MIAMI-DADE

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
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PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Johns Manville
717 17th Street
Denver CO 80202

Your application for Product Approval of:
EPDM Roofing System-Steel Deck
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 approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime 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 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.: 00-0424.11 **(Revises No.: 98-0520.03)**

Expires: 12/10/2004

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 Dade County, Florida under the conditions set forth above.

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

Approved: 07/20/2000

Internet mail address: postmaster@buildingcodeonline.com **Homepage: http://www.buildingcodeonline.com**

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply, EPDM

Approval Date: **July 20, 2000**

Expiration Date: **December 10, 2004**

Deck Type: Steel
Maximum Design Pressure -45 psf
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product Name	Dimensions	Test Specifications	Product Description
½" Retro-Fit Board	½" x 2' x 4'	PA 110	Perlite roof insulation.
#12-#15 UltraFast Fastener		PA 114	Hex or Phillips head roof insulation fastener.
#14 EPDM Fastener		PA 114	Membrane fastener.
CD-10 Fasteners		PA 114	Insulation fastener for concrete decks.
Fesco	various	PA 110	Perlite roof insulation.
Fesco Foam	various	PA 110	Perlite/isocyanurate composite roof insulation.
EPDM Lap Caulk		PA 110	Black Caulk for Lap Seams.
LWC Base Sheet Fastener	1.2" x 1.75"	PA 114	G-90 Galvanized fastener for securing base sheet to lightweight insulating concrete.
NBT-1H & 2H		PA 114	Glass reinforced nylon fastener for gypsum and cementitious wood fiber decks.
EPDM Lap Caulk - White		PA 110	White Caulk for lap seams.
EPDM Lap Cement - Black		PA 110	Lap Cement for Black Membrane.
EPDM Lap Cement - White		PA 110	Lap Cement for White Membrane.
EPDM Flashing - White	various	ASTM D 4637	60 mil uncured EPDM (white) sheet for flashing details.

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Roofing Product Control Examiner

Product Name	Dimensions	Test Specifications	Product Description
EPDM Color Coating		PA 110	Hypalon paint for color coating EPDM membranes.
Anchor Discs	2" dia.	PA 114	Sheet attachment stress plate.
EPDM Bonding Adhesive		PA 110	Rubber based adhesive for adhering membrane or flashing sheet to porous substrate.
EPDM Flashing - Black	various	ASTM D 4637	60 mil uncured EPDM (black) sheet for flashing details.
.045 EPDM	various	ASTM D 4637	45 mil non-reinforced black EPDM sheet.
.045R EPDM	various	ASTM D 4637	45 mil reinforced black EPDM sheet.
.060 EPDM	various	ASTM D 4637	60 mil non-reinforced black EPDM sheet.
.060R EPDM	various	ASTM D 4637	60 mil reinforced black EPDM sheet.
.060FR EPDM	various	ASTM D 4637	60 mil non-reinforced, flame retardant black EPDM sheet.
.060W EPDM	various	ASTM D 4637	60 mil non-reinforced white EPDM sheet.
Sure-Seal Lightweight Insulation Plates	3" dia.	PA 114	Metal plates used for insulation securement with HP Lightweight Fasteners.
UltraFast Galvalume Metal Plate	3" x 3"	PA 114	Galvalume stress plate.
UltraFast Locking Plastic Plate	3" dia.	PA 114	Plastic stress plate.
UltraGard	various	PA 110	Isocyanurate roof insulation.
E'NERG'Y PSI-25	various	PA 110	Polyisocyanurate foam insulation

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Product Name	Dimensions	Test Specifications	Product Description
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation
UltraFast ASAP	Various	PA 114	Assembled screw & plate for roof insulation
UltraFast Locking Plastic Plate	Varous.	PA 114	Assembled screw & plate for roof insulation
EPDM Seam Tape	Various		Self adhering splice tape for splicing EPDM sheets
EPDM Peel & Stick Flashing	various		6"-12" self adhesive flashing for EPDM systems
EPDM Reinforced Termination Strip	Various		6" reinforced cured EPDM strip for securing EPDM membrane in corners and perimeters

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product Name	Dimensions	Test Specification	Product Description	Manufacturer
Hy Therm	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co.
Pyrox	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co.
White Line	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co.
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products
Celcore	Various	PA 110	Cellular insulating Concrete System	Celcore, Inc.
Concrecel	Various	PA 110	Cellular insulating Concrete System	Concrecel, Inc.
Elastizell	Various	PA 110	Cellular insulating Concrete System	Elastizell Corp.
Hy-Therm Stable R	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp.
Star SP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp.
Star AP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp.
Tristar	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp.

