MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

Sika Sarnafil Inc.
100 Dan Road
Canton, MA 02021

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

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

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

DESCRIPTION: Sika Sarnafil PVC Single Ply Roofing Membrane Over Wood Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This revises NOA No. 07-0614.03 and consists of pages 1 through 15.
The submitted documentation was reviewed by Alex Tigera.

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: PVC

Deck Type: Wood
Maximum Design Pressure -52.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
G410	Various	ASTM D 4434	Fiberglass reinforced PVC roofing membrane.
G410 Felt	Various	ASTM D 4434	Fiberglass reinforced PVC roofing membrane with a non-woven felt backing.
G410 PS	Various	ASTM D 4434	Fiberglass reinforced PVC roofing membrane with a peel & stick self-adhering backing.
S327	Various	ASTM D 4434	Polyester reinforced PVC roofing membrane.
S327 Felt	Various	ASTM D 4434	Polyester reinforced PVC roofing membrane.
Sikaplan 45	45 mil thick	ASTM D 4434	White polyester reinforced PVC roofing membrane
G459	Various	ASTM D 4434	Fiberglass reinforced PVC Alloy asphalt compatible flashing membrane.
Sarna Dens Deck®	4' x 8'	TAS 110	Silicon treated gypsum board
Sarnatape	Various		Air flow barrier tape
Sarnabar	1.25" x 15'	TAS 114	Galvanized or stainless steel membrane fastening bar.
Sarnastop	1" x 10'	TAS 114	Aluminum termination bar.
SarnaAirguard			PVC air/vapor barrier
Sarnavap-10	20' x 100'		Polyethylene air/vapor barrier
Sarnabarrier			Polyester separation sheet.
Sarnafelt	82" x 135"		Asphalt protection or leveling layer.
Sarnafastener	Various		Membrane and insulation fastener.
Sarnadisc	Various		Membrane attachment stress plate.
Sarnaplate	Various		Insulation fastening plate.
Sarnacord	4mm x 328'	TAS 114	Reinforcement cord for use with Sarnabar.
Sarnareglet	2.15" x 10'		Aluminum surface mount reglet (term. bar).
Sarnacol 2170	5 gallons		Solvent based bonding adhesive.
Sarnacol 2121	5 gallons		Water based bonding adhesive.
Sarnafiller	2 gallons		Urethane pitch pocket filler.
Sarnasolv	1 gallon		Membrane cleaner.
Sarnacorner	5", 6", 8.5"		Prefabricated inside and outside corner flashing.
Sarnaflash	18" x 40"		Prefabricated expansion joints.

Product	Dimensions	Test Specification	Product Description
Sarnatred	3.25' x 32.8'		PVC walkway protection sheet.
SarnaWalkways	Various		PVC walkway protection sheet.
Sarnastack	Various		Prefabricated cone flashing.
Sarnadrain RAC	Various		Aluminum drain insert.
Sarnamatic			Seam welding equipment.
Sarnatherm	Various	TAS 110	Isocyanurate insulation board.
Sarnatherm Composite	Various	TAS 110	Isocyanurate insulation board with perlite facer.
Sarnatherm Plus		TAS 110	Isocyanurate board with wood fiberboard facer.
Sarnatherm 25 PSI	Various	TAS 110	Polyisocyanurate insulation board.
Sarnaclad	Various		Heat weldable PVC/galvanized or stainless steel flashing
Edge-Tite	Various		Prefabricated metal edge system.
Anchor-Tite	Various		Prefabricated metal edge system.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

