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PRODUCT CONTROL NOTICE OF ACCEPTANCE

J. P. S. Elastomeric Corporation
Nine Sullivan Road
Holyoke ,MA 01040-2800

Your application for Notice of Acceptance (NOA) of:

Stevens EP for Concrete Decks

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0409.03
EXPIRES: 05/17/2006

Raul Rodriguez
Chief Product Control Division

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 05/17/2001

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply

Approval Date: May 17, 2001

Expiration Date: May 17, 2006

Material: TPO
Deck Type: Concrete
Maximum Design Pressure -720 psf
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Stevens FB4560	76 1/2" x 100' (0.045" thick)	PA114	Membrane laminated with a 6oz/yd ² spunbonded polyester fleece.
Stevens FB6060	76 1/2" x 100' (0.060" thick)	PA114	Membrane laminated with a 6 oz/yd ² spunbonded polyester fleece.
Stevens FB636WB	1 and 5 gallons	PA 114	Water based adhesive for fleece back membranes.
Stevens EP	various	ASTM D 4434	Polyester reinforced, ethylene-propylene roofing membrane
Unsupported EP	36" x 50'	ASTM D4434	Flashing for surfaces whose geometry prohibits the use of reinforced membrane.
Stevens EP Walkway Roll	30" x 30"	N/A	Walkway pad
Stevens ESL Fasteners		PA114	Membrane fastening assembly
Stevens ESI Fasteners		PA114	Insulation fastening assembly
Stevens ASAP Fasteners		PA114	Membrane fastening assembly
Stevens PIF Fasteners		PA114	Insulation fastening assembly
Stevens Preassembled XHD or XHD(M)	various	PA 114	Membrane fastening assembly
Stevens Metal or Plastic Barbed Seam Plates	2" or 2-3/8" dia.	PA114	Metal or Plastic seam plate



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Stevens Metal or Plastic Insulation Plates	3" dia.	PA114	Metal or Plastic insulation plate
Stevens Spike	various	PA114	Membrane and insulation attachment
Stevens CD-10	various	PA114	Membrane and insulation attachment
Stevens Masonry Anchor	various	PA114	Zinc alloy and stainless steel (termination bar attachment only)
Stevens #14 All-Purpose Fastener	various	PA114	Fasteners for insulation and membrane attachment (concrete, steel or wood decks)
Stevens XHD Fastener	various	PA114	Fasteners for insulation and membrane attachment (concrete or steel decks)
Stevens Stainless Steel Fasteners	various	PA114	#12 and #14 fasteners for insulation and membrane fasteners (steel or wood decks)
Stevens Purlin Fastener	various	PA114	Fasteners for membrane attachment (min. 16 ga. purlins)
Stevens N.T.B. Fasteners	various	PA114	Insulation and membrane fasteners (gypsum, tectum or cementitious wood fiber decks)
Stevens Termination Bar	10'	N/A	Extruded aluminum termination bar
Supreme Slip Sheet	52" x 2500'	ASTM E108	Fiberglass fire barrier
Stevens Inside Corners	various	N/A	Prefabricated flashing
Stevens Outside Corners	various	N/A	Prefabricated flashing
Stevens Pipe Boots	various	N/A	Prefabricated flashing
Stevens Vent Gloves	various	N/A	Prefabricated flashing
Stevens VRS Vent	various	N/A	Spun aluminum, one-way pressure relief valve
Stevens EP Seam Cleaner	1 gallon	N/A	Membrane cleaner



Frank Zuloaga, RRC
Roofing Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Stevens EP Bonding Adhesive	5 gallon	N/A	Membrane adhesive
Stevens All-Purpose Sealant	10 oz. tube & 1 gallon	N/A	Sealant
Stevens EP Seam Caulk	1 gallon	N/A	Sealant for exposed scrim of Stevens EP membrane
Stevens Fascia	various	PA 111	Extruded aluminum roof edge
Stevens Edge	various	PA 111	Formed aluminum roof edge
Stevens Cap	various	PA 111	Prefabricated metal coping system
Stevens EP Clad Metal	4'x 8'	N/A	Unsupported membrane laminated to galvanized steel. For applicator forming of flashing details
Stevens ISO 2000	4' x 4'	PA 110	Polyisocyanurate insulation
Stevens ISO 2000	4' x 4'	PA 110	Polyisocyanurate insulation
Stevens Recover Board	4' x 4'	PA 110	Polyisocyanurate insulation

