MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786)315-2590 F (786) 315-2599
www.miamidade.gov/economy

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

IB Roof Systems
506 E. Dallas Road, Suite 300
Grapevine, TX 75061

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 RER -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. RER 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 including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: IB PVC Single Ply Roof Systems over Steel Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city and state of manufacturing facility, 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 and revises NOA No. 20-0608.04 and consists of pages 1 through 21.
The submitted documentation was reviewed by Jorge L. Acebo.

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply Roofing
Material:	PVC
Deck Type:	Steel
Maximum Design Pressure:	-90 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
IB PVC Single Ply	50, 60, 80 mil thickness	ASTM D4434	Polyester reinforced PVC membrane.
IB PVC Single Ply Fleeceback	50, 60, 80 mil thickness	ASTM D4434	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.
IB Vertibond PVC Bonding Adhesive	5 gal.	Proprietary	Adhesive for bonding IB membranes to metal, wood, concrete and certain insulation boards.
IB Rapid Set Insulation Adhesive	Various	Proprietary	Elastomeric, one-step, all-purpose, foamable adhesive.
Sopravap'r	45" x 133'	Various	Self-adhering air/vapor barrier membrane.
Elastocol Stick	Various	ASTM D41	Asphalt primer.
Elastocol Stick Zero	Various	ASTM D41	Asphalt primer.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
IB EnergyBoard II	Polyisocyanurate Insualtion	IB Roof Systems
IB EnergyBoard III	Polyisocyanurate Insulation	IB Roof Systems
ACFoam-II	Polyisocyanurate Insulation	Atlas Roofing Corp.
ACFoam-III	Polyisocyanurate Insulation	Atlas Roofing Corp.
ACFoam-HD Coverboard	High-Density Polyisocyanurate Insulation	Atlas Roofing Corp.
ENRGY 3	Polyisocyanurate Insulation	Johns Manville Corp.
Multi-Max FA-3	Polyisocyanurate Insulation	Rmax, A Buisiness Unit of Sika Corporation
H-Shield	Polyisocyanurate insulation	Hunter Panels, a div. of Carlisle Const. Materials, LLC
H-Shield CG	Polyisocyanurate insulation	Hunter Panels, a div. of Carlisle Const. Materials, LLC
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
DensDeck	Gypsum insulation	Georgia Pacific Gypsum LLC
DensDeck Prime	Gypsum insulation	Georgia Pacific Gypsum LLC
SECUROCK Gypsum-Fiber Roof Board	Gypsum insulation	USG Corp.

APPROVED FASTENERS / ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Dekfast DF-#12 PH3, Dekfast DF-#14 PH3, Dekfast DF-#15 PH3	Insulation and membrane fastener	Various	SFS Group USA, Inc.
2.	Dekfast PLT-R-2-4B	Galvalume stress plate	2” round	SFS Group USAc, Inc.
3.	#12 Standard Roofgrip, #14 Roofgrip, #15 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
4.	OMG XHD Fastener	High thread fastener for use in wood, steel and concrete decks.	Various	OMG, Inc.
5.	OMG 2-3/8 in. XHD Barbed Stress Plate	Galvalume AZ55 stress plate	2-3/8" round	OMG, Inc.
6.	OMG 3” Galvalume Steel Plate	Galvalume steel plate	3” round	OMG, Inc.
7.	Dekfast PLT-R-3	Galvalume stess plate	3” round	SFS Group USA, Inc.
8.	OMG Polymer Batten Strip	Modified polymer batten strip. Holes spaced 6” o.c.	250’ long, 1” wide	OMG, Inc.
9.	OMG Metal Batten Strip	Galvalume batten strip. Holes spaced 6” or 12” o.c.	10’ long, 1” wide	OMG, Inc.
10.	OMG 2-3/8” Barbed XHD Plates	Steel stress plate	2-3/8” round	OMG, Inc.
11.	IB #12 Standard Roofing Fastener	Insulation and membrane fastener	Various	IB Roof Systems
12.	IB #14 Heavy Duty Roofing	Insulation and membrane fastener	Various	IB Roof Systems
13.	IB #15 XHD Roofing Fastener	High thread fastener for use in wood, steel and concrete decks	Various	IB Roof Systems
14.	IB 3” Insulation Plate	Galvalume steel plate	3” round	IB Roof Systems
15.	IB 2-3/8” Barbed Seam Plates	Steel stress plate	2-3/8” round	IB Roof Systems
16.	Dekfast PLT-R-2-3/8-6B	Steel stress plate	2-3/8” round	SFS Group USA, Inc.
17.	Trufast 3” Metal Insulation Plate	Galvalume steel stress plate	3” round	Altenloh, Brinck & Co., U.S., Inc.
18.	Trufast #12 DP Fastener	Carbon steel fastener for use in steel or wood decks	Various	Altenloh, Brinck & Co., U.S., Inc.

