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)

U.S. Intec, Inc.
1361 Alps Road
Wayne, NJ 07470

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 the BCCO and accepted by the Building Code and Product Review Committee 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: US Intec Conventional Built-Up Roof System for Wood Deck.

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 consists of pages 1 through 19.
The submitted documentation was reviewed by Frank Zuloaga, RRC

PRODUCT CONTROL ACCEPTED

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: BUR

Deck Type: Wood
Maximum Design Pressure -75 psf
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions*	Test Specification	Product Description
WorkHorse Ultra Base Sheet	67 lb. roll	ASTM D 4601	Type II asphalt impregnated and coated glass fiber base sheet.
Brai Supreme APP Smooth (SP-4)	88 lb. roll	ASTM D 6222	Smooth surface, polyester reinforced, APP modified asphalt membrane.
Brai Supreme APP Granule (GBSP-4)	105 lb. roll	ASTM D 6222	Granule surface, polyester reinforced, APP modified asphalt membrane.
Brai Supreme APP Granule FR (GBSP-4FR)	105 lb. roll	ASTM D 6222	Granule surface, polyester reinforced, fire resistant, APP modified asphalt membrane.
Brai Supreme Plus APP Granule FR (GBSP-250FR)	90 lb. roll	ASTM D 6222	Granule surface, polyester reinforced, fire resistant, APP modified asphalt membrane.
WorkHorse APP 160 Smooth	88 lb. roll	ASTM D 6222	Smooth surface, polyester reinforced, APP modified asphalt membrane.
WorkHorse APP 160 Granule	105 lb. roll	ASTM D 6222	Granule surface, polyester reinforced, APP modified asphalt membrane.
WorkHorse SBS Granule	105 lb. roll	ASTM D 6222	Granule surface, polyester reinforced, SBS modified asphalt membrane.
Brai Supreme SBS Glass Base HS	90 lb. roll	ASTM D 6222	Smooth surface, fiber glass mat and scrim reinforced, SBS modified asphalt membrane.
Supreme Eliminator Nailable Venting Base Sheet	72 lb. roll	ASTM D 4897 Type II	Fiber glass base sheet impregnated and coated on both sides.
Supreme Eliminator Perforated Venting Base Sheet	67 lb. roll	ASTM D 4601 Type I	Type I asphalt impregnated and coated glass fiber base sheet with kraft paper backing.
Brai Supreme SBS Glass Base	90 lb. roll	ASTM D 6163 Type I Grade S	Fiberglass base sheet coated with SBS modified asphalt.
Brai Supreme Ply 4	38 lb. roll	ASTM D 2178 Type IV	Type IV asphalt impregnated glass felt.
Brai Supreme Ply 6	38 lb. roll	ASTM D 2178 Type VI	Type VI asphalt impregnated glass felt.
WorkHorse Ultra Cap Sheet	72 lb. roll	ASTM D 3909	Asphalt impregnated and coated felt surfaced with mineral granules.
WorkHorse Ultra Cap 730 Premier	72 lb. roll	ASTM D 3909	Asphalt impregnated and coated felt surfaced with mineral granules.
Brai Supreme SBS Poly Smooth (Flex Smooth)	88 lb. roll	ASTM D 6164	Smooth surface, polyester reinforced, SBS modified asphalt membrane.