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Product Name	Dimensions	Test Specification	Product Description	Manufacturer
Dekfast Fasteners #12, #14, & #15		PA 114	Insulation fastener for steel and wood decks.	Construction Fasteners Inc.
Dekfast Hex Plate	2 7/8" x 3 1/4"	PA 114	Galvalume hex stress plate.	Construction Fasteners Inc.
Styrofoam	2' x 8'	PA 110	Extruded polystyrene insulation	Dow
ISO 95+ GL, 95+ GW		PA 110	Polyisocyanurate foam insulation	Firestone
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	generic
Perlite/Urethane Composite	various	PA 110	Perlite/urethane composite insulation board	generic
Sturdi-Top	various	PA 110	Wood fiber insulation board.	Georgia Pacific
Ultra/M-II	various	PA 110	Polyisocyanurate foam insulation	Homasote Co.
Insta-Stick	various	PA 110	Polyisocyanurate foam insulation	Insta-Foam
#12 & #14 Roofgrip		PA 114	Insulation fastener	ITW Buildex
E'NERG'Y PSI-25	various	PA 110	Polyisocyanurate foam insulation	NRG Barriers, Inc.
CD-10 Fastener		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc.
Con-Tite		PA 114	Conctrete deck insulation fastener	Olympic Manufacturing Group, Inc.
Lite-Deck Fastener		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc.
N.T.B. Magnum		PA 114	Glass reinforced nylon fastener for use in gypsum and cementitious wood fiber decks.	Olympic Manufacturing Group, Inc.
Olympic Fastener #12 & #14		PA 114	Insulation fastener	Olympic Manufacturing Group, Inc.
Multi-Max FA	various	PA 110	Polyisocyanurate foam insulation	RMAX
HD Insul-Fixx Fastener		PA 114	Insulation fastener for use in steel and concrete decks	SFS/Stadler
Insul-Fixx Fastener		PA 114	Insulation fastener for steel and wood decks	SFS/Stadler
Insul-Fixx S	3" square	PA 114	3" square galvalume AZ55 stress plate	SFS/Stadler

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Product Name	Dimensions	Test Specification	Product Description	Manufacturer
Insul-Fixx P	3" round	PA 114	3" round polyethylene stress plate	SFS/Stadler
Isofast Plate	various	PA 114	Square or oblong galvalume steel plates for use with Isofast fasteners	SFS/Stadler
Isofast Fasteners		PA 114	Insulation fastener for steel and wood decks	SFS/Stadler
Rawl Speed-Lock Toggle Bolt		PA 114	Insulation fastener assembly	The Rawlplug Company Inc.
Rawl Drive		PA 114	Insulation fastener and steel and plastic stress plate for concrete deck	The Rawlplug Company Inc.
Rawl Fasteners #12		PA 114	Insulation fastener for steel and wood decks	The Rawlplug Company Inc.
Rawl Spike		PA 114	Insulation fastener and steel and plastic stress plate for concrete deck	The Rawlplug Company Inc.
Rawl Fasteners #14		PA 114	Insulation fastener for use in steel, wood or concrete	The Rawlplug Company Inc.
Rawlite		PA 114	Insulation fastener for cementitious and gypsum decks	The Rawlplug Company Inc.
Tru-Fast DP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast
Tru-Fast DL		PA 114	Glass reinforced nylon fastener for use in tectum or gypsum decks	Tru-Fast
Tru-Fast CF Fasteners		PA 114	Insulation fastener for concrete decks	Tru-Fast
Tru-Fast TP		PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast
Tru-Fast MP-3	3.23" round	PA 114	3.23" round galvalume AZ50 steel plate	Tru-Fast
Tru-Fast Plastic Plate	3.04" round	PA 114	3.04" round polyethylene plastic plate	Tru-Fast
Tru-Fast Ultra		PA 114	Stainless Steel fastener for use in steel, wood and concrete decks	Tru-Fast
Tru-Fast HD		PA 114	Insulation fastener for use in wood, steel or concrete decks	Tru-Fast
Structodeck	various	PA 110	High Density Wood Fiber insulation board.	Wood Fiber Industries

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EVIDENCE SUMBITTED:

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corporation	J.I. 2W8A8.AM	Wind Uplift and Fire Classification	9/27/93
	J.I. 2X7A4.AM	Letter	3/7/94
	J.I. 0W2A5.AM	Wind Uplift Classification	5/28/93
	J.I. 0T4A3.AM	Fire Test	10/30/91
	J.I. 1V3A1.AM	Pullout Test	5/11/92
	J.I. 2V1A1.AM	Wind Uplift Classification	1/20/93
Factory Mutual Research Corporation		Letter	5/7/94
	FM Approval Guide	Current insulation and fastening requirements	Published Annually with supplements
Underwriters Laboratories, Inc.	UL Roofing Materials and Systems Directory	File No. R8103	Published Annually with supplements
		Letter	10/21/92
Warnock Hersey	634-308500	Wind Uplift	6/4/93
Architectural Testing Inc.	ATI-18535	Wind Uplift	10/14/96
Architectural Testing Inc	ATI-17214	Wind Uplift	3/20/96
Architectural Testing Inc	ATI-17601-1	Wind Uplift	6/29/96
Architectural Testing Inc	ATI-17601-2	Wind Uplift	7/30/96

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SYSTEMS:

Membrane Type: Single Ply, Thermoset, EPDM, Reinforced, Nonreinforced

Deck Type 2I: Steel, Insulated, New Construction

Deck Description: 18-22 ga. steel

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

All General and System Limitations apply.

Insulation Base Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One of the following covered with the boards listed in Top Layer or Base or Top Layer.				
Approved Type(s): **Extruded Polystyrene**				
Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Expanded Polystyrene**				
Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fesco**				
Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A

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

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One or more layers of the following:				
Approved Type(s): **ACFoam II**				
Minimum: 1.5" x 3' x 4'	Sure-Seal HP Fastener	[2]	6	1:2 ft.²
Minimum: 1.5" x 3' x 4'	Olympic Stainless #12, #14	[2]	6	1:2 ft.²
Minimum: 1.5" x 3' x 4'	Olympic #12, #14	[2]	6	1:2 ft.²
Minimum: 1.5" x 3' x 4'	Rawl #12, 14	[2]	6	1:2 ft.²
Minimum: 1.5" x 3' x 4'	UltraFast #12, #14	[2]	6	1:2 ft.²
Minimum: 1.5" x 3' x 4'	UltraGrip #12, #14	[2]	6	1:2 ft.²
Minimum: 1.3" x 3' x 4'	Isofast #10, #12, #14	[2]	6	1:2 ft.²
Minimum: 1.5" x 4' x 4'	Sure-Seal HP Fastener	[3]	5	1:3.2 ft.²
Minimum: 2" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	Insulfixx HD S	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	UltraFast #12, #14	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	UltraGrip #12, #14	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	Tru-Fast Ultra Stainless	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	Tru-Fast #10, #12, #14	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	Insta-Lock	[3]	8	1:2 ft.²

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Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Approved Type(s): **E'NRG'Y-2, PSI-25**				
Minimum: 1.4" x 4' x 4'	Insulfixx SP	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	RoofGrip #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Dekfast #12, #14, #15	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Perma-Fastener #12, #14, #15	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Olympic Stainless #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Olympic #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Rawl #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Tru-Fast Ultra Stainless	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	Tru-Fast #10, #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	UltraFast #12, #14	[3]	8	1:2 ft.²
Minimum: 1.4" x 4' x 4'	UltraGrip #12, #14	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	Insulfixx SP	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	RoofGrip #12, #14	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Sure-Seal HP Fastener	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Dekfast #12, #14, #15	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Perma-Fastener #12, #14, #15	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Olympic Stainless #12, #14	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Olympic #12, #14	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Rawl #12, #14	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Tru-Fast Ultra Stainless	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	Tru-Fast #10, #12, #14	[3]	4	1:4 ft.²
Minimum: 2" x 4' x 4'	UltraFast #12, #14	[3]	8	1:2 ft.²
Minimum: 2" x 4' x 4'	UltraGrip #12, #14	[3]	8	1:2 ft.²
Approved Type(s): **HP Recovery**				
Minimum: ½" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²
Minimum: 1" x 2' x 4'	Insulfixx HD	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	RoofGrip #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Sure-Seal HP Fastener	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Dekfast #12, #14, #15	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Olympic Stainless #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Olympic #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Rawl #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Tru-Fast Ultra Stainless	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Tru-Fast #10, #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	UltraFast #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	UltraGrip #12, #14	[1]	4	1:2 ft.²
Approved Type(s): **High Density Fiberboard**				
Minimum: ¾" x 4' x 4'	RoofGrip #12, #14	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	Dekfast #12, #14, #15	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	Olympic Stainless #12, #14	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	Olympic #12, #14	[3]	6	1:2.67 ft.²