APPROVED FASTENERS / ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
19.	IB SD #12 Insulation Fastener	Insulation and membrane fastener	Various	IB Roof Systems
20.	IB HD #14 Roofing Fastener	Insulation and membrane fastener	Various	IB Roof Systems
21.	IB XHD #15 Roofing Fastener	Insulation and membrane fastener	Various	IB Roof Systems
22.	IB 3" Isoweld Plate	Round, coated galvalume plate (Silver and Gold) used for PVC membranes	3" round	IB Roof Systems
23.	Isoweld F1-P-6.8-PVC Plate	Round, coated galvalume plate (Silver and Gold) used for PVC membranes	3" round	SFS Group USA, Inc.
24.	Millennium One Step Foamable Adhesive	Polyurethane two component high rise insulation adhesive	1.5 liters	H.B. Fuller Company
25.	OMG OlyBond 500 Adhesive	Spray polyurethane foam insulation adhesive	10 gal. bag-in-box set and 1.5 liters SpotShot cartridge	OMG, Inc.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
FM Approvals	2D5A9.AM	FM 4450	06/22/99
	3009502	FM 4470	12/21/00
	3012321	FM 4470	07/29/02
	3015444	FM 4450	07/11/03
	3014692	FM 4470	08/05/03
	3014751	FM 4450	08/27/03
	PR460143	FM 4470	11/04/21
UL LLC	02NK18635	CGSB-37.54-95	11/12/03
Exterior Research & Design, LLC	03903.05.06-2	TAS 114-J	05/10/06
	03900.05.05-R1	TAS 114-D	03/23/10
Trinity | ERD	02762.03.05-R1	TAS 114-D/TAS 114-J	12/10/07
	I11110.02.09	TAS 114-J	02/05/09
	03903.05.06-2-R1	TAS 114-J	07/13/09
	I33030.03.11	FM 4474/TAS 114	03/11/11
	02642.01.05-1-R2	TAS 114-J	06/07/11
	SC5160.01.15-R1	FM 4474/TAS 114	02/03/15
	SFS-SC10010.02.16	FM 4474/TAS 114	02/29/16
NEMO ETC, LLC	1j-IBR-20-GNSPT-01.C	ASTM D4434	04/24/20
	1j-IBR-20-GNSPT-01.D	ASTM D4434	04/24/20

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Robert Nieminen, P.E.	Signed/Sealed Calculations	B(4), C(2), C(3), C(4), C(5), C(6)	08/25/16
FM Approval Deck Limitations	N/A	D(1), D(2), D(3), D(4)	01/01/13

APPROVED ASSEMBLIES:

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 33 steel.

System Type B(1): Base layer of insulation mechanically attached, top layer adhered with approved adhesive, roof cover fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III, H-Shield		
Minimum 2.0" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:2.9 ft^2**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, ACFoam-HD Coverboard		
Minimum 0.25" thick	**N/A**	**N/A**

Note: All insulations shall be adhered with OlyBond 500 Adhesive applied in ¾" – 1" wide beads 12" o.c. or Millennium One Step Foamable Adhesive or IB Rapid Set Insulation Adhesive applied in ½" – ¾" wide beads 12" o.c. Refer to 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.