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Amocor PB-6	4' x 50'	PA 110	Extruded polystyrene insulation	Amoco Foam (with current NOA)
Amocor PG-38	4' x 8'	PA 110	Extruded polystyrene insulation	Amoco Foam (with current NOA)
Amocor PG-39	4' x 9'	PA 110	Extruded polystyrene insulation	Amoco Foam (with current NOA)
Amofoam	2' x 8'	PA 110	Extruded polystyrene insulation	Amoco Foam (with current NOA)
EPS	4' x 4'	PA 110	Expanded polystyrene insulation	Generic
Perform 1	4' x 4'	PA 110	Expanded polystyrene insulation	AFM (with current NOA)



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Perform 2	4' x 4'	PA 110	Expanded polystyrene with laminated hardboard insulation	AFM (with current NOA)
Perform 3	4' x 4'	PA 110	Expanded polystyrene with laminated kraft/foil facer	AFM (with current NOA)
Contour Tile	4' x 4'	PA 110	Tapered expanded polystyrene insulation	AFM (with current NOA)
Perform Perfect	4' x 4'	PA 110	Expanded polystyrene insulation	AFM (with current NOA)
Pyrox	4' x 4'	PA 110	Polyisocyanurate insulation	Apache (with current NOA)
ACFoam II	4' x 4'	PA 110	Polyisocyanurate insulation	Apache (with current NOA)
ACFoam III	4' x 4'	PA 110	Polyisocyanurate insulation	Apache (with current NOA)
ACFoam Supreme	4' x 4'	PA 110	Polyisocyanurate insulation	Apache (with current NOA)
Hy-Therm AP	4' x 4'	PA 110	Polyisocyanurate insulation	Celotex (with current NOA)
High Density Wood Fiberboard	4' x 4'	PA 110	Wood fiber insulation	Celotex (with current NOA)
Certifoam	2' x 8'	PA 110	Extruded polystyrene insulation	Diversifoam (with current NOA)
Styrofoam	2' x 8'	PA 110	Extruded polystyrene insulation	Dow (with current NOA)
Recovery Board	2' x 8'	PA 110	Extruded polystyrene insulation	Dow (with current NOA)
Recover Mate	4' x 8'	PA 110	Extruded polystyrene insulation	Dow (with current NOA)
ISO 95+	4' x 4'	PA 110	Polyisocyanurate insulation	Firestone (with current NOA)
Ultragard Gold	4' x 4'	PA 110	Polyisocyanurate insulation	Johns Manville (with current NOA)
Fesco-Foam	2' x 4'	PA 110	Polyisocyanurate/perlite insulation	Johns Manville (with current NOA)
ENRG'Y-2	4' x 4'	PA 110	Polyisocyanurate insulation	Johns Manville (with current NOA)