Brai Supreme SBS Poly Granule (Flex 190)	97 lb. roll	ASTM D 6164	Granule surface, polyester reinforced, SBS modified asphalt membrane.
Brai Supreme SBS Poly Granule FR (Flex 190 FR)	105 lb. roll	ASTM D 6164	Granule surface, polyester reinforced, fire resistant, SBS modified asphalt membrane.
Brai Supreme Plus SBS Poly Granule FR (250 FR)	105 lb. roll	ASTM D 6164	Granule surface, polyester reinforced, fire resistant, SBS modified asphalt membrane.
Brai Supreme SBS Glass Granule FR (Flex FR 4.5)	105 lb. roll	ASTM D 6163	Granule surface, fiberglass reinforced, fire retardant, SBS modified asphalt membrane.
Brai Supreme SBS Dual FR (Intec Flex Dual FR)	69 lb. roll	ASTM D 6164 Type II Grade G	Granule surface, polyester/fiberglass reinforced, fire resistant, SBS modified asphalt membrane.
Intec Flex G4 (Smooth)	90 lb. roll	ASTM D 6163	Smooth surface, fiberglass reinforced, SBS modified asphalt membrane.
Brai Supreme Flex Aluminum		ASTM D 6298	Aluminum surface, reinforced membrane for flashing use only.
Brai Supreme APP Walk Board	3' x 3'	Proprietary	Granule surface, APP modified asphalt membrane walkboard.
Brai Supreme SBS Walk Board	3' x 3'	Proprietary	Granule surface, SBS modified asphalt membrane walkboard.
Flex Asphalt. Asphalt Plus, Asphalt Lite	various	ASTM D 312	SEBS modified mopping asphalt.
Brai Supreme/Permaglas Roofing Asphalt	various	ASTM D 312	Mopping Asphalt
Matrix 101 System Pro SBS Adhesive	5 gallons	ASTM D3019	Cold Applied Modified SEBS Asphalt Adhesive
Matrix 102 Select SBS Adhesive	5 gallons	ASTM D3019	Cold Applied Modified SEBS Asphalt Adhesive.
Matrix 103 Cold Adhesive	5 gallons	ASTM D3019	Cold Applied Asphalt Adhesive.
Matrix 201 System Pro SBS Flashing	5 gallons	ASTM D3019	Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.
Matrix 202 Select SBS Flashing	5 gallons	ASTM D4586	Cold Applied Modified SEBS Asphalt Adhesive – Flashing Grade.
Matrix 203 Standard Plastic Cement	5 gallons	ASTM D4586	Standard Plastic Asphalt Roofing Cement
Matrix 304 Select Non-Fibered	various	ASTM D2824, Type I	Non-fibered. Aluminum pigmented, asphalt roof coating.
Matrix™ 305 Fibered Emulsion	various	ASTM 1227	Asphalt based clay emulsion roof coating.
Matrix™ 307 Primer	various	ASTM D 41	Asphalt based primer.
Matrix™ 322 White Elastomeric Roof Coating	various	ASTM D 2824 Type I	Styrene, acrylic based roof coating.
Matrix 602 SB Coating	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
Matrix 715 MB Coating	5 gallons		Surface coating for smooth surfaced and mineral surfaced roofs.
Fireshield	6 gal. drum	proprietary	A liquid, temporary fire retardant treatment for brush, roll or spray application.
M-Weld Gravel Guard MB	various	proprietary	Metal edge gravel guard with perforated flange.
M-Weld MDrain	various	proprietary	Spun aluminum or copper roof drain.

Brai Supreme Mini APP Smooth	various	proprietary	Pre-cut widths of polyester reinforced, APP modified membrane for flashing and repairs.
M-Weld MPan	various	proprietary	A prefabricated pitch pan and modified bitumen flashing assembly.
M-Weld MScupper	various	proprietary	Prefabricated scupper.
M-Weld Preflashed Lead Jack	various	proprietary	Preflashed vent pipe waterproofing assembly.
M-Weld Standard, Adjustable, One Way MVent	various	proprietary	Prefabricated stack cover for use in soil pipe waterproofing.
Intec Tape	roll	proprietary	Unreinforced APP asphalt used as sealer or filler.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
BMCA EnergyGuard (USIso) PolyIso Roof Insulation	Polyisocyanurate foam insulation	BMCA
BMCA EnergyGuard RA PolyIso Roof Insulation	Polyisocyanurate foam insulation	BMCA
BMCA EnergyGuard (USIso/Perlite) Composite	Polyisocyanurate foam /perlite composite insulation board.	BMCA
BMCA EnergyGuard RA Composite	Polyisocyanurate foam /perlite composite insulation board.	BMCA
BMCA EnergyGuard High Density Wood Fiberboard	Wood fiber insulation board	BMCA
BMCA EnergyGuard Perlite	Perlite and tapered perlite insulation	BMCA
BMCA EnergyGuard Perlite Recover	Perlite recover board	BMCA
BMCA Dens Deck	Water resistant gypsum board	BMCA
PYROX, White Line	Polyisocyanurate foam insulation	Apache Products Co.
ACFoam I, II & Composite	Polyisocyanurate foam insulation	Atlas Energy Products
Wood Fiber	Wood fiber insulation board	generic
High Density Wood Fiberboard	Wood fiber insulation board	generic
Perlite Insulation	Perlite insulation board	generic
Dens Deck	Water resistant gypsum board	G-P Gypsum Corp.
ENRGY-2 & ENRGY-2 PLUS, UltraGard Gold	Polyisocyanurate foam insulation	Johns Manville
Multi-Max & FA	Polyisocyanurate roof insulation	RMax, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Drill-Tec® #12 Standard & #14 Heavy Duty Roofing Fastener	Insulation fastener for steel, wood & concrete decks.		US Intec, Inc.
2.	Drill-Tec® ASAP	Pre-assembled GAFTITE Fasteners and metal and plastic plates.		US Intec, Inc.
3.	Drill-Tec® Base Sheet Fastener and Plate	Base sheet fastening assembly.		US Intec, Inc.
4.	Drill-Tec® Metal	Round galvalume stress plates.	3" and 3 ½"	US Intec, Inc.
5.	Drill-Tec® Plastic	Round polypropylene stress plates.	3" and 3 ½"	US Intec, Inc.
6.	Dekfast Fasteners #12, #14 & #15	Insulation fastener for wood, steel and concrete decks		Construction Fasteners Inc.
7.	Dekfast Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 ¼"	Construction Fasteners Inc.
8.	Dekfast Lock Plate	Polypropylene locking plate.	3" x 3 ¼"	Construction Fasteners Inc.
9.	#12 Roofgrip Fasteners	Insulation fastener for wood and steel.		ITW Buildex Corp.
10.	Metal Plate	Galvalume stress plate.	3" round 3" square	ITW Buildex Corp.
11.	Gearlok Plastic Plate	Polypropylene round plate	3.2"	ITW Buildex Corp.
12.	Hextra Plus	Insulation fastener and metal plate		ITW Buildex Corp.
13.	Glasfast Fastener	Insulation fastener assembly with recessed plastic plate		Johns Manville
14.	Olympic Fastener #12 & #14	Insulation fastener		Olympic Manufacturing Group, Inc.
15.	Olympic Fastener ASAP	Pre-assembled Insulation fastener and plate		Olympic Manufacturing Group, Inc.
16.	Olympic Polypropylene	Polypropylene plastic plate	3.25" round	Olympic Manufacturing Group, Inc.
17.	Olympic G-2	3.5" round galvalume AZ55 steel plate	3.5" round	Olympic Manufacturing Group, Inc.
18.	Olympic Standard	3" round galvalume AZ50 steel plate	3" round	Olympic Manufacturing Group, Inc.
19.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks		SFS/Stadler

