



MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Simon Roofing and Sheet Metal Corporation
70 Karago Avenue
Youngstown OH 44512

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT SECTION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

Your application for Product Approval of:

SR Builtup Roof System for Concrete 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.: 00-0526.05

Expires: 06/29/2003

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: 06/29/2000

1 of 16



PRODUCT CONTROL NOTICE OF ACCEPTANCE

Category: Roofing
Sub-Category: BUR, Coal Tar
Deck Type: Concrete
Maximum Design Pressure: -485 psf.
Fire Classification: See General Limitation #1

Approval Date: June 29, 2000**Expiration Date:** June 29, 2003**TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Armor Board High Density Fiberboard	various	PA 110	High density wood fiber insulation board.
Armor Lite Perlite	various	PA 110	Perlite roof insulation board.
Armor-R Glas	various	PA 110	Fiberglass roof insulation.
Armor-R Plus	various	PA 110	Polyisocyanurate foam roof insulation.
Black Armor Aluminum Coating		ASTM D 2824	Asbestos free, fibrated aluminum/asphalt roof coating, to coat smooth surface membranes.
Black Armor Asphalt Primer		ASTM D 41	Cut back, asphalt based coating used to facilitate adhesion of dissimilar materials.
Black Armor Glass Fiber Base Sheet	324 sq. ft.	ASTM D 4601 type II	Asphalt coated, glass fiber mat for use as a base sheet in built-up roof systems.
Black Armor Granulated Reinforced Base Flashing	various		Nonwoven polyester, asphalt coated flashing for use in coal tar and asphalt built-up roof systems.
Black Armor Modified Base Flashing	100 sq. ft.		160 mil APP modified bitumen membrane reinforced with non-woven polyester mat for torch application.
Black Armor Organic Base Sheet	216 sq. ft.	ASTM D 2626	Asphalt saturated and coated #43 organic felt base sheet for use in modified bitumen and conventional built-up roof systems.
Black Armor Reinforced Base Flashing	150 sq. ft.		Nonwoven polyester mat coated and saturated with asphalt for use in built-up roof systems.
SR Tar Glass	540 sq. ft. roll	ASTM D 2178	Glass fiber SR Flex Plus coated base sheet for use in conventional built-up roof systems.
SR Premier Tar Glass	540 sq. ft.; roll weight: 65 lbs.	ASTM D 2178 type VI	Glass fiber, SR Flex Plus coated ply sheet for use in conventional built-up roof systems.
Black Armor Tar Mastic		ASTM D 4022	Coal tar based asbestos-free roof cement.



Frank Zuloaga, RRC
Product Control Examiner

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
SR Tarred Felt	432 sq. ft.; roll weight: 60 lbs.	ASTM D 227	Organic fiber sheet saturated with SR Flex Plus for use in SR Flex Plus built-up roof systems.
SR Flex Plus		ASTM D 450 type I, II	SR Flex Plus adhesive used in modified and conventional built-up roofing applications.
Millenium GMC	75sq. ft.; roll weight: 75 lbs.	proprietary	Coal tar membrane with non-woven fiberglass reinforcement for use as a modified bitumen membrane. Applied in hot asphalt or coal tar pitch.
Millennium GMC-FR	75 sq. ft.; roll weight: 75 lbs.	proprietary	Coal tar membrane with non-woven fiberglass reinforcement for use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhesive.
Millennium BS, ST	150 sq. ft.; roll weight: 81 lbs.	proprietary	Coal tar membrane reinforced with non-woven fiberglass and lightly surfaced with sand. For use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhesive.
Millenium STF Smooth Torch Flashing.	80.6 sq. ft. roll	proprietary	Coal tar membrane with polyester reinforcement for flashing applications in modified bitumen roof systems. Torch applied.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Pyrox	various	PA 110	Polyisocyanurate foam insulation	Apache Products Co. (with current NOA)
ACFoam II	various	PA 110	Polyisocyanurate foam insulation	Atlas Energy Products (with current NOA)
Multi-Max	various	PA 110	Polyisocyanurate foam insulation	Rmax, Inc. (with current NOA)
Hy-Therm Nail-line	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current NOA)
Hy-Therm AP	various	PA 110	Polyisocyanurate foam insulation	Celotex Corp. (with current NOA)
ISO 95+	various	PA 110	Polyisocyanurate foam insulation	Firestone (with current NOA)
E'NRG'Y-2 Plus	various	PA 110	Polyisocyanurate foam insulation	Johns Manville (with current NOA)
E'NRG'Y-2	various	PA 110	Polyisocyanurate foam insulation	Johns Manville (with current NOA)