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Fesco	2' x 4'	PA 110	Mineral fiber board (perlite)	Johns Manville (with current NOA)
Fiberglas	3' x 4'	PA 110	Glass fiber insulation	Johns Manville (with current NOA)
Thermarroof Plus	4' x 4'	PA 110	Polyisocyanurate insulation	R-Max (with current NOA)
Multi-Max FA	4' x 4'	PA 110	Polyisocyanurate insulation	R-Max (with current NOA)
Toprox	4' x 4'	PA 110	Mineral wool insulation	Roxul (with current NOA)
Fiberbase HD	4' x 4'	PA 110	High density fiberboard	Temple-Inland (with current NOA)
Foamular	2' x 8'	PA 110	Extruded polystyrene insulation	Owens Corning (with current NOA)
Durapink	2' x 8'	PA 110	Extruded polystyrene insulation	Owens Corning (with current NOA)
Structodek	4' x 4'	PA 110	High density fiberboard	Wood Fiber Ind. (with current NOA)
Sealskin	2' x 4'	PA 110	Mineral fiber board (perlite)	International Permalite (with current NOA)
Fireguard Type "X"	4' x 8'	PA 110	Gypsum board	Domtar (with current NOA)
Dens-Deck	4' x 8'	PA 110	Gypsum board	Georgia-Pacific (with current NOA)
Overlayment board	4' x 8'	PA 110	Gypsum board	Georgia-Pacific (with current NOA)
Gypsum board	4' x 8'	PA 110	Gypsum board	generic
Asphalt	N/A	ASTM D 312	Hot applied bitumen adhesive	generic
Red rosin	various		Red rosin paper used for barrier layer on wood decks	generic



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<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Polyethylene	min. 4 mil		sheet used as vapor/air barrier	generic
Olympic Standard, HD or XHD	various	PA 114	Insulation fastener	Olympic (with current NOA)
CD-10	various	PA 114	Insulation fastener for concrete decks	Olympic (with current NOA)
Olympic Purlin Fastener	various	PA 114	Membrane fastener for min. 16 ga. Purlins	Olympic (with current NOA)
Insulation Plates	3" dia.	PA 114	Insulation plate	Olympic (with current NOA)
Roofgrip #12, #14, #15	various	PA 114	Insulation fastener	Buildex (with current NOA)
Accutrac Plates	3" square	PA 114	Insulation plate	Buildex (with current NOA)
Dekfast #12, #14, #15	various	PA 114	Insulation fastener	Construction Fasteners (with current NOA)
Insulation Plates	3" dia. or Hex	PA 114	Insulation plate	Construction Fasteners (with current NOA)
Tru-Fast #12, #14, #15	various	PA 114	Insulation fastener	Tru-Fast (with current NOA)
Insulation Plates	3" dia.	PA 114	Insulation plate	Tru-Fast (with current NOA)
Rawl Spike	various	PA 114	Membrane and insulation fastener for concrete decks	Rawl (with current NOA)
Rawlite	various	PA 114	Insulation and membrane fastener for lightweight decks	Rawl (with current NOA)
Insulation Plates	3" dia.	PA 114	Insulation plate	Rawl (with current NOA)



EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Factory Mutual Research Corporation	J.I. 0X2A6.AM	Standard 4470	06/07/93
Factory Mutual Research Corporation	J.I. 2X6A9.AM	Standard 4470	12/13/93
Factory Mutual Research Corporation	J.I. 2W2A9.AM	Standard 4470	11/30/93
Factory Mutual Research Corporation	J.I. 2X7AO.AM	Standard 4470	01/31/94
Factory Mutual Research Corporation	J.I. 1X5A2.AM	Standard 4470	06/24/94
Factory Mutual Research Corporation	J.I. 1Z8A7.AM	Standard 4470	06/10/96
Factory Mutual Research Corporation	J.I. 3Z8A9.AM	Standard 4470	02/19/96
Factory Mutual Research Corporation	J.I. 0D2A9.AM	Standard 4470	09/06/97
Inchcape Testing Services Inc.	484-830500	Physical Property Testing	05/31/93
Underwriters Laboratories, Inc.	File R10321	Fire Classification	Published Annually
Underwriters Laboratories, Inc.	93 NK27934	Wind Uplift Testing	11/12/93
Underwriters Laboratories, Inc.	93 NK17378	Physical Property Testing	08/10/93
Underwriters Laboratories, Inc.	92 NK1400	Physical Property Testing	09/24/93
Underwriters Laboratories, Inc.	94 NK 13394	Physical Property Testing	07/20/94
Factory Mutual Research Corporation	3003970	Standard 4470	05/12/2000



APPROVED ASSEMBLIES:

Deck Type 3I: Concrete Decks, Insulated, New Construction, Reroof
Deck Description: 2500 psi structural concrete
System Type A: One or more layers of insulation adhered with approved asphalt or adhesive

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): ISO 95+, E'NRG'Y-2, AC Foam II, Stevens ISO 2000
 Minimum: 1.5" x 4' x 4'

<u>Insulation (Optional) Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): ISO 95+, E'NRG'Y-2, AC Foam II, Stevens ISO 2000
 Minimum: 1" x 4' x 4'

Approved Type(s): **Dens Deck**
 Minimum: 1/4" x 4' x 8'

Note: Concrete deck 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 Instastick adhesive. All insulation shall be adhered to the vapor barrier or primed deck in full moppings of approved hot asphalt within the EVT range and at a rate of 20-40 lbs./ 100 ft² or adhered to the deck in 3/4" 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) JPS Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, or Gypsum board, minimum thickness 1/2", Overlayment board; secured with insulation and membrane assembly. Barrier may be installed on the deck or between insulation layers. See Approved Roofing Materials Directory for specific placement of fire barrier.

Membrane: Stevens EP with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or Stevens FB4560 or FB6060 with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive at a rate of 100ft²/gal.

Maximum Design Pressure: -135 psf (See General Limitation #9.)



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 Roofing Product Control Examiner

Deck Type 3I: Concrete Decks, Insulated, New Construction, Reroof

Deck Description: 2500 psi structural concrete

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

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s):	High Density Roof Fiberboard			
Minimum: ¾" x 4' x 4'	Stevens PIF	[3]	8	1:2 ft ²
Minimum: ¾" x 4' x 4'	Stevens #12, #14 / S	[3]	8	1:2 ft ²
Approved Type(s):	ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, E'NRG'Y-2, E'NRG'Y-2 Plus, PSI-25, Multi-Max FA, or HyTherm AP			
Minimum: 1.4" x 4' x 4'	Stevens PIF	[3]	8	1:2 ft ²
Minimum: 1.4" x 4' x 4'	Stevens #12, #14 / S	[3]	8	1:2 ft ²
Minimum: 2" x 4' x 4'	Stevens PIF	[3]	4	1:4 ft ²
Minimum: 2" x 4' x 4'	Stevens #12, #14 / S	[3]	4	1:4 ft ²
Approved Type(s):	ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000			
Minimum: 1.5" x 4' x 4'	Stevens PIF	[3]	6	1:2.7 ft ²
Minimum: 1.5" x 4' x 4'	Stevens #12, #14 / S	[3]	6	1:2.7 ft ²
Approved Type(s):	Dens Deck			
Minimum: ¼" x 4' x 8'	Stevens #12, #14 / S	[4]	16	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).

<u>Insulation (Optional) Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s):	ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, E'NRG'Y-2, E'NRG'Y-2 Plus, PSI-25, Multi-Max FA, or HyTherm AP			
Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s):	Dens Deck			
Minimum: ¼" x 4' x 4'	N/A	N/A	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./sq. 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.



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Roofing Product Control Examiner

- 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) JPS Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, 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 Approved Roofing Materials Directory for specific placement of fire barrier.
- Membrane: Stevens EP with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or Stevens FB4560 or FB6060 with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive at a rate of 100ft²/gal.
- Maximum Design
Pressure: -45 psf (See General Limitation #9.)



Deck Type 3I: Concrete Decks, Insulated, New Construction, Reroof

Deck Description: 2500 psi structural concrete

System Type B(2): Base layer of insulation mechanically attached, optional top layer adhered; membrane fully adhered

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): ACFoam II, Stevens ISO 2000				
Minimum: 1.8" x 4' x 4'	Stevens PIF	[3]	8	1:2 ft ²
Minimum: 1.8" x 4' x 4'	Stevens #14 / S	[3]	8	1:2 ft ²
Approved Type(s): Dens Deck				
Minimum: ¼" x 4' x 8'	Stevens #14 / S	[4]	16	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).