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
20.	Insul-Fixx S Plate	3" round galvalume AZ50 steel plate	3" round	SFS/Stadler
21.	Insul-Fixx P Plate	3" round polyethylene stress plate	3" round	SFS/Stadler
22.	Tru-Fast	Insulation fastener for steel and wood decks		The Tru-Fast Corp.
23.	Tru-Fast Plates	3" round galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
24.	Tru-Fast Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corp.	J.I. 3X0A9.AM	FMRC 4470	04/12/94
Factory Mutual Research Corp.	Letter	Approval Extension	04/13/94
Factory Mutual Research Corp.	J.I. 1B7A6.AM	FMRC 4470	05/27/97
Factory Mutual Research Corp.	J.I. 3B0A0.AM	FMRC 4470/4454	04/30/97
Factory Mutual Research Corp.	J.I. 0D3A3.AM	FMRC 4470/4454	04/04/97
Factory Mutual Research Corp.	3012280	FMRC 4470	09/16/02
Underwriters Laboratories, Inc.	1997 UL Guide	Fire Classification Compliance	01/01/97
Underwriters Laboratories, Inc.	96NK26146	UL 790	11/04/96
Underwriters Laboratories, Inc.	96NK11547	UL 790	05/28/96
Warnock Hersey - ITS	484-733400	Physical Properties	07/26/94
Exterior Research & Design, LLC.	#3955.05.97-1	Wind Uplift PA 114, Appendix J	05/22/97

APPROVED ASSEMBLIES:

Deck Type 1I: Wood, Insulated, New Construction

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

System Type A(1): Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation for Base Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
USIso, E'NRG'Y-2, ACFoam II, Multi-Max, Multi-Max FA, Pyrox, Whiteline, EnergyGuard PolyIso, BMCA EnergyGuard RA PolyIso, USIso/Perlite Composite, BMCA EnergyGuard Composite, BMCA EnergyGuard RA Composite		
Minimum 1.5" thick	**N/A**	**N/A**

Insulation for Base or Top Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
USIso/Perlite Composite, BMCA EnergyGuard Composite, BMCA EnergyGuard Composite		
Minimum 1.5" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite		
Minimum ¾" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite Recover (Top Layer Only)		
Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. 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. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. US Intec requires either a ply of Supreme Eliminator Perforated Venting Base Sheet laid dry or a layer of BMCA EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

Anchor Sheet: WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Glass Base HS, Brai Supreme SBS Base, Brai Supreme SBS Poly Smooth, Intec flex G4 Smooth or Supreme Eliminator Nailable Venting fastened to the deck as described below:

Fastening: Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps or Drill-Tec fasteners and Drill-Tec Metal Plates at 12" o.c. at the lap and two rows staggered in the center of the sheet 12" o.c.

Base Sheet: (Optional if ply sheet is used) WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Glass Base HS, Brai Supreme SBS Base, Brai Supreme SBS Poly Smooth or Intec flex G4 Smooth adhere with any approved mopping asphalt at an application rate of 25-35 lbs./sq.