TABLE 2

Product	Product Description	Manufacturer (with current NOA)
ACFoam 25 PSI	Isocyanurate Insulation	Atlas Roofing Corp.
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corp.
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
ACFoam III	Isocyanurate Insulation	Atlas Roofing Corp.
ACFoam Supreme	Isocyanurate Insulation	Atlas Roofing Corp.
DensDeck, DensDeck Prime, DensDeck DuraGuard	Silicon treated gypsum	G-P Products
E'NRG'Y 2, ENRGY3	Isocyanurate Insulation	Johns Manville
E'NRG'Y 2 Composite	Isocyanurate Insulation w/ perlite or gypsum facer	Johns Manville
E'NRG'Y 2 Plus	Isocyanurate Insulation with wood fiberboard facer	Johns Manville
E'NRG'Y 2 PSI-25	Isocyanurate Insulation	Johns Manville
E'NRG'Y 2 Gypsum Composite	Isocyanurate Insulation	Johns Manville
EPS	Expanded polystyrene with gypsum board facer	Johns Manville
High Density Wood Fiberboard	Wood fiber insulation	Generic
H-Shield, H-Shield CG	Isocyanurate Insulation	Hunter Panels

ISO 95+ GL	Isocyanurate Insulation	Firestone
Millox	Isocyanurate Insulation with wood fiberboard facer	Apache Products
Millox 25 PSI	Isocyanurate Insulation with wood fiberboard facer	Apache Products
Multi-Max FA	Isocyanurate Insulation	Rmax, Inc.
Multi-Max FA 25 PSI	Isocyanurate Insulation	Rmax, Inc.
Pyrox	Isocyanurate Insulation	Apache Products
Pyrox 25 PSI	Isocyanurate Insulation	Apache Products
Perlite Insulation Board	Perlite Insulation	Generic
Thermaroof	Isocyanurate Insulation	Rmax, Inc.
Thermaroof Plus	Isocyanurate Insulation	Rmax, Inc.
Type X Gypsum	Gypsum Wallboard	Generic
Ultra M-II Iso/glas	Isocyanurate Insulation	Homasote Co.
Whiteline	Isocyanurate Insulation	Apache Products
XPS	Extruded polystyrene	Generic

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1	Olympic Fasteners	Insulation and membrane fastener	Various	OMG, Inc.
2	Rawl Fasteners	Insulation and membrane fastener	Various	Powers Fasteners, Inc.
3	SFS Fasteners	Insulation and membrane fastener	Various	SFS Intec, Inc.
4	True Fast Fasteners	Insulation and membrane fastener	Various	The Tru-Fast Corp.
5	Sarnafil Fasteners	Insulation and membrane fastener	Various	Sarnafil, Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Celotex Technical Center	MTS Job No. 258215	Wind Uplift	09/09/97
Factory Mutual Research Corporation	J.I. 0X3A3.AM	Wind Uplift	07/31/94
	J.I. 0P6A6.AM	Wind Uplift	03/03/94
	J.I.2X2A5.AM	Wind Uplift	07/31/94
	J.I.0B9A0.AM	Wind Uplift	10/22/96
	J.I.1Z5A6.AM	Wind Uplift	07/18/97
	J.I.4B3A2.AM	Wind Uplift	06/19/97
	3016201	FM 4470	01/28/03
	3021131	FM 4470	07/07/05
	3028309	FM 4470	03/30/07
	3032532	FM 4470	08/05/08
Underwriters Laboratories, Inc.	R8992	Fire Classification	1994

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated, New Construction

Deck Description: $^{19}/_{32}$" or greater plywood or wood plank

System Type B(1): Base layer of insulation mechanically fastened top layer fully adhered with Approved asphalt, membrane adhered.

All General and System Limitations apply:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
AC Foam II, AC Foam - 25 PSI, ACFoam Composite, Pyrox, Millox, Pyrox-25 PSI, Millox-25 PSI, Whiteline, H-Shield		
Minimum 1.3" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Sarnatherm, Sarnatherm-25 PSI, Sarnatherm Plus Sarnatherm-Composite, Sarnatherm Gypsum Composite, E'NRG'Y 2, E'NRG'Y 2 Composite, E'NRG'Y 2 Plus, PSI-25, Gypsum Composite		
Minimum 1.4" thick or tapered	1, 2, 3, 4, or 5	1:2.9 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
DensDeck, DensDeck Prime		
Minimum 1/4" thick	1, 2, 3, 4, or 5	1:1.2 ft^2
Minimum 1/2" thick	1, 2, 3, 4, or 5	1:1.7 ft^2
High Density Wood Fiberboard		
Minimum 1" thick	1, 2, 3, 4, or 5	1:2 ft^2
Hy-Therm AP, Hy-Therm SP, Hy-Tec		
Minimum 1.5" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Ultra M-II Iso/glas, Ultra M-II AEF		
Minimum 1.2" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Multi-Max FA, Multi-Max FA - 25 PSI, Thermaroof		
Minimum 1.25" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Perlite		
Minimum 3/4" thick	1, 2, 3, 4, or 5	1:2 ft^2