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
E'NRG'Y-2 Composite Fiberglas	various	PA 110	Polyisocyanurate foam insulation	Johns Manville (with current NOA)
Fiberglas	various	PA 110	Fiber Glass roof insulation.	Johns Manville (with current NOA)
EPS	various	PA 110	Extruded polystyrene insulation	generic
High Density Wood Fiberboard	various	PA 110	Wood fiber insulation board	See Approved Systems Listings
Perlite Insulation	various	PA 110	Perlite insulation board	See Approved Systems Listings
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)
Type X Gypsum Anchorbond	various	PA 114	Fire resistant rated gypsum Insulation fastener and metal or plastic plate	generic Celotex Corp. (with current NOA)
Dekfast Fasteners #14	various	PA 114	Insulation fastener for steel and concrete decks	Construction Fasteners (with current NOA)
Dekfast Hex Plate	2 7/8" x 3 1/4"	PA 114	Galvalume hex stress plate.	Construction Fasteners (with current NOA)
Dekfast Lock Plate	3" x 3 1/4"	PA 114	Polypropylene locking plate.	Construction Fasteners (with current NOA)
Dekfast Fasteners #15	various	PA 114	Insulation fasteners for concrete decks	Construction Fasteners (with current NOA)
Dekfast Fasteners #12	various	PA 114	Insulation fastener for steel and wood decks.	Construction Fasteners (with current NOA)
#12 Roofgrip	various	PA 114	Insulation fastener for steel or wood decks	ITW Buildex (with current NOA)
#14 Roofgrip	various	PA 114	Insulation fastener steel, wood or concrete decks	ITW Buildex (with current NOA)
Gripdek Fastener	various	PA 114	Insulation fastener	ITW Buildex (with current NOA)
Hexcel Fastener	various	PA 114	Insulation fastener	ITW Buildex (with current NOA)
Hextra	various	PA 114	Insulation fastener and metal or plastic plate	ITW Buildex (with current NOA)
Premium Metal Plate	3" square	PA 114	3" square galvalume AZ55 stress plate	ITW Buildex (with current NOA)
Standard Plastic Plate	3" round	PA 114	Polyolefin plastic plate	ITW Buildex (with current NOA)
Olympic Fastener #14	various	PA 114	Insulation fastener	Olympic (with current NOA)

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Olympic Fastener #12	various	PA 114	Insulation fastener	Olympic (with current NOA)
HD Insul-Fixx Fastener	various	PA 114	Insulation fastener for use in steel and concrete decks	SFS Stadler (with current NOA)
Insul-Fixx Fastener	various	PA 114	Insulation fastener for steel and wood decks	SFS Stadler (with current NOA)
Insul-Fixx S	3" round	PA 114	3" round galvalume AZ55 stress plate	SFS Stadler (with current NOA)
Insul-Fixx P	3" round	PA 114	3" round polyethylene stress plate	SFS Stadler (with current NOA)
ESI Fastening Systems	various	PA 114	Insulation fastening assembly with interlocking plate.	SFS Stadler (with current NOA)
Rawl Fasteners #12	various	PA 114	Insulation fastener for steel and wood decks	The Rawlplug Company Inc. (with current NOA)
Rawl Fasteners #14	various	PA 114	Insulation fastener for use in steel, wood or concrete	The Rawlplug Company Inc. (with current NOA)
Rawl 2" Plate	2" round	PA 114	2" round galvalume AZ55 membrane plate	The Rawlplug Company Inc. (with current NOA)
Rawl 3" Plate	3" round	PA 114	3" round galvalume AZ55 steel plate	The Rawlplug Company Inc. (with current NOA)
Tru-Fast DL	various	PA 114	Insulation fastener for steel, or wood	Tru-Fast (with current NOA)
Tru-Fast Plastic Plate	3.04" round	PA 114	3.04" round polyethylene plastic plate	Tru-Fast (with current NOA)
Tru-Fast MP-3	3.23" round	PA 114	3.23" round galvalume AZ50 steel plate	Tru-Fast (with current NOA)
Tru-Fast HD	various	PA 114	Insulation fastener for use in wood, steel or concrete decks	Tru-Fast (with current NOA)
Tru-Fast Ultra	various	PA 114	Stainless Steel fastener for use in steel, wood and concrete decks	Tru-Fast (with current NOA)
Tru-Fast DP	various	PA 114	Insulation fastener for use in steel or wood deck	Tru-Fast (with current NOA)
Tru-Fast TP	various	PA 114	Insulation fastener for use in steel or wood decks	Tru-Fast (with current NOA)
Tru-Fast CF Fasteners	various	PA 114	Insulation fastener for concrete decks	Tru-Fast (with current NOA)
Roofing Nails	Minimum # 12	PA 114	Corrosion resistant annular ring shank nails	generic
Tin Caps	Min. 32 ga. x 1 ⁵ / ₈ "		Corrosion resistant circular discs.	generic
Asphalt	various	ASTM D 312	Type III or IV hot asphalt bitumin adhesive	generic