Membrane: IB PVC Single Ply roof cover adhered to the insulation with IB Vertibond PVC Bonding Adhesive at 1 gal/50 – 70 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/125 – 175 ft^2 (substrate only). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply Fleeceback roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/100 – 160 ft^2 (substrate only) or IB Vertibond PVC Bonding Adhesive at 1 gal/45 – 60 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 33 steel.

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

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-III, IB EnergyBoard III, H-Shield, H-Shield CG Minimum 1.5" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:2.0 ft^2**

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

Note: All insulations shall be adhered with OlyBond 500 Adhesive applied in ¾" – 1" wide beads 12" o.c. or Millennium One Step Foamable Adhesive or IB Rapid Set Insulation Adhesive applied in ½" – ¾" wide beads 12" o.c. Refer to 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.

Membrane: IB PVC Single Ply roof cover adhered to the insulation with IB Vertibond PVC Bonding Adhesive at 1 gal/50 – 70 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/125 – 175 ft^2 (substrate only). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply Fleeceback roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/100 – 160 ft^2 (substrate only) or IB Vertibond PVC Bonding Adhesive at 1 gal/45 – 60 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 33 steel.

System Type B(3): Thermal barrier mechanically attached, vapor barrier, base and top layer of insulation adhered with approved adhesive, roof cover fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Thermal Barrier	**Thermal Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum 0.5" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:4.0 ft^2**

Vapor Barrier: Sopravap'r, primed with Elastocol Stick Zero or Elastocol Stick applied at 1.0 gal./sq., adhered to the Thermal Barrier.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, EnergyBoard II, ACFoam-III, IB EnergyBoard III, H-Shield, H-Shield CG		
Minimum 1.0" thick	**N/A**	**N/A**

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

Note: All insulations shall be adhered with OlyBond 500 Adhesive applied in ¾" – 1" wide beads 12" o.c. or Millennium One Step Foamable Adhesive or IB Rapid Set Insulation Adhesive applied in ½" – ¾" wide beads 12" o.c. Refer to 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.

Membrane: IB PVC Single Ply roof cover adhered to the insulation with IB Vertibond PVC Bonding Adhesive at 1 gal/50 – 70 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/125 – 175 ft^2 (substrate only). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply Fleeceback roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/100 – 160 ft^2 (substrate only) or IB Vertibond PVC Bonding Adhesive at 1 gal/45 – 60 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 40 steel decking secured to minimum 0.25 in. thick structural steel supports spaced a maximum 6 ft. o.c. with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. at each structural steel support. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 24" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type B(4): Base layer of insulation mechanically attached, top layer adhered with approved adhesive, roof cover fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III, H-Shield, H-Shield CG		
Minimum 2.0" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:1.6 ft²**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
SECUROCK Gypsum-Fiber Roof Board, DensDeck Prime, ACFoam-HD Coverboard		
Minimum 0.25" thick	**N/A**	**N/A**

Note: All insulations shall be adhered with OlyBond 500 Adhesive applied in ¾" – 1" wide beads 6" o.c. or Millennium One Step Foamable Adhesive or IB Rapid Set Insulation Adhesive applied in ½" – ¾" wide beads 6" o.c. Refer to 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.

Membrane: IB PVC Single Ply roof cover adhered to the insulation with IB Vertibond PVC Bonding Adhesive at 1 gal/50 – 70 ft² (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/125 – 175 ft² (substrate only). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply Fleeceback roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/100 – 160 ft² (substrate only) or IB Vertibond PVC Bonding Adhesive at 1 gal/45 – 60 ft² (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

Maximum Design Pressure: -75 psf. (See General Limitation #7.)