Note: Base layer shall be mechanically attached with fasteners and density described. 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 fastener details).

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft2
AC Foam II, AC Foam - 25 PSI, Pyrox, Millox, Pyrox-25 PSI, Millox-25 PSI		
Minimum 1.3" thick or tapered	N/A	N/A
Sarnatherm, Sarnatherm-25 PSI, Sarnatherm Plus, Sarnatherm Gypsum Composite, E'NRG'Y 2, E'NRG'Y 2 Plus, PSI-25, Gypsum Composite		
Minimum 1.4" thick or tapered	N/A	N/A
DensDeck, DensDeck Prime		
Minimum 1/4" thick	N/A	N/A
Hy-Therm AP, Hy-Tec		
Minimum 1.5" thick or tapered	N/A	N/A
Ultra M-II Iso/glas, Ultra M-II AEF		
Minimum 1.2" thick or tapered	N/A	N/A
Multi-Max FA, Multi-Max FA - 25 PSI, Thermaroof		
Minimum 1.25" thick or tapered	N/A	N/A

Note: Optional top layer of insulation shall be bonded in a hot mopping of approved asphalt at an application rate of 25 lbs./sq. +/- 15%.

Vapor Retarder: (Optional) An FMRC approved vapor retarder approved for use with hot asphalt may be applied to the deck or base layer.

Barrier: (Optional) Minimum 5/8" gypsum, 1/4" Dens-Deck, or Atlas FR10 or FR50.

Membrane: G410 or S327 adhered with Sarnacol 2170 adhesive applied at 1.25 gal/sq. to the substrate and 0.5 gal/sq. to the back of the membrane or 2121 adhesive applied at a rate of 1.75 gal/sq. to the substrate. G410 feltback adhered with Sarnacol 2170 applied at 1.25 gal/sq. to the substrate followed by a second coat at 1.0 gal/sq. to the substrate.

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

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$" or greater plywood or wood plank

System Type B(2): Base Layer of insulation mechanically attached, optional top insulation layer adhered with approved adhesive.

All General and System Limitations apply:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam Supreme, H-Shield, Sarnatherm or H-Shield CG		
Minimum 1.5" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
(Optional) ACFoam Supreme, H-Shield, Sarnatherm or H-Shield CG		
Minimum 1.5" thick or tapered	N/A	N/A
(Optional) DensDeck Prime, DensDeck DuraGuard		
Minimum ¼" thick	N/A	N/A

Note: Optional top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 25 lbs/sq. or 0.75" wide beads of Olympic OlyBond 500 or Spot Shot spaced 12" o.c.

Vapor Retarder: (Optional) Any UL or FMRC approved vapor barrier approved for use with hot asphalt may be applied to the deck or perlite base layer.

Barrier: Min. 0.5" thick DensDeck, DensDeck Prime, DensDeck DuraGuard

Membrane: G410 PS, self-adhered to insulation and installed with a 3" wide heat welded seam. Membrane is rolled into insulation with a weighted roller.

