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)

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Sarnafil Waterproofing Systems

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 consists of pages 1 through 9.
The submitted documentation was reviewed by Frank Zuloaga, RRC.

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Waterproofing
Material:	PVC
Deck Type:	Concrete
Maximum Design Pressure	-432.5 psf
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specification	Product Description
G410	Various	ASTM D 4434	Fibergalss reinforced PVC roofing membrane
G410 Felt	Various	ASTM D 4434	Fibergalss reinforced PVC roofing membrane with a non-woven felt backing.
S327	Various	ASTM D 4434	Polyester reinforced PVC roofing membrane
S327 Felt	Various	ASTM D 4434	Fibergalss reinforced PVC roofing membrane with a non-woven felt backing.
G459	Various	ASTM D 4434	Fiberglass reinforced PVC Alloy asphalt compatible flashing membrane.
Sarnacol 2170	5 gallons		Solvent based bonding adhesive.
Sarnacol 2121	5 gallons		Water based bonding adhesive.
Sarnasolv	1 gallon		Membrane cleaner.
Sarnacorner	5", 6", 8.5"		Prefabricated inside and outside corner flashing.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS

Product	Dimensions	Test Specification	Product Description	Manufacturer
ACFoam 25 PSI	Various	PA 110	Isocyanurate Insulation	Atlas Roofing Corp. (with current NOA)
ACFoam II	Various	PA 110	Isocyanurate Insulation	Atlas Roofing Corp. (with current NOA)
ACFoam III	Various	PA 110	Isocyanurate Insulation	Atlas Roofing Corp. (with current NOA)
ACFoam Supreme	Various	PA 110	Isocyanurate Insulation	Atlas Roofing Corp. (with current NOA)
E'NRG'Y 2	Various	PA 110	Isocyanurate Insulation	Johns Manville (with current NOA)
E'NRG'Y 2 PSI-25	Various	PA 110	Isocyanurate Insulation	Johns Manville (with current NOA)
Hy-Tec	Various	PA 110	Isocyanurate Insulation	Celotex Corp.

Product	Dimensions	Test Specification	Product Description	Manufacturer
Hy-Therm AP	Various	PA 110	Isocyanurate Insulation	(with current NOA) Celotex Corp.
Hy-Therm SP	Various	PA 110	Isocyanurate Insulation	(with current NOA) Celotex Corp.
ISO 95+ GL	Various	PA 110	Isocyanurate Insulation	(with current NOA) Firestone
Multi-Max FA	Various	PA 110	Isocyanurate Insulation	(with current NOA) Rmax, Inc.
Multi-Max FA 25 PSI	Various	PA 110	Isocyanurate Insulation	(with current NOA) Rmax, Inc.
Pyrox	Various	PA 110	Isocyanurate Insulation	(with current NOA) Apache Products
Star AP	Various	PA 110	Isocyanurate Insulation	(with current NOA) Celotex Corp.
Thermaroof Plus	Various	PA 110	Isocyanurate Insulation	(with current NOA) Rmax, Inc.
Top R-II	Various	PA 110	Isocyanurate Insulation	(with current NOA) Celotex Corp. (with current NOA)

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corporation	J.I.2X2A5.AM	Wind Uplift	07/31/94
Factory Mutual Research Corporation	J.I. 4B3A2.AM J.I. IZ5A6.AM	Wind Uplift	06/19/97 07/18/97
Factory Mutual Research Corporation	J.I. OB9A0.AM	Wind Uplift	10/22/96
Factory Mutual Research Corporation	2B8A4.AM	Wind Uplift	07/02/97
Underwriters Laboratories, Inc.	R8992	Fire Classification	1994
Factory Mutual Research Corporation	J.I. 1Z5A6.AM	Wind Uplift	07/18/97
Factory Mutual Research Corporation	J.I. 4B3A2.AM	Wind Uplift	06/19/97
Factory Mutual Research Corporation	J.I. 0B9A0.AM	Wind Uplift	10/22/96
Factory Mutual Research Corporation	3001396	Wind Uplift	05/28/99
IRT of S. Florida	99023-24 99025-26	PA 114	06/30/99

APPROVED SYSTEMS

Deck Type 3I: Concrete, insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F: Membrane adhered.

All General and System Limitations shall apply.

Insulation Base Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Approved Type(s):	**Polyisocyanurate (35 psi), flat or tapered**			
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry. Insulation shall be adhered to the deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Apply Sarnacol 2170 Adhesive over insulation roller applied at a rate of 1 to 1.25 gal/sq. and allowed to dry as primer. Followed with Sarnafil G410, felt back roof membrane adhered with Sarnacol 2170 Adhesive additionally applied at a rate of 1 gal/sq.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required. Verify that the structure can support the deadload weight of a watertight test before proceeding.

Protection Course: Sarnafil G445 Protection Course, protection layer shall be adhered with Sarnacol 2170 Adhesive roller applied at a rate of 1 gal/sq. Top side of protection layer shall be cover with a film of Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected

Surfacing: Poured in place minimum 2" thick reinforced concrete slab.

Maximum Design Pressure: -367.50 psf (See General Limitation #9)

Maximum Fire Classification: See General Limitation #1.

Deck Type 3: Concrete, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F-1: Membrane adhered.

All General and System Limitations shall apply.

Membrane: Apply Sarnacol 2170 Adhesive over insulation roller applied at a rate of 1 to 1.25 gal/sq. and allowed to dry as primer. Followed with Sarnafil G410, felt back roof membrane adhered with Sarnacol 2170 Adhesive additionally applied at a rate of 1 gal/sq.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required. Verify that the structure can support the deadload weight of a watertight test before proceeding.

Protection Course: Sarnafil G445 Protection Course, protection layer shall be adhered with Sarnacol 2170 Adhesive roller applied at a rate of 1 gal/sq. Top side of protection layer shall be cover with a film of Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected.

Surfacing: Poured in place minimum 2" thick reinforced concrete slab.

Maximum Design Pressure: -432.50 psf (See General Limitation #9)

Maximum Fire Classification: See General Limitation #1.

Deck Type 3: Concrete, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F-2: Membrane adhered.

All General and System Limitations shall apply.

Membrane: Sarnafil G410 Felt Back membrane shall be adhered with Sarnacol 2121 Adhesive squeegee applied at a rate of 2 gal/sq.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required. Verify that the structure can support the deadload weight of a watertight test before proceeding.

Protection Course: Apply over membrane Sarnacol 2170 Adhesive roller applied at a rate of 1 to 1.25 gal/sq. and allowed to dry as primer. Followed with Sarnafil G445 Protection Course, protection course is adhered with Sarnacol 2170 Adhesive additionally roller applied at a rate of 1 gal/sq.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected

Surfacing: Concrete pavers (ASTM C936/minimum 2" thick) adhered to protection course with Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Maximum Design Pressure: -432.50 psf (See General Limitation #9)

Maximum Fire Classification: See General Limitation #1.

Deck Type 3: Concrete, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F-3: Membrane adhered.

All General and System Limitations shall apply.

Membrane: Sarnafil G410 Felt Back membrane shall be adhered with Sarnacol 2121 Adhesive squeegee applied at a rate of 2 gal/sq.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required. Verify that the structure can support the deadload weight of a watertight test before proceeding.

Protection Course: Apply over membrane Sarnacol 2170 Adhesive roller applied at a rate of 1 to 1.25 gal/sq. and allowed to dry as primer. Followed with Sarnafil G445 Protection Course, protection course is additionally adhered with Sarnacol 2170 Adhesive roller applied at a rate of 1 gal/sq. Top side of protection layer shall be cover with a film of Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected

Surfacing: 12" x 12" x 1" exterior grade saltillo clay tiles set into ½" thick bed of exterior grade thinset.

Maximum Design Pressure: -410.83 psf (See General Limitation #9)

Maximum Fire Classification: See General Limitation #1.

Deck Type 3I: Concrete, insulated, New Construction

Deck Description: 2500 psi structural concrete or concrete plank

System Type F: Insulation adhered to deck.

All General and System Limitations shall apply.

Insulation Base Layer	Fastener Type	Fastening Detail No.	Fasteners Per Board	Fastener Density
Approved Type(s): Polyisocyanurate (min. 35 psi), flat or tapered				
Minimum: 1.5" x 4' x 4'	N/A	N/A	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry. Insulation shall be adhered to the deck in full moppings of approved asphalt within the EVT range and at a rate of 20-40 lbs. Please refer to Miami-Dade County Roofing Application Standard RAS 117 for insulation attachment.

Membrane: Apply Sarnacol 2170 Adhesive over insulation roller applied at a rate of 1 to 1.25 gal/sq. and allowed to dry as primer. Followed with Sarnafil G410, felt back roof membrane adhered with Sarnacol 2170 Adhesive additionally applied at a rate of 1 gal/sq.

Integrity Test: Required, and shall be performed in accordance with ASTM D 5957. Water maybe maintained for a period longer than 24 hours if required. Verify that the structure can support the deadload weight of a watertight test before proceeding.

Protection Course: Sarnafil G445 Protection Course, protection layer shall be adhered with Sarnacol 2170 Adhesive roller applied at a rate of 1 gal/sq. Top side of protection layer shall be cover with a film of Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Inspection: Contractor and a representative of the membrane manufacturer shall inspect the waterproofing assembly and notify the contractor of any defects. Inspection must take place prior to installation of any overlay insulation, protection pads, drainage boards and traffic surfacing. All defects observed shall be corrected

Surfacing: 12" x 12" x 1" exterior grade saltillo clay tiles set into ½" thick bed of exterior grade thinset.
Or
Concrete pavers (ASTM C936/minimum 2" thick) adhered to protection course with Sarnacol 2121 Adhesive applied at rate of 2.25 gal/sq. using a ¼" notched squeegee.

Maximum Design Pressure: -367.50 psf (See General Limitation #9)

Maximum Fire Classification: 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. Required integrity flood testing shall be provided to the Building Official for review at time of final inspection.
3. Contractor shall be approved by Soprema, Inc.
4. Flashings shall be installed according to the manufacturer's published standard details and shall be submitted to the Building Official for review.
5. Contractor shall submit to the Building Official for review the system specifications and details. Submission of these documents, as well as the proper application and installation of all materials shall be the sole responsibility of the contractor.
6. Systems shall not be installed over lightweight insulating concrete.
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 the wind load requirements of applicable 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.)

END OF THIS ACCEPTANCE