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 33 steel.

System Type C(1): All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any Polyisocyanurate Insulation layer listed in Table 2. Any thickness	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, EnergyBoard III, H-Shield, H-Shield CG, Multi-Max FA-3 Minimum 1.5" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:2.0 ft^2**
ACFoam-HD Coverboard Minimum 0.5" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:2.0 ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 0.25" thick	**1, 3, 4, 6, 7, 11, 12, 13, 14, 15, 16, 19, 20, 21**	**1:2.0 ft^2**

Note: All layers shall be simultaneously fastened; see above for fasteners and density. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover adhered to the insulation with IB Vertibond PVC Bonding Adhesive at 1 gal/50 – 70 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/125 – 175 ft^2 (substrate only). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Or
IB PVC Single Ply Fleeceback roof cover adhered to the insulation with IB Water Borne Adhesive at 1 gal/100 – 160 ft^2 (substrate only) or IB Vertibond PVC Bonding Adhesive at 1 gal/45 – 60 ft^2 (contact both sides). Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 80 steel deck secured 6" o.c. with ITW Buildex ICH TRAXX/5 screws to supports spaced max. 6 ft. o.c. Side laps secured with ITW Buildex ICH TRAXX/1 screws spaced max 36" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(2): Membrane heat welded to fastener plates mechanically attaching insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment prior to the application of Isoweld plates and fasteners as outline below. See membrane description for fastener details. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover shall be heat welded to bonding plates as specified below:

Fastening: Insulation shall be mechanically attached with Dekfast DF-#12 PH3 , Dekfast DF-#14 PH3 , Dekfast DF-#15 PH3, IB SD #12 Insulation Fasteners, IB HD #14 Roofing Fasteners, IB XHD #15 Roofing Fasteners with Isoweld F1-P-6.8-PVC Plates and IB 3" Isoweld Plates spaced 12" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonding to plates with SFS Isoweld 3000 stand-up bonding tool. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 40 steel deck secured 6" o.c. with 5/8" diameter puddle welds to supports spaced max. 6 ft. o.c. Side laps secured with ITW Buildex ICH TRAXX/1 screws spaced max 36" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(3): Membrane heat welded to fastener plates mechanically attaching insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment prior to the application of Isoweld plates and fasteners as outline below. See membrane description for fastener details. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover shall be heat welded to bonding plates as specified below:

Fastening: Insulation shall be mechanically attached with Dekfast DF-#15 PH3, IB XHD #15 Roofing Fasteners with Isoweld F1-P-6.8-PVC Plates and IB 3" Isoweld Plates spaced 2' o.c. in staggered fastener rows spaced 2' o.c (grid pattern). Membrane shall be bonding to plates with SFS Isoweld 3000 stand-up bonding tool. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7.)

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 40 steel deck secured 6" o.c. with ITW buildex ICH TRAXX/5 screws to supports spaced max. 6 ft. o.c. Side laps secured with ITW Buildex ICH TRAXX/1 screws spaced max 36" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(4): Membrane heat welded to fastener plates mechanically attaching insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment prior to the application of Isoweld plates and fasteners as outline below. See membrane description for fastener details. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover shall be heat welded to bonding plates as specified below:

Fastening: Insulation shall be mechanically attached with Dekfast DF-#15 PH3, IB XHD #15 Roofing Fasteners with Isoweld F1-P-6.8-PVC Plates and IB 3" Isoweld Plates spaced 2' o.c. in staggered fastener rows spaced 3' o.c (grid pattern). Membrane shall be bonding to plates with SFS Isoweld 3000 stand-up bonding tool. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7.)