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

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

System Type C(1): All layers of insulation simultaneously fastened, membrane adhered

All General and System Limitations apply:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
AC Foam II, ACFoam III, AC Foam - 25 PSI, AC Foam Composite, AC Foam Supreme, Pyrox, Millox, Pyrox-25 PSI, Millox-25 PSI, Whiteline, H-Shield		
Minimum 1.3" thick or tapered	N/A	N/A
Sarnatherm, Sarnatherm-25 PSI, Sarnatherm-Composite, Sarnatherm Gypsum Composite, E'NRG'Y 2, E'NRG'Y 2 Composite, E'NRG'Y 2 Plus, PSI-25, Gypsum Composite, ISO 95+ GL		
Minimum 1.4" thick or tapered	N/A	N/A
DensDeck, DensDeck Prime		
Minimum: ¼ " Thick	N/A	N/A
Multi-Max FA, Multi-Max FA - 25 PSI, Thermaroof, Thermaroof Plus		
Minimum: 1.25" Thick or tapered	N/A	N/A
Hy-Therm AP, Hy-Therm SP, Top-R II, Star AP, Hy-Tec		
Minimum: 1.5" Thick or tapered	N/A	N/A
High Density Wood Fiberboard		
Minimum: 1" Thick	N/A	N/A
Ultra M-II Iso/glas		
Minimum: 1.2" Thick or tapered	N/A	N/A
Perlite		
Minimum: ¾" Thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. 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 RAS 117 for fastener details).

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
AC Foam II, AC Foam - 25 PSI, Pyrox, Millox, Pyrox-25 PSI, Millox-25 PSI		
Minimum 1.3" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Sarnatherm, Sarnatherm 25 PSI, Sarnatherm Gypsum Composite, E'NRG'Y 2, E'NRG'Y 2 Plus, PSI-25, Gypsum Composite, ISO 95+ GL		
Minimum 1.4" thick or tapered	1, 2, 3, 4, or 5	1:2.9 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
DensDeck, DensDeck Prime		
Minimum: ¼ " Thick	1, 2, 3, 4, or 5	1:1.2 ft^2
Minimum: $^1/_2$ " Thick	1, 2, 3, 4, or 5	1:1.7 ft^2
High Density Wood Fiberboard		
Minimum: 1" Thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Hy-Therm AP, Hy-Tec		
Minimum 1.5" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2
Ultra M-II Iso/glas		
Minimum 1.2" thick or tapered	1, 2, 3, 4, or 5	1:2 ft^2
Minimum 2" thick or tapered	1, 2, 3, 4, or 5	1:4 ft^2

Note: 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 RAS 117 for fastener details).

Vapor Retarder:	(Optional) An FMRC approved vapor retarder approved for use with hot asphalt may be applied to the deck or base layer.
Barrier:	(Optional) Minimum 5/8" gypsum, 1/4" Dens-Deck, or Atlas FR10 or FR50.
Membrane:	G410 or S327 adhered with Sarnacol 2170 adhesive applied at 1.25 gal/sq. to the substrate and 0.5 gal/sq. to the back of the membrane or 2121 adhesive applied at a rate of 1.75 gal/sq. to the substrate. G410 feltback adhered with Sarnacol 2170 applied at 1.25 gal/sq. to the substrate followed by a second coat at 1.0 gal/sq. to the substrate.
Maximum Design Pressure:	-45 psf (See General Limitation #9)

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

System Type C(2): All layers of insulation simultaneously fastened, membrane adhered

All General and System Limitations apply:

Base Insulation Layer (Barrier)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck, DensDeck Prime, Dens Deck Duraguard		
Minimum: ½ " Thick	N/A	N/A

Note: Joints of the Base Insulation Layer are offset a minimum of 6" from joints in wood decking. All layers shall be simultaneously fastened; see top layer below for fasteners and density. 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 RAS 117 for fastener details).

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Sarnatherm, Sarnatherm(a), H-Shield, H-Shield CG, AC-Foam-II, ACFoam Supreme, E'NRG'Y 3, Multi Max FA3, or ISO 95+ GL		
Minimum 1.5" thick	1, 3, or 5	1:2 ft^2

Note: 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 RAS 117 for fastener details).