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Asphalt Primer	various	ASTM D 41	Asphalt Primer	generic
Polyethylene	4 mil min.		Vapor barrier / Air barrier	generic
Red Rosin	various		Rosin paper for barrier layer on wood decks	generic

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Dynatech Engineering Corporation	3.94.23	Wind Uplift Resistance	03.23.94
Dynatech Engineering Corporation	07.94.12	Wind Uplift Resistance	07.12.94
Dynatech Engineering Corporation	4501-3.95-1	Wind Uplift Resistance	03.01.95
Dynatech Engineering Corporation	4500-3.95-1	Wind Uplift Resistance	03.01.95
Factory Mutual Research Corporation	J.I. # 1V7A6.AM	Wind Uplift Resistance	12.28.91
Factory Mutual Research Corporation	FM Approval Guide Listings	Current Insulation Fastening Requirements	Published Annually
Factory Mutual Research Corporation	J.I. #2X1A6.AM and Letter	Wind Uplift Resistance	04.11.94
Underwriters Laboratories, Inc.	UL Materials and Systems Directory Listings R13503(N)	Fire Classification Compliance	Published Annually
Exterior Research & Design, LLC.	#4502.09.96-1	Protocol PA 114(D)	09.15.96
Exterior Research & Design, LLC.	#4504.04.97-1	Protocol PA 114(J)	04.14.97
Factory Mutual Research Corporation	3003320	Class 4470	09.10.99



Frank Zuloaga, RRC
Product Control Examiner

APPROVED ASSEMBLIES:

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

Deck Description: 2500 psi structural concrete or concrete plank

System Type A: All layers of insulation adhered with approved asphalt or SR Flex Plus.

All General and System Limitations apply.

<u>Insulation Base Layer Only</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
---------------------------------------	--------------------------	---------------------------------	--------------------------------	-----------------------------

One or more layers of the following insulations:

Approved Type(s): AC-Foam II, Armor-R Plus, E'NRG'Y 2 Minimum: 1" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): ISORoc Minimum: 1" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Multi-Max Minimum: 1" x 4' x 8'	N/A	N/A	N/A	N/A
Approved Type(s): E'NRG'Y Plus, E'NRG'Y Composite Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

<u>Insulation Base or Top 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 Wood Fiber, Armor Board High Density Fiberboard Minimum: 1/2" x 4' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Perlite, Armor Lite Perlite Minimum: 3/4" x 2' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Fiberglas, Armor-R Glas Minimum: 1 5/16" x 3' x 4'	N/A	N/A	N/A	N/A

Note: When using hot asphalt, concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of vapor barrier or insulation. All insulation shall be adhered to the vapor barrier or primed deck in full moppings of approved hot asphalt or SR Flex Plus within the EVT range and at a rate of 20-40 lbs./sq. Please refer to Miami-Dade County 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.

Anchor Sheet: (Optional) Vapor Barrier or Temporary Roof: Two plies of ASTM D 226 type I organic felt adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in SR Flex Plus.

Base Sheet: (Optional) Black Armor Organic Base Sheet, Millenium SM, SR Tar Glass or SR Premier Tar Glass adhered in a full mopping of SR Flex Plus applied at not less than 20 lbs./sq.; or Black Armor Organic Base Sheet or Millenium SM in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate.

Ply Sheet: Three, four or five plies of SR Tarred Felt, SR Tar Glass or SR Premier Tar Glass, Type G1 or Glass Fiber Felt adhered in a full mopping of hot SR Flex Plus applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or base sheet.

Cap Sheet: (Optional) One ply of Millenium GMC-FR or ST torch applied according to manufacturer's instructions, or one ply of Millenium GMC or SM adhered in a full mopping of approved SR Flex Plus applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of SR Tar Glass or SR Premier Tar Glass applied in SR Flex Plus.

Surfacing: (Where required for fire classification; not required where granular cap sheet is used) Flood coat of hot SR Flex Plus at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.

Maximum Design (See General Limitation #9 for all.)

Pressure:

- 100 psf (for min. 1.5" E'NRG'Y Composite in hot asphalt)
- 485 psf (for min. 1.5" E'NRG'Y Plus in hot asphalt)
- 97 psf (for min. 1.2" Approved polyisocyanurate with min. ½" Armor Board Regular Fiberboard coverboard in hot asphalt.)
- 275 psf (for min. 1.3" Approved polyisocyanurate with min. ½" thick Armor Board High Density Fiberboard or Celotex High Density Wood Fiberboard)
- 272.5 psf (for min. 1.3" Approved polyisocyanurate with min. ¾" Armor Board Perlite or GAFTEMP Permalite coverboard in hot asphalt.)
- 107 psf (for min. 1.2" Approved polyisocyanurate with min. ¼" Georgia Pacific Dens Deck coverboard in hot asphalt.)
- 75 psf (for all other applications)

Maximum Fire Classification: See General Limitation # 1.

Maximum Slope: ½":12"; See General Limitation # 1.



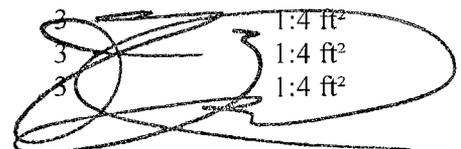
Deck Type 3I: Concrete Decks, Insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type B: Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt or SR Flex Plus.

All General and System Limitations apply.

<u>Insulation Base Layer Only</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): Apache/Hy-Therm Pyrox, AP, White Line				
Minimum: 1.3" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	DekFast S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	HD Insulfixx S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Olympic	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Olympic /G2 Plate	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Anchorbond S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Tru-Fast S	[3]	6	1:2.67 ft ²
Approved Type(s): Apache/Hy-Therm Nail-Line				
Minimum: 1.5" x 4' x 4'	DekFast S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Anchorbond S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Olympic S	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft ²
Approved Type(s): E'NRG'Y 2				
Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	DekFast S	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	Olympic S/P	[2]	3	1:4 ft ²
Minimum: 1.4" x 3' x 4'	Con-Tite S	[2]	3	1:4 ft ²
Minimum: 1.4" x 3' x 4'	Rawl Drive	[2]	3	1:4 ft ²
Minimum: 1.4" x 3' x 4'	Anchorbond S/P	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	Olympic/G2	[2]	3	1:4 ft ²
Approved Type(s): ISORoc				
Minimum: 1.5" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	DekFast S	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Olympic S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Rawl Drive	[3]	6	1:2.67 ft ²
Approved Type(s): E'NRG'Y 2 Plus				
Minimum: 1.5" x 3' x 4'	Glasfast Striker S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	DekFast S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	Anchorbond S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	HD Insulfixx S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	Olympic S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	Olympic/G2 Plate	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	Con-Tite S/P	[2]	3	1:4 ft ²
Minimum: 1.5" x 3' x 4'	Rawl Drive S	[2]	3	1:4 ft ²



Minimum: 1.5" x 3' x 4'	Tru-Fast S/P	[2]	3	1:4 ft ²
Approved Type(s): Iso 95 +				
Minimum: 1.4" x 3' x 4'	Glasfast Striker S/P	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	HD Insulfixx S/P	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	Tru-Fast S/P	[2]	4	1:3 ft ²
Minimum: 1.4" x 3' x 4'	Olympic S/P	[2]	3	1:4 ft ²
Minimum: 1.4" x 3' x 4'	Olympic/G2	[2]	3	1:4 ft ²
Minimum: 1.4" x 3' x 4'	Con-Tite S/P	[2]	3	1:4 ft ²

Approved Type(s): Multi-Max				
Minimum: 1.5" x 4' x 8'	Glasfast Striker S/P	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	DekFast S	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	HD Insulfixx S/P	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	Olympic S	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	Olympic/G2	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	Con-Tite S	[4]	11	1:2.9 ft ²
Minimum: 1.5" x 4' x 8'	Tru-Fast S	[4]	11	1:2.9 ft ²

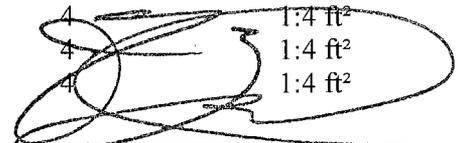
Approved Type(s): UltraGard Gold				
Minimum: 1.3" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	DekFast S	[3]	6	1:2.67 ft ²
Minimum: 1.3" x 4' x 4'	Tru-Fast S/P	[3]	6	1:2.67 ft ²

<u>Insulation</u>	<u>Fastener</u>	<u>Fastening</u>	<u>Fasteners</u>	<u>Fastener</u>
<u>Base or Top Layer</u>	<u>Type</u>	<u>Detail No.</u>	<u>Per Board</u>	<u>Density</u>

Approved Type(s): Perlite, Armor Lite Perlite				
Minimum: 3/4" x 2' x 4'	DekFast S	[1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	Anchorbond S	[1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	Glasfast Striker S/P	[1]	4	1:2 ft ²
Minimum: 3/4" x 2' x 4'	Tru-Fast S/P	[1]	4	1:2 ft ²

Approved Type(s): Fiberglas, Armor-R Glas				
Minimum: 15/16" x 4' x 4'	DekFast S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Anchorbond S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Glasfast/Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Olympic S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Olympic/G2	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	HD Insulfixx S	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Tru-Fast S	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	GlasFast	[3]	6	1:2.67 ft ²

Approved Type(s): High Density Wood Fiber, Armor Board High Density Fiberboard				
Minimum: 3/4" x 4' x 4'	DekFast S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Anchorbond S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Hextra S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Ultrafast S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	TruFast S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Olympic	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Con-Tite S	[3]	4	1:4 ft ²
Minimum: 3/4" x 4' x 4'	Olympic /G2 Plate	[3]	4	1:4 ft ²


 Frank Zuloaga, RRC
 Product Control Examiner

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 Miami-Dade County Roofing Application Standard RAS 117 for fastener details).

<u>Insulation Top Layer Only</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
--------------------------------------	--------------------------	---------------------------------	--------------------------------	-----------------------------

Any approved insulation noted above for top layer option.

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt or SR Flex Plus applied within the EVT range and at a rate of 20-35 lbs./sq. Refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer 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.

Anchor Sheet: Vapor Barrier or Temporary Roof: Two plies of ASTM D 226 type I organic felt adhered in a full mopping of approved asphalt or SR Flex Plus applied within the EVT range and at a rate of 20-40 lbs./sq..

Base Sheet: (Optional) Black Armor Organic Base Sheet, Millenium SM, or SR Tar Glass or SR Premier Tar Glass adhered in a full mopping of SR Flex Plus applied at not less than 20 lbs./sq.; or Black Armor Organic Base Sheet or Millenium SM in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate.

Ply Sheet: Four plies of SR Tarred Felt, SR Tar Glass or SR Premier Tar Glass, Type G1 or Glass Fiber Felt adhered in a full mopping of hot SR Flex Plus applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or base sheet.

Cap Sheet: (Optional) One ply of Millenium GMC-FR or ST torch applied according to manufacturer's instructions, or one ply of Millenium GMC or SM adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of SR Tar Glass or SR Premier Tar Glass applied in SR Flex Plus.

Surfacing: (Where required for fire classification; not required where granular cap sheet is used) Flood coat of hot SR Flex Plus at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.

Maximum Design Pressure: -75 psf; (See General Limitation #9.)

Maximum Fire Classification: See General Limitation # 1.

Maximum Slope: ½":12"; See General Limitation # 1.



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

Deck Description: 2500 psi structural concrete or concrete plank

System Type C: All layers of insulation simultaneously fastened.

All General and System Limitations apply.

<u>Insulation Base Layer Only</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): AC-Foam II, Armor-R Plus				
Minimum: 1.3" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): E'NRG'Y 2				
Minimum: 1.4" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): E'NRG'Y 2 Plus				
Minimum: 1.5" x 3' x 4'	N/A	N/A	N/A	N/A
Approved Type(s): Multi-Max				
Minimum: 1.4" x 4' x 8'	N/A	N/A	N/A	N/A

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

<u>Insulation Base or Top Layer</u>	<u>Fastener Type</u>	<u>Fastening Detail No.</u>	<u>Fasteners Per Board</u>	<u>Fastener Density</u>
Approved Type(s): ISORoc				
Minimum: 1.5" x 4' x 4'	Glasfast Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	DekFast S	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Olympic S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 1.5" x 4' x 4'	Rawl Drive	[3]	6	1:2.67 ft ²
Approved Type(s): Perlite, Armor Lite Perlite				
Minimum: ¾" x 2' x 4'	DekFast S	[1]	4	1:2 ft ²
Minimum: ¾" x 2' x 4'	Anchorbond S	[1]	4	1:2 ft ²
Minimum: ¾" x 2' x 4'	Glasfast Striker S/P	[1]	4	1:2 ft ²
Minimum: ¾" x 2' x 4'	Tru-Fast S/P	[1]	4	1:2 ft ²
Approved Type(s): Fiberglas, Armor-R Glas				
Minimum: 15/16" x 4' x 4'	DekFast S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Anchorbond S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Glasfast/Striker S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Olympic S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Con-Tite S/P	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Olympic/G2	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	HD Insulfixx S	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	Tru-Fast S	[3]	6	1:2.67 ft ²
Minimum: 15/16" x 4' x 4'	GlasFast	[3]	6	1:2.67 ft ²



Approved Type(s): **High Density Wood Fiber, Armor Board High Density Fiberboard**

Minimum: ¾" x 4' x 4'	DekFast S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Anchorbond S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Hextra S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Ultrafast S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	TruFast S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Con-Tite S	[3]	4	1:4 ft²
Minimum: ¾" x 4' x 4'	Olympic /G2 Plate	[3]	4	1:4 ft²

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. Refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment.

Anchor Sheet: Vapor Barrier or Temporary Roof: Two plies of ASTM D 226 type I organic felt adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or in SR Flex Plus.

Base Sheet: (Optional) Black Armor Organic Base Sheet, Millenium SM, or SR Tar Glass or SR Premier Tar Glass adhered in a full mopping of SR Flex Plus applied at not less than 20 lbs./sq.; or Black Armor Organic Base Sheet or Millenium SM in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate.

Ply Sheet: Three, four or five plies of SR Tarred Felt, SR Tar Glass or SR Premier Tar Glass, Type G1 or Glass Fiber Felt adhered in a full mopping of hot SR Flex Plus applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or base sheet.

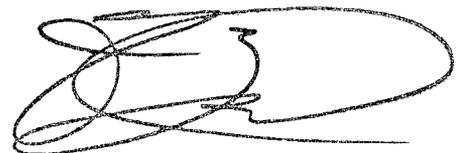
Cap Sheet: (Optional) One ply of Millenium GMC-FR or ST torch applied according to manufacturer's instructions, or one ply of Millenium GMC or SM adhered in a full mopping of approved SR Flex Plus applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply of SR Tar Glass or SR Premier Tar Glass applied in SR Flex Plus.

Surfacing: (Where required for fire classification; not required where granular cap sheet is used) Flood coat of hot SR Flex Plus at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.

Maximum Design Pressure: -75 psf; (See General Limitation #9.)

Maximum Fire Classification: See General Limitation # 1.

Maximum Slope: ½":12"; See General Limitation # 1.



Deck Type 3: Concrete Decks, Non-insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F: Ply sheets adhered with approved asphalt or SR Flex Plus

All General and System Limitations apply.

Insulation: None

Base Sheet: (Optional) SR Tar Glass or SR Premier Tar Glass, Millenium SM or Black Armor Organic Base Sheet adhered in a full mopping of SR Flex Plus applied at not less than 20 lbs./sq. or a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.; or Millenium ST torch applied according to manufacturer's instructions.

Ply Sheet: Three, four or five plies of SR Tarred Felt, SR Tar Glass or SR Premier Tar Glass, Type G1 or Glass Fiber Felt adhered in a full mopping of hot SR Flex Plus applied at not less than 20 lbs./sq..

Cap Sheet: (Optional) One ply of Millenium SM or GMC adhered in a full mopping of hot asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or one ply of Millenium ST or GMC-FR torch applied according to manufacturer's instructions or one ply of SR Tar Glass or SR Premier Tar Glass applied in SR Flex Plus.

Surfacing: (Where required for fire classification; not required where granular cap sheet is used) Flood coat of hot SR Flex Plus at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.

Maximum Design Pressure: -145 psf; (See General Limitation #9.)

Maximum Fire Classification: 'A'. See General Limitation # 1.

Maximum Slope: ½":12"; See General Limitation # 1.



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 or Architect may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Miami-Dade County Testing Application Standards 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 increased for both insulation and base sheet as calculated in compliance with Miami-Dade County 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 Miami-Dade County Roofing Application Standard RAS 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, 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.)**



Frank Zuloaga, RRC
Product Control Examiner

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



Frank Zuloaga, RRC
Product Control Examiner