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 40 steel deck secured 6" o.c. with 5/8" diameter puddle welds to supports spaced max. 6 ft. o.c. Side laps secured with ITW Buildex ICH TRAXX/1 screws spaced max 36" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(5): Membrane heat welded to fastener plates mechanically attaching insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ ft^2
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment prior to the application of Isoweld plates and fasteners as outline below. See membrane description for fastener details. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover shall be heat welded to bonding plates as specified below:

Fastening: Insulation shall be mechanically attached with Dekfast DF-#15 PH3, IB XHD #15 Roofing Fasteners with Isoweld F1-P-6.8-PVC Plates and IB 3" Isoweld Plates spaced 1.5' o.c. in staggered fastener rows spaced 3' o.c (grid pattern). Membrane shall be bonding to plates with SFS Isoweld 3000 stand-up bonding tool. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

Maximum Design Pressure: -82.5 psf. (See General Limitation #7.)

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 22 ga., Type B, Grade 80 steel deck secured 6" o.c. with ITW Buildex ICH TRAXX/5 screws to supports spaced max. 5 ft. o.c. Side laps secured with ITW Buildex ICH TRAXX/1 screws spaced max 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type C(6): Membrane heat welded to fastener plates mechanically attaching insulation layer.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ ft^2**
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment prior to the application of Isoweld plates and fasteners as outline below. See membrane description for fastener details. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: IB PVC Single Ply roof cover shall be heat welded to bonding plates as specified below:

Fastening: Insulation shall be mechanically attached with Dekfast DF-#15 PH3, IB XHD #15 Roofing Fasteners with Isoweld F1-P-6.8-PVC Plates and IB 3" Isoweld Plates spaced 6" o.c. in fastener rows spaced 60" o.c. Membrane shall be bonding to plates with SFS Isoweld 3000 stand-up bonding tool. Side laps are min. 3-inch wide sealed with min. 1-$^1/_2$" heat weld.

Maximum Design Pressure: -90 psf. (See General Limitation #7.)

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel decking secured to minimum 0.25 in. thick structural steel supports spaced a maximum of 6 ft. o.c. with ITW Buildex Traxx/4 or Traxx/5 fasteners as maximum of 6" o.c. at each structural steel support. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 30" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

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

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier (Optional): Any UL or FM approved vapor Barrier may be installed on the deck or over the layer of insulation.

One or more layers of the following.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ ft^2
ACFoam-II, IB EnergyBoard II, ACFoam-III, IB EnergyBoard III		
Minimum 1.3" thick	**N/A**	**N/A**
ENRGY 3		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment, prior to the installation of the membrane sheet, 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment. All layers of insulation and base sheet shall be simultaneously fastened. See membrane sheet below for fasteners and density.

Membrane: IB PVC Single Ply mechanically fastened through the insulation as specified below:

Fastening #1: Install maximum 72" wide sheets with a 5" overlap fastened 6" o.c. using OMG XHD fasteners and OMG 2-3/8" Barbed XHD Plates or IB #15 XHD Roofing Fasteners and IB 2-3/8" Barbed Seam Plates or Dekfast PLT-R-2-3/8-6B or Dekfast DF-#15 PH3 fasteners or IB XHD #15 Roofing Fasteners and Dekfast PLT-R-2-4B plates. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Maximum Design Pressure –60 psf. (See General Limitation #7.)

Fastening #2: Install maximum 72" wide sheets with a 5" overlap fastened 12" o.c. using OMG XHD Fasteners and OMG 2-3/8" Barbed XHD Plates or IB #15 XHD Roofing Fasteners and IB 2-3/8" Barbed Seam Plates or Dekfast PLT-R-2-3/8-6B or Dekfast DF-#15 PH3 fasteners or IB XHD #15 Roofing Fasteners and Dekfast PLT-R-2-4B plates. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.
Maximum Design Pressure –45 psf. (See General Limitation #7.)

Maximum Design Pressure: See Fastening Options Above

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 16-22 ga., Type B, Grade 33 steel decking secured to minimum 0.25 in. thick structural steel supports spaced a maximum of 6 ft. o.c. with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. at each structural steel support. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 24" o.c.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

System Type D(2): Membrane mechanically attached over fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier (Optional): Any UL or FM approved vapor Barrier may be installed on the deck or over the layer of insulation.