Membrane: Minimum 45mil G410 or S327 adhered with Sarnacol 2166 adhesive applied at 0.4 gal/sq. and with a minimum 1.25in. wide heat-welded seam.

Maximum Design Pressure: -52.5 psf (with E'NRG'Y 3) (See General Limitation #7)
-45 psf (with all other polyisocyanurate insulations) (See General Limitation #7)

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

System Type C(3): All layers of insulation simultaneously fastened, membrane adhered

All General and System Limitations apply:

Base Insulation Layer (Barrier)	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck, DensDeck Prime, Dens Deck Duraguard Minimum: ½ " Thick	N/A	N/A

Note: Joints of the Base Insulation Layer are offset a minimum of 6" from joints in wood decking.

Intermediate Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
Sarnatherm, Sarnatherm(a), H-Shield, H-Shield CG, AC-Foam-II, ACFoam Supreme, E'NRG'Y 3, Multi Max FA3, or ISO 95+ GL Minimum: 1.5" thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. 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 RAS 117 for fastener details).

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
DensDeck, DensDeck Prime Minimum 1/4" thick	1, 3, or 5	1:2 ft^2

Note: 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 RAS 117 for fastener details).

Membrane: Minimum 45mil G410 or S327 adhered with Sarnacol 2166 adhesive applied at 0.4 gal/sq. and with a minimum 1.25in. wide heat-welded seam.

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

Membrane Type: Single Ply, Thermoplastic, PVC

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

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

All General and System Limitations apply:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, ACFoam III, ACFoam Composite (bottom layer only), ACFoam Supreme, ACFoam - 25 PSI, Pyrox, Millox, Pyrox-25 PSI, Millox-25 PSI, Whiteline, H-Shield		
Minimum 1.3" thick or tapered	N/A	N/A
Sarnatherm, Sarnatherm-25 PSI, Sarnatherm-Composite (bottom layer only), E'NRG'Y 2, E'NRG'Y 2 Composite (bottom layer only), E'NRG'Y 2 Plus, PSI-25		
Minimum 1.4" thick or tapered	N/A	N/A
DensDeck, DensDeck Prime		
Minimum: ¼ " Thick	N/A	N/A
Multi-Max FA, Multi-Max FA - 25 PSI, Thermaroof, Thermaroof Plus		
Minimum: 1.25" Thick or tapered	N/A	N/A
Hy-Therm AP, Hy-Therm SP, Top-R II, Star AP, Hy-Tec		
Minimum: 1.5" Thick or tapered	N/A	N/A
High Density Wood Fiberboard		
Minimum: 1" Thick	N/A	N/A
ISO 95+ GL		
Minimum: 1.4" Thick or tapered	N/A	N/A
Ultra M-II Iso/glas		
Minimum: 1.2" Thick or tapered	N/A	N/A
Perlite		
Minimum: ¾" Thick	N/A	N/A

Note: All insulation require preliminary attachment prior to the installation of the roofing membrane at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft. and four fasteners for any insulation board having no dimension greater than 8 ft.

Vapor Retarder:	(Optional) Sarnavap vapor barrier applied directly to the deck or over the base insulation layer.
Barrier:	(Optional) Minimum 5/8" gypsum, 1/4" Dens-Deck, or Atlas FR10 or FR50.
Membrane:	S327 or Sikiplan 45 attached to deck as specified below.
Fastening:	Sarnafasteners or SFS Fasteners with approved discs spaced 6" o.c. within the 5.5" side lap spaced 73" o.c. and sealed with a minimum 1.5" weld or Sarnafasteners with approved discs spaced 6" o.c. in rows 12' o.c. maximum, or Sarnabars spaced 12' o.c. maximum fastened with Sarnafasteners spaced 6 in. o.c., through the field of the membrane and covered with a 7" minimum width coverstrip with 1.5" welds on each side.
Maximum Design Pressure:	-52.5 psf. (See General Limitation # 7)

GENERAL LIMITATIONS:

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

END OF THIS ACCEPTANCE