MIAMI-DADE COUNTY
BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
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NOTICE OF ACCEPTANCE (NOA)

IB Roof Systems
2877 Chad Drive
Eugene, OR 97408

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County BNC - Product Control Section 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 Section (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. BNC reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: IB Single Ply PVC Roof Systems over Lightweight Concrete 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 NOA renews NOA No. 09-0608.11 and consists of pages 1 through 10.
The submitted documentation was reviewed by Jorge L. Acebo

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	PVC
Deck Type:	Lightweight Concrete
Maximum Design Pressure	-242.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimeusions	Test Specification	Product Description
IB Single Ply	50, 60, 80 mil thickness	ASTM D 4434	Polyester reinforced PVC membrane.
IB Single Ply Fleecebacked	50, 60, 80 mil thickness	ASTM D 4434	Polyester reinforced PVC membrane with a non-woven polyester fleeceback.
IB Water Borne Adhesive	3 gal.	Proprietary	Adhesive for bonding IB membranes to wood, concrete and glass faced polyisocyanurate insulations.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam II	Polyisocyanurate foam insulation	Atlas Roofing Corp.
DensDeck, DensDeck Prime	Gypsum insulation	GP Gypsum
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville
SECUROCK Gypsum-Fiber Roof Board	Gypsum insulation	US Gypsum
Multi-Max FA-3	Polyisocyanurate foam insulation	RMax
H-Shield	Polyisocyanurate foam insulation	Hunter Panels
Insulfoam EPS	Closed-cell, Type IX (min 1.8 pcf) expanded polystyrene.	Carlisle Syntec

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	N/A	N/A	N/A	N/A

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	3029864	FM 4470	02/18/08
	3014692	FM 4470	08/05/03
	2D5A9.AM	FM 4450	06/22/99
	3014751	FM 4450	08/27/03
	3012321	FM 4470	07/29/02
	3009502	FM 4470	12/21/00
	3023458	FM 4450	07/18/06
	3026128	FM 4450	08/04/06
	3032172	FM 4470	06/12/09
	3015444	FM 4450	07/11/03
Underwriters Laboratories Inc.	02NK18635	CGSB-37.54-95	11/12/03
Exterior Research & Design, LLC	02764.09.05	TAS 114-D	09/09/05
Trinity | ERD	02762.03.05-R1	TAS 114-D/TAS 114-J	12/10/07
	02642.01.05-1-R1	TAS 114-J	07/13/09
	111110.02.09	TAS 114-J	02/05/09
	03903.05.06-2-R1	TAS 114-J	07/13/09
	03900.05.05-R1	TAS 114-D	03/23/10
	I31580.10.10	ASTM D4434	10/18/10

APPROVED ASSEMBLIES

Membrane Type: Single Ply, Thermoplastic PVC, Insulated

Deck Type 4I: Lightweight Concrete

Deck Description: Min. 200 psi Elastizell cellular LWC cast over concrete deck

System Type A(1): One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, H-Shield, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A

(Optional) Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or subsequent layers of insulation in 3" to 3.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive (3M Polyurethane Foam Insulation Adhesive CR-20). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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.

Membrane: IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the insulation with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.

Maximum Design Pressure: -180 psf (See General Limitation #9)

Membrane Type:	Single Ply, Thermoplastic PVC, Insulated
Deck Type 4I:	Lightweight Concrete
Deck Description:	Min. 200 psi Elastizell cellular LWC cast over concrete deck
System Type A(2):	One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, H-Shield, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A
Insulfoam EPS		
Minimum .75" thick	N/A	N/A

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or subsequent layers of insulation in 1.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive (3M Polyurethane Foam Insulation Adhesive CR-20). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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.

Membrane:	IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the insulation with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.
Maximum Design Pressure:	-127.5 psf (See General Limitation #9)

Membrane Type:	Single Ply, Thermoplastic PVC, Insulated
Deck Type 4I:	Lightweight Concrete
Deck Description:	Min. 200 psi Celcore cellular LWC cast over concrete deck
System Type A(3):	One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, H-Shield, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A

(Optional) Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or subsequent layers of insulation in 3" to 3.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive (3M Polyurethane Foam Insulation Adhesive CR-20). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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.

Membrane:	IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the insulation with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.
Maximum Design Pressure:	-222.5 psf (See General Limitation #9)

Membrane Type:	Single Ply, Thermoplastic PVC, Insulated
Deck Type 4I:	Lightweight Concrete
Deck Description:	Min. 200 psi Mearlcrete cellular LWC cast over concrete deck
System Type A(4):	One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, H-Shield, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A

(Optional) Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or subsequent layers of insulation in 3" to 3.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive (3M Polyurethane Foam Insulation Adhesive CR-20). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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.

Membrane:	IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the insulation with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.
Maximum Design Pressure:	-240 psf (See General Limitation #9)

Membrane Type:	Single Ply, Thermoplastic PVC, Insulated
Deck Type 4I:	Lightweight Concrete
Deck Description:	Min. 200 psi Mearlcrete cellular LWC cast over concrete deck
System Type A(5):	One or more layers of insulation adhered with approved adhesive, membrane fully adhered

All General and System Limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, H-Shield, ACFoam II, Multi-Max FA-3		
Minimum 1.5" thick	N/A	N/A
Insulfoam EPS		
Minimum .75" thick	N/A	N/A

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.25" thick	N/A	N/A

Note: All insulation shall be adhered to the deck or subsequent layers of insulation in 1.5" wide beads 12" o.c. of TITE-SET Roofing Adhesive (3M Polyurethane Foam Insulation Adhesive CR-20). Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation 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.

Membrane:	IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the insulation with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.
Maximum Design Pressure:	-75 psf (See General Limitation #9)

Deck Type 4:	Lightweight Concrete, Non-insulated
Deck Description:	Min. 200 psi Elastizell cellular LWC cast over concrete deck.
System Type F:	Membrane fully adhered to deck.

All General and System Limitations apply.

Deck:	Minimum 2500 psi structural concrete
Lightweight Concrete:	Minimum 200 psi, Elastizell cellular lightweight concrete deck applied with minimum 1/8" slurry coat over a minimum 1" thick minimum 1.0 pcf Apache Holey Board or approved EPS board and a minimum 2" thick top coat.
Membrane:	IB Single Ply or IB Single Ply Fleecebacked roof cover adhered to the lightweight concrete with IB Water Borne Adhesive or Pliobond 7008 at 280 ft^2 per gallon.
Maximum Design Pressure:	-242.5 psf; (See General Limitation #9.)

LIGHTWEIGHT CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For Systems where specific lightweight insulating concrete is referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

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 side lap 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 Professional Engineer, Registered 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 and/or RAS 137. 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 to 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.)
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

END OF THIS ACCEPTANCE