One or more layers of the following.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam-II, IB EnergyBoard II, ACFoam–III, IB EnergyBoard III, ENRGY 3 Minimum 1.5" thick	**1, 3, 6, 7**	**1:2 ft^2**

Note: All layers of insulation shall be fastened; see above for fasteners and density. 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. Please refer to Roofing Application Standard RAS 117 for insulation attachment. See membrane sheet below for fasteners and density.

Membrane: IB PVC Single Ply mechanically fastened through the insulation and vapor barrier, as specified below:

Install maximum 72" wide sheets with a 5" overlap fastened 6" o.c. using OMG XHD fasteners and OMG 2-3/8" Barbed XHD Plates or IB #15 XHD Roofing Fasteners and IB 2-3/8" Barbed Seam Plates or Dekfast PLT-R-2-3/8-6B or Dekfast DF-#15 PH3 fasteners or IB XHD #15 Roofing Fasteners and Dekfast PLT-R-2-4B plates. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

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

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-20 ga., Type B, Grade 80 steel decking with 6 ft. spans secured to supports with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 24" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type D(3): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier (Optional): Any UL or FM approved vapor Barrier may be installed on the deck or over the layer of insulation.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any Approved Polyisocyanurate Insulation listed in Table 2 Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment, prior to the installation of the membrane sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. Please refer to Roofing Application Standard RAS 117 for insulation attachment. See membrane sheet below for fasteners and density.

Membrane: IB PVC Single Ply mechanically fastened through the insulation as specified below:

Fastening #1: Install maximum 72" wide sheets with a 5" overlap fastened with 1" wide OMG Polymer Batten Strip, spaced maximum 8 ft. o.c. and OMG XHD fasteners spaced maximum 6" o.c. in the batten strip. The OMG Polymer Batten Strip is sealed with a minimum 5" wide PVC cover strip sealed on both edges with min. 1.5" wide heat weld.
Maximum Design Pressure –67.5 psf. (See General Limitation #7.)

Fastening #2: Install maximum 72" wide sheets with a 5" overlap fastened with 1" wide OMG Metal Batten Strip, spaced maximum 8 ft. o.c. and OMG XHD fasteners spaced maximum 6" o.c. in the metal batten. The OMG Metal Batten is sealed with a minimum 5" wide PVC cover strip sealed on both edges with minimum 1.5" wide heat weld.
Maximum Design Pressure –75 psf. (See General Limitation #7.)

Maximum Design Pressure: See Fastening Options Above

Membrane Type: Single Ply, PVC

Deck Type 2I: Steel, Insulated

Deck Description: Min. 18-22 ga., Type B, Grade 80 steel decking with 6 ft. spans secured to supports with ITW Buildex Traxx/5 fasteners as maximum of 6" o.c. The deck side laps are secured with ITW Buildex Traxx/1 fasteners a maximum of 24" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

System Type D(4): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Vapor Barrier (Optional): Any UL or FM approved vapor Barrier may be installed on the deck or over the layer of insulation.

One or more layers of the following.

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any Approved Polyisocyanurate Insulation listed in Table 2 Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall have preliminary attachment, prior to the installation of the membrane sheet, 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. All layers of insulation and base sheet shall be simultaneously fastened. Please refer to Roofing Application Standard RAS 117 for insulation attachment. See membrane sheet below for fasteners and density.

Membrane: Minimum 80 mils thick IB PVC Single Ply mechanically fastened through the insulation as specified below:

Install maximum 72" wide sheets with a 5" overlap fastened 6" o.c. using OMG XHD fasteners and OMG 2-3/8" Barbed XHD Plates. Side laps are min. 3-inch wide sealed with min. 1- ½" heat weld.

Maximum Design Pressure: -67.5 psf. (See General Limitation #7.)

STEEL DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine 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.

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 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE