5" thick	14	1:2 ft²
ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, ENRGY 3, ENRGY 3 Plus, PSI-25, Multi-Max FA Minimum 2" thick	1 & 2	1:4 ft²
ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000 Minimum 1.5" thick	1 & 2	1:2.7 ft²
Dens Deck, Dens Deck Prime Minimum ¼" thick	2	1:2 ft²

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).

Insulation Top Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, ENRGY 3, ENRGY 3 Plus, PSI-25, Multi-Max FA Minimum 1" 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 approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or in ¾" to 1" wide beads of Insta-Stik Adhesive, 12" o.c. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.



Vapor (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼"), or Gypsum board (minimum thickness ½"), Overlayment board, with all joints staggered a minimum of 6 inches from the plywood joints; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or *(for steel deck only)* Pliodeck TPO Membrane Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

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



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Steel/ Concrete
System Type B(2): Base layer of insulation mechanically attached, optional top layer adhered; membrane fully adhered

All General and System Limitations apply.

Insulation Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, Stevens ISO 2000 Minimum 1.8" thick	1 & 2	1:2 ft²
Dens Deck, Dens Deck Prime Minimum ¼" thick	2	1:2 ft²

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).

Insulation Top Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, Stevens ISO 2000 Minimum 1" 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 approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft² or in ¾" to 1" wide beads of Insta-Stik Adhesive, 12" o.c. Refer to Roofing Application Standard RAS 117 and insulation adhesive manufacturer's Roofing Component Product Control Approval for insulation attachment requirements. Insulations listed as base layer shall be used only as base layers with an optional top layer insulation installed as the final membrane substrate.

Vapor (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼"), or Gypsum board (minimum thickness ½"), Overlayment board; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP, Stevens EP-XL with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or *(for steel deck only)* Pliodeck TPO Membrane Adhesive.

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



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Wood/ Steel/ Concrete/ Cementitious Wood Fiber/ Gypsum
System Type C: All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply.

Insulation Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, ENRGY 3, ENRGY 3 Plus, PSI-25, Multi-Max FA Minimum 1.4" thick	N/A	N/A
Expanded Polystyrene Minimum ½" thick	N/A	N/A
Extruded Polystyrene Minimum ⅜" thick	N/A	N/A

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

Insulation Top Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
High Density Wood Fiberboard, Structodeck Minimum ½" thick	1, 2 & 14	1:2 ft ²
Fiber Base HD1 or Fiber Base HD6 Minimum ½" thick	1, 2 & 14	1:2.7 ft ²
APA Rated Plywood Minimum 7/16" thick	2	1:4 ft ²
Dens Deck, Dens Deck Prime Minimum ¼" thick	2	1:1.8 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. 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 (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼"), or Gypsum board, (minimum thickness ½"), Overlayment board, with all joints staggered a minimum of 6 inches from the plywood joints; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP or Stevens EP-XL membrane with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive. Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.

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



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Wood/ Steel/ Concrete/ Cementitious Wood Fiber/ Gypsum
System Type D(1): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply.

Insulation Base Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
GAFTEMP Permalite, Fesco Board Minimum ¾" thick	N/A	N/A
Insulation Top Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Expanded Polystyrene Minimum ½" thick	N/A	N/A
Extruded Polystyrene Minimum ⅜" thick	N/A	N/A
Multi-Max, Multi-Max AP, ISO 95+, ENRGY 3, PSI-25, ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000, DP Foam II, DP Foam III Minimum 1" thick	N/A	N/A
High Density Wood Fiberboard, Structodeck, Fiber Base HD1 or Fiber Base HD6 Minimum ½" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Vapor (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼") or Gypsum board, (minimum thickness ½"), Overlayment board, with all joints staggered a minimum of 6 inches from the plywood joints; secured with insulation and membrane assembly. Barrier may be installed on the deck, between insulation layers, or on top of the insulation. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP, Stevens EP-XL mechanically fastened through the insulation as specified below:

Fastening #1: *(wood, steel, concrete)* Install 76½" or 64½" wide sheets with a 4½" overlap fastened 6" o.c. using Approved Stevens Seam Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.