<u>Insulation (Optional) Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): ACFoam II, Stevens ISO 2000				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Dens Deck				
Minimum: ¼" x 4' x 4'	N/A	N/A	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./sq. 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) JPS Slip sheet 15 mil min., Fireguard Type "X", Dens-Deck, 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 Approved Roofing Materials Directory for specific placement of fire barrier.

Membrane: Stevens EP with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or Stevens FB4560 or FB6060 with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive at a rate of 100ft²/gal.

Maximum Design

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



Deck Type 3I: Concrete Decks, Insulated, New Construction, Reroof

Deck Description: 2500 psi structural concrete

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

All General and System Limitations apply.

<u>Insulation Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): ACFoam II, ACFoam III, ACFoam Supreme, Stevens ISO 2000, ISO 3000, E'NRG'Y-2, E'NRG'Y-2 Plus, PSI-25, Multi-Max FA, or HyTherm AP

Minimum: 1.4" x 4' x 4'	N/A	N/A	N/A	N/A
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Approved Type(s): **Expanded or Extruded Polystyrene**

Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
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Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density.

<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
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Approved Type(s): **High Density Wood Fiberboard, Traffic Top Fiberboard, FM-90 High Density Fiberboard, FM-90 Traffic Top Fiberboard, High Density Roof Fiberboard or Structodeck**

Minimum: ½" x 4' x 4'	Stevens PIF	[3]	8	1:2 ft ²
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Minimum: ½" x 4' x 4'	Stevens #12, #14 / S	[3]	8	1:2 ft ²
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Approved Type(s): **Fiber Base HD1 or Fiber Base HD6**

Minimum: ½" x 4' x 4'	Stevens PIF	[3]	6	1:2.7 ft ²
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Minimum: ½" x 4' x 4'	Stevens #12, #14 / S	[3]	6	1:2.7 ft ²
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Approved Type(s): **APA Rated Oriented Strand Board**

Minimum: 7/16" x 4' x 8'	Stevens #12, #14 / S	[4]	8	1:4 ft ²
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Approved Type(s): **Dens Deck**

Minimum: ¼" x 4' x 8'	Stevens #12, #14 / S	[4]	18	1:1.8 ft ²
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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) JPS Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, 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 Approved Roofing Materials Directory for specific placement of fire barrier.



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Roofing Product Control Examiner

Membrane: Stevens EP with minimum 2" side laps adhered to the insulation with Stevens EP Bonding Adhesive or Stevens FB4560 or FB6060 with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive at a rate of 100ft²/gal.

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



Deck Type 3I: Concrete Decks, Insulated, New Construction, Reroof

Deck Description: 2500 psi structural concrete.

System Type D: Membrane mechanically attached over preliminary fastened insulation

All General and System Limitations apply.

<u>Insulation (Optional) Base Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Minimum: ¾" x 2' x 4'	Celotherm, ConPerl, GAFTEMP Permalite, Fesco Board N/A	N/A	N/A	N/A
<u>Insulation Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Minimum: 1" x 2' x 4'	Polystyrene (extruded or expanded) N/A	N/A	N/A	N/A
Approved Type(s): Minimum: 1" x 4' x 4'	Hy-Therm AP, Multi-Max, Multi-Max AP, ISO 95+, E'NRG'Y-2, PSI-25, ACFoam II, ACFoam III, Stevens ISO 2000, ISO 3000, Pyrox N/A	N/A	N/A	N/A
Approved Type(s): Minimum: ½" x 2' x 4'	High Density Wood Fiberboard, Traffic Top Fiberboard, FM-90 High Density Fiberboard, FM-90 Traffic Top Fiberboard, High Density Roof Fiberboard, Structodeck, Fiber Base HD1 or Fiber Base HD6 N/A	N/A	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) JPS Slip sheet 15 mil minimum, Fireguard Type "X", Dens-Deck, 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 Approved Roofing Materials Directory for specific placement of fire barrier.

Membrane:

Stevens EP mechanically fastened through the insulation as specified below:

Fastening #1:

Install 76½" or 64½" wide sheets with a 4½" overlap fastened 6" o.c. using Stevens Screws and Plates.

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

- Fastening #2: Install 52½" wide sheets with a 4½" overlap fastened 18" o.c. using Stevens Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.
- Fastening #3: Install maximum 76½" wide sheets with a 5½" overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.
- Fastening #4: Install maximum 76½" wide sheets with a 5½" overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -67.5 psf - see General Limitation #7.
- Fastening #5: Install alternating 76½" and 52½" sheets or double 64½" sheets with a 4½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens #14 All-Purpose Fasteners or Stevens CD-10 with Stevens 2" Barbed Metal Seam Plate or with a 5½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.
- Fastening #6: Install maximum 52½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -60 psf-see General Limitation #7.
- Fastening #7: Install maximum 52½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -97.5 psf - see General Limitation #7.
- Fastening #8: Install maximum 64½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -75 psf - see General Limitation #7.
- Fastening #9: Install maximum 84½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45. psf - see General Limitation #7



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Deck Type 3: Concrete Decks, Non-Insulated, New Construction, Reroof

Deck Description: 2500 psi structural concrete.

System Type E: Membrane mechanically attached to deck.

All General and System Limitations apply.

Barrier: (Optional) If used, fire barriers may be placed between the deck and the base layer of insulation or between the base and top layers of insulation. Refer to the current Fire Directory for specific barrier placement.

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

Fastening #1: Install 76½" or 64½" wide sheets with a 4½" overlap fastened 6" o.c. using Stevens Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.

Fastening #2: Install 52½" wide sheets with a 4½" overlap fastened 18" o.c. using Stevens Screws and Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.

Fastening #3: Install maximum 76½" wide sheets with a 5½" overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.

Fastening #4: Install maximum 76½" wide sheets with a 5½" overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -67.5 psf - see General Limitation #7.

Fastening #5: Install alternating 76½" and 52½" sheets or double 64½" sheets with a 4½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens #14 All-Purpose Fasteners or Stevens CD-10 with Stevens 2" Barbed Metal Seam Plate or with a 5½" overlap fastened 6" o.c. in every other roof cover side lap using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7.

Fastening #6: Install maximum 52½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -60 psf-see General Limitation #7.

Fastening #7: Install maximum 52½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -97.5 psf - see General Limitation #7.

Fastening #8: Install maximum 64½" wide sheets with a 5½" wide overlap fastened 6" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -75 psf - see General Limitation #7.

Fastening #9: Install maximum 84½" wide sheets with a 5½" wide overlap fastened 12" o.c. using Stevens #14 All-Purpose Fastener or Stevens CD-10 with Stevens 2-3/8" Barbed Metal Seam Plates.
Maximum Design Pressure: -45 psf - see General Limitation #7

Deck Type 3: Concrete Decks, New Construction, Reroof

Deck Description: 2500 psi structural concrete

System Type F: Membrane adhered to roof deck.

All General and System Limitations apply.

Barrier: None.

Membrane: Stevens FB4560 or FB6060 with minimum 1.5" side and end laps adhered to insulation with Stevens FB636WB bonding adhesive at a rate of 100ft²/gal.

Maximum Design Pressure: -720 psf (See General Limitation #9.)



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CONCRETE DECK SYSTEM LIMITATIONS:

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

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**



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NOTICE OF ACCEPTANCE STANDARD CONDITIONS

- 1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documentation, including test supporting data, engineering documents, are no older than eight (8) years.
- 2 Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
- 3 Renewals of Acceptance will not be considered if:
 - a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
 - b) The product is no longer the same product (identical) as the one originally approved;
 - c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
 - d) The engineer who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
- 4 Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
- 5 Any of the following shall also be grounds for removal of this Acceptance:
 - a) Unsatisfactory performance of this product or process;
 - b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
- 6 The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
- 7 A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The copies need not be resealed by the engineer.
- 8 Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
- 9 This Acceptance contains pages 1 through 20.

END OF THIS ACCEPTANCE



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