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Roofing Product Control Examiner

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Minimum: ¾" x 4' x 4'	Rawl #12, #14	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	Tru-Fast Ultra Stainless	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	Tru-Fast #10, #12, #14	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	UltraFast #12, #14	[3]	6	1:2.67 ft.²
Minimum: ¾" x 4' x 4'	UltraGrip #12, #14	[3]	6	1:2.67 ft.²
Approved Type(s): **WHITELINE, PYROX, AP**				
Minimum: 1.2" x 4' x 4'	Insulfixx SP	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	RoofGrip #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Dekfast #12, #14, #15	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Perma-Fastener #12, #14, #15	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Olympic Stainless #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Olympic #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Rawl #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Tru-Fast Ultra Stainless	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	Tru-Fast #10, #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	UltraFast #12, #14	[3]	8	1:2 ft.²
Minimum: 1.2" x 4' x 4'	UltraGrip #12, #14	[3]	8	1:2 ft.²
Approved Type(s): **Multi-Max FA**				
Minimum: 1.2" x 3' x 4'	Insulfixx SP	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	RoofGrip #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Dekfast #12, #14, #15	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Perma-Fastener #12, #14, #15	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Olympic Stainless #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Olympic #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Rawl #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Tru-Fast Ultra Stainless	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	Tru-Fast #10, #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	UltraFast #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	UltraGrip #12, #14	[2]	6	1:2 ft.²
Approved Type(s): **Fesco Foam**				
Minimum: 1.5" x 3' x 4'	Insulfixx SP	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	RoofGrip #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Sure-Seal HP Fastener	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Dekfast #12, #14, #15	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Perma-Fastener #12, #14, #15	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Olympic Stainless #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Olympic #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Rawl #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Tru-Fast Ultra Stainless	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	Tru-Fast #10, #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	UltraFast #12, #14	[2]	4	1:3 ft.²
Minimum: 1.5" x 3' x 4'	UltraGrip #12, #14	[2]	4	1:3 ft.²

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Roofing Product Control Examiner

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Approved Type(s): **Structodeck**				
Minimum: ½" x 4' x 4'	Dekfast #12. #14, #15	[3]	8	1:2 ft.²
Minimum: ½" x 4' x 4'	Olympic Stainless #12, #14	[3]	8	1:2 ft.²
Minimum: ½" x 4' x 4'	Olympic #12, #14	[3]	8	1:2 ft.²
Minimum: ½" x 4' x 4'	Rawl #12, #14	[3]	8	1:2 ft.²
Minimum: ½" x 4' x 4'	UltraFast #12, #14	[3]	8	1:2 ft.²
Minimum: ½" x 4' x 4'	UltraGrip #12, #14	[3]	8	1:2 ft.²
Approved Type(s): **Wood Fiber**				
Minimum: 1" x 2' x 4'	Insulfixx HD S	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	RoofGrip #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Dekfast #12. #14, #15	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Olympic Stainless #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Olympic #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Rawl #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Tru-Fast Ultra Stainless	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Tru-Fast #10, #12, #14	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Perma-Fastener #12, #14, #15	[1]	4	1:2 ft.²
Minimum: 1" x 2' x 4'	Sure-Seal HP Fastener	[1]	4	1:2 ft.²
Minimum: 1.2" x 3' x 4'	UltraFast #12, #14	[2]	6	1:2 ft.²
Minimum: 1.2" x 3' x 4'	UltraGrip #12, #14	[2]	6	1:2 ft.²
Approved Type(s): **Fiber Base**				
Minimum: ½" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²

Insulation Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density

Required over the insulations listed in Base Layer or optional over any of the insulations listed as Base or Top Layer:

Approved Type(s): **HP Recovery** (for use over all insul. types)				
Minimum: ½" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²
Approved Type(s): **Fiber Base** (for use over polyisocyanurate, gypsum or perlite)				
Minimum: ½" x 4' x 4'	Sure-Seal HP Fastener	[3]	8	1:2 ft.²

Note: Base 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 Miami-Dade County Testing Application Standard TAS 105 to confirm compliance with the wind load requirements set forth in Chapter 23 of the S.F.B.C. Please refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment.

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Vapor Retarder:	(Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.
Barrier:	None.
Membrane:	.045, .045R, .060, .060R, .060W EPDM fully adhered to the insulation using EPDM Bonding Adhesive applied to the substrate and membrane at a rate of 1 gal/60 ft.^{2}
Surfacing:	(Optional) A two part surfacing consisting of EPDM Color Coating applied to a clean membrane surface, after a two week cure at the rate of 1 gal./150 ft.^{2} and silica sand applied into the wet coating at a rate of 35 lbs./sq.
Maximum Design Pressure:	-45 psf. (See General Limitation #9.)
Maximum Fire Classification:	See General Limitation #1.
Maximum Slope:	See General Limitation #1.

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Membrane Type: Single Ply, Thermoset, EPDM, Reinforced

Deck Type 2I: Steel, Insulated, New Construction

Deck Description: 18-22 ga. steel

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

All General and System Limitations apply.

Insulation Base Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One of the following covered with the boards listed in Top Layer or Base or Top Layer.				
Approved Type(s): **Extruded or Expanded Polystyrene** Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fesco** Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A

Insulation Base or Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
One or more layers of the following:				
Approved Type(s): **ACFoam II** Minimum: 1.5" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **E'NRG'Y-2, PSI-25** Minimum: 1.4" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **HP Recovery** Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **High Density Fiberboard** Minimum: ¾" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **WHITELINE, PYROX, AP** Minimum: 1.2" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Multi-Max FA** Minimum: 1.2" 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Structodeck** Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Wood Fiber** Minimum: ½" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): **Fiber Base** Minimum: ½" x 4' x 8'	N/A	N/A	N/A	N/A

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Insulation Top Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Required over the insulations listed in Base Layer or optional over any of the insulations listed as Base or Top Layer:				
Approved Type(s): **HP Recovery** (use over all other insul. types)				
Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fiber Base** (use over polyisocyanurate, Gypsum or perlite)				
Minimum: ½" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Fesco** (use over all other insulation types)				
Minimum: ¾" x 2' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): **Retro-Fit Board** (use over all other insulation types)				
Minimum: ½" x 2' x 4'	N/A	N/A	N/A	N/A

Note: Top insulation layer shall have preliminary attachment at a density of two Miami Dade County Approved insulation fasteners per board for insulation boards having any one dimension no greater than 4 ft. and a minimum of four Miami-Dade County Approved insulation fasteners per board for insulation boards having any one dimension greater than 4 ft. Composite insulation panels shall be placed with the polyisocyanurate side down.

Vapor Retarder:	(Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.
Barrier:	None.
Membrane:	EPDM .045R or EPDM .060R secured through the preliminary attached insulation as specified below.
Fastening:	#14 Ultrafast Fastener with EPDM Anchor Discs or EPDM Locking Plates fastened 6 inches o.c. at the 6 inch wide lap spaced a maximum of 78 inches o.c.
Surfacing:	(Optional) A two part surfacing consisting of EPDM Color Coating applied to a clean membrane surface, after a two week cure at the rate of 1 gal./150 ft.^{2} and silica sand applied into the wet coating at a rate of 35 lbs./sq.
Maximum Design Pressure:	-45 psf. (See General Limitation #9.)
Maximum Fire Classification:	See General Limitation #1.
Maximum Slope:	See General Limitation #1.

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STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Miami-Dade County Protocol TAS 105 and Miami-Dade County Roofing Application Standard RAS 117.

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 applied 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 may 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 TAS 105. If the fastener value, as field-tested, is 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 the 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 or Architect may be submitted. Said revised fastener spacing utilize the withdrawal resistance value taken from Miami-Dade Protocol TAS 105 and calculations in compliance with Miami-Dade Roofing Application Standard RAS 117.

7 Perimeter and corner areas shall comply with the enhanced uplift pressure of these areas, as calculated in compliance with Chapter 23 of the South Florida Building Code. Fastener densities shall be increase for both insulation and base sheet as needed calculated in compliance with Miami-Dade Roofing Application Standard TAS 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 Miami-Dade County Roofing Application Standard TAS 111 and the wind load requirements of Chapter 23 of the South Florida Building Code.

9 The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, corners). No 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 16.

END OF THIS ACCEPTANCE

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