Fastening #2: *(wood, steel, concrete)* Install 52½" wide sheets with a 4½" overlap fastened 18" o.c. using Approved Stevens Seam Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #3: *(wood, steel, concrete)* Install maximum 76½" wide sheets with a 5½" overlap fastened 12" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for wood and steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8"



Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #4: **(wood, steel, concrete)** Install alternating 76½" and 52½" wide sheets or double 64½" wide sheets with a 4½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens ASAP assemblies (wood or steel only) or Stevens #14 All-Purpose Fasteners or Stevens CD-10 with Stevens 2" Barbed Metal Seam Plate (concrete only) or in a 5½" overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates (wood or steel only) or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates (concrete only) or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates or in a 5-1/2 overlap fastened 12" o.c. with Stevens SW Fastener and Stevens SW 2-3/8 Metal Seam Plate or Stevens MaxFast Fastener and Stevens MaxFast 3" Metal Seam Plate (Steel Deck Only)

Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #5: **(steel, concrete)** Install maximum 76½" wide sheets with a 5½" overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -67.5 psf - see General Limitation #7

Fastening #6: **(steel, concrete)** Install maximum 52½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -60 psf - see General Limitation #7

Fastening #7: **(steel, concrete)** Install maximum 52½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: - 97.5 psf - see General Limitation #7

Fastening #8: **(steel, concrete)** Install maximum 64½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

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

Fastening #9: **(cementitious wood fiber, gypsum)** Install 64½" wide sheets with a 4½" overlap fastened 6" o.c. using Stevens NTB Fasteners or Olympic NTB Magnum with 2" head [minimum 2" embedment] (Both fasteners MUST include Anti-backout wires)

Maximum Design Pressure: -45 psf - see General Limitation #7

Maximum Design Pressure: See Fastening and Membrane and Deck Options Above.



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Insulated
Deck Description: Steel
System Type D(2): Membrane mechanically attached to steel purlins over preliminary fastened insulation.

All General and System Limitations apply.

Insulation Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
GAFTEMP Permalite, Fesco Board Minimum ¾" thick	N/A	N/A
Expanded Polystyrene Minimum ½" thick	N/A	N/A
Extruded Polystyrene Minimum ⅜" thick	N/A	N/A
Multi-Max, Multi-Max AP, ISO 95+, ENRGY 3, PSI-25, ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000, DP Foam II, DP Foam III Minimum 1" thick	N/A	N/A
Insulation Top Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Expanded Polystyrene Minimum 1" thick	N/A	N/A
Extruded Polystyrene Minimum ⅜" thick	N/A	N/A
Multi-Max, Multi-Max AP, ISO 95+, ENRGY 3, PSI-25, ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000, DP Foam II, DP Foam III Minimum 1" thick	N/A	N/A
High Density Wood Fiberboard, Structodeck, Fiber Base HD1 or Fiber Base HD6 Minimum ½" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Vapor (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼"), or Gypsum board, (minimum thickness ½"), Overlayment board; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP, Stevens EP-XL mechanically fastened through the insulation and existing roof system to minimum 16 ga. steel purlins as specified below:



- Fastening #1: Install maximum 52½" wide sheets with a 4½" wide overlap fastened 18" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Fastening #2: Install maximum 64½" wide sheets with a 4½" wide overlap fastened 6" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Fastening #3: Install maximum 76½" wide sheets with a 4½" overlap fastened 6" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Fastening #4: Install alternating 76½" and 52½" wide sheets or double 64½" wide sheets with a 5½" overlap fastened 6" o.c. in every other roof cover side lap using Olympic or Stevens Purlin Fasteners with Stevens 2-3/8" Barbed Metal or Plastic Seam Plates or with a 4½" overlap fastened 6" o.c. in every other roof cover side lap using Olympic or Stevens Purlin Fasteners with Stevens 2" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Fastening #5: Install maximum 64½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2-3/8" Purlin Plate.
Maximum Design Pressure: -75 psf - see General Limitation #7
- Fastening #6: Install maximum 64½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2-3/8" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Fastening #7: Install maximum 76½" wide sheets with a 5½" overlap fastened 6" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2-3/8" Purlin Plate.
Maximum Design Pressure: -67.5 psf - see General Limitation #7
- Fastening #8: Install maximum 76½" wide sheets with a 5½" overlap fastened 12" o.c. using Olympic or Stevens Purlin Fasteners with Stevens 2-3/8" Purlin Plate.
Maximum Design Pressure: -45 psf - see General Limitation #7
- Maximum Design Pressure: See Fastening and Membrane and Deck Options Above.



Membrane Type: Single Ply, Thermoplastic

Deck Type 7I: Recover, Insulated

Deck Description: Steel, Concrete

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

All General and System Limitations apply.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Multi-Max, Multi-Max FA, ISO 95+, ENRGY 3, PSI-25, ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000, DP Foam II, DP Foam III Minimum 1.5" thick	N/A	N/A

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at an 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. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Vapor (or Air) Retarder: (Optional) If used they may be placed between the deck and the base layer of insulation or between the base and top layers of insulation.

Barrier: (Optional) Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, Dens-Deck Prime(minimum thickness ¼"), or Gypsum board, (minimum thickness ½"), Overlayment board; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP, Stevens EP-XL mechanically fastened through the insulation as specified below:

Fastening: Install maximum 76½" wide sheets with a 5½" overlap fastened 18" o.c. using Stevens Maxfast Fasteners and Plates or Stevens SW Fastener and Stevens SW 2-3/8" Metal Seam Plate

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



Membrane Type: Single Ply, Thermoplastic
Deck Type 7: Recover, Non-Insulated.
Deck Description: Wood/ Steel/ Concrete/ Cementitious Wood Fiber/ Gypsum
System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Barrier: (Optional) Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, Dens-Deck Prime (minimum thickness ¼") or Gypsum board, (minimum thickness ½"), Overlayment board, with all joints staggered a minimum of 6 inches from the plywood joints; secured with insulation and membrane assembly. Barrier may be installed on the deck, between insulation layers, or on top of the insulation. See current fire ratings for specific placement of the fire barrier.

Membrane: Stevens EP, Stevens EP-XL mechanically fastened through the insulation as specified below:

Fastening #1: (*wood, steel, concrete*) Install 76½" or 64½" wide sheets with a 4½" overlap fastened 6" o.c. using Approved Stevens Seam Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #2: (*wood, steel, concrete*) Install 52½" wide sheets with a 4½" overlap fastened 18" o.c. using Approved Stevens Seam Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #3: (*wood, steel, concrete*) Install maximum 76½" wide sheets with a 5½" overlap fastened 12" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for wood and steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7

Fastening #4: (*wood, steel, concrete*) Install alternating 76½" and 52½" wide sheets or double 64½" wide sheets with a 4½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens ASAP assemblies (wood or steel only) or Stevens #14 All-Purpose Fasteners or Stevens CD-10 with Stevens 2" Barbed Metal Seam Plate (concrete only) or in a 5½" overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates (wood or steel only) or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates (concrete only) or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates or in a 5-1/2" overlap fastened 12" o.c. with Stevens SW Fastener and Stevens SW 2-3/8" Metal Seam Plate or Stevens MaxFast Fastener and Stevens MaxFast 3" Metal Seam Plate (Steel Deck Only).
Maximum Design Pressure: -45 psf - see General Limitation #7



Fastening #5: *(steel, concrete)* Install maximum 76½" wide sheets with a 5½" overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -67.5 psf - see General Limitation #7

Fastening #6: *(steel, concrete)* Install maximum 52½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -60 psf - see General Limitation #7

Fastening #7: *(steel, concrete)* Install maximum 52½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -97.5 psf - see General Limitation #7

Fastening #8: *(steel, concrete)* Install maximum 64½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens Preassembled XHD(M), Stevens Preassembled XHD or Stevens XHD Fasteners and Stevens 2-3/8" Barbed Metal Seam Plates for steel decks or Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates for concrete decks or Stevens Deckgrip Fasteners and Stevens 2-3/8" Deckgrip Metal Seam Plates.

Maximum Design Pressure: -75 psf - see General Limitation #7

Maximum Design Pressure: See Fastening and Membrane and Deck Options Above.



Membrane Type: Single Ply, Thermoplastic
Deck Type 7I: Recover, Non-Insulated
Deck Description: Concrete Deck with Existing Asphaltic roof cover or BUR
System Type F: Membrane fully adhered.

All General and System Limitations apply.

Deck: Structural Concrete
Lightweight Concrete: Minimum 300 psi cellular lightweight concrete deck applied with a minimum 1/8" slurry coat followed by an optional minimum 1" thick Holey Board and a minimum 2" thick top coat.
Treatment: Polyvinyl Alcohol (PVA) applied to the deck top surface when walkable.
Membrane: Stevens FB4535, FB4560, FB6035 or FB6060 membrane with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive.
Maximum Design Pressure: -427.5 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. 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



NOA No: 06-0207.08
Expiration Date: 05/17/11
Approval Date: 06/01/06
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