Ply Sheet:	Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25-35 lbs./sq.
Cap Sheet:	(Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.
Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively. 2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq. 3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.
Maximum Design Pressure:	-45 psf (See General Limitation #9.)

Deck Type 1I: Wood, Insulated, New Construction

Deck Description: Min $^{19}/_{32}$" or greater plywood plywood attached 6" o.c. using #8 x 2½" wood screws fastened to minimum 2" x 4" supports spaced a maximum of 24" o.c.

System Type A(2): Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation for Base Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
USIso, E'NRG'Y-2, ACFoam II, Multi-Max, Multi-Max FA, Pyrox, Whiteline, BMCA EnergyGuard PolyIso, BMCA EnergyGuard RA PolyIso, USIso/Perlite Composite, BMCA EnergyGuard Composite Minimum 1.5" thick	**N/A**	**N/A**

Insulation for Base or Top Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
USIso/Perlite Composite, BMCA EnergyGuard Composite Minimum 1.5" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite Minimum ¾" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite Recover (Top Layer Only) Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full mopping of approved hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. 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. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. US Intec requires either a ply of Supreme Eliminator Perforated Venting Base Sheet laid dry or a layer of BMCA EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

Anchor Sheet: WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Poly Smooth or Supreme Eliminator Nailable Venting Base Sheet fastened to the deck as described below:

Fastening: Anchor sheet shall be lapped 4" and fastened with approved roofing nails and tin caps or Drill-Tec fasteners and Drill-Tec Metal Plates at 9" o.c. at the lap and two rows staggered in the center of the sheet 18" o.c.

Base Sheet: (Optional) WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Poly Smooth adhere with approved mopping asphalt at an application rate of 25-35 lbs./sq.

Ply Sheet: Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25-35 lbs./sq.

Cap Sheet:	(Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.
Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively. 2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq. 3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.
Maximum Design Pressure:	-52.5 psf (See General Limitation #7.)

Deck Type 1I: Wood, Insulated, New Construction

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

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

All General and System Limitations apply.

Insulation for Base Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II		
Minimum 1.3" thick	**1, 6, 9 or 14**	**1:2.67 ft^2**
BMCA EnergyGuard RA PolyIso, E'NRG'Y 2, USIso, BMCA EnergyGuard PolyIso		
Minimum 1.4" thick	**1, 6, 9 or 14**	**1:2.67 ft^2**
	1 or 22	**1:4 ft^2**
Multi-Max		
Minimum 1.5" thick	**1, 6, 9, 14 or 19**	**1:3.2 ft^2**
BMCA EnergyGuard Perlite		
Minimum ¾" thick	**1, 6, 9, 14, 19 or 22**	**1:2 ft^2**
USIso/Perlite Composite, BMCA EnergyGuard Composite		
Minimum 1.5" thick	**1, 6, 9, 14, 19 or 22**	**1:2.67 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).

Insulation for Top Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
USIso/Perlite Composite, EnergyGuard Composite		
Minimum 1.5" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite		
Minimum ¾" thick	**N/A**	**N/A**
BMCA EnergyGuard Perlite Recover (Top Layer Only)		
Minimum ½" thick	**N/A**	**N/A**

Note: Apply top layer of insulation in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft^2. 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. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down. US Intec requires either a ply of Supreme Eliminator Perforated Venting Base Sheet laid dry or a layer of BMCA EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

Base Sheet:	(Optional) WorkHorse Ultra Base Sheet, Brai Supreme SBS Glass Base or Brai Supreme SBS Poly Smooth adhered to the insulated substrate with a full mopping of approved asphalt applied at a rate of 20-35 lbs./sq. or Supreme Eliminator Perforated Venting Base Sheet (laid dry)
Ply Sheet:	Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25-35 lbs./sq.
Cap Sheet:	(Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.
Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively. 2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq. 3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.
Maximum Design Pressure:	-45 psf; (See General Limitation #9.)

Deck Type 1I: Wood, Insulated, New Construction

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

System Type C: One or more layers of insulation simultaneously attached.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation for Base Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
USIso, ENRGY-2, ACFoam II, Multi-Max, Multi-Max FA, Pyrox, Whiteline, BMCA EnergyGuard PolyIso, BMCA EnergyGuard RA PolyIso, USIso/Perlite Composite, BMCA EnergyGuard Composite		
Minimum 1.5" thick	**N/A**	**N/A**

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

Insulation for Top Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
BMCA EnergyGuard Perlite		
Minimum ¾" thick	**1, 6, 9, 14, 19 or 22**	**1:2 ft²**
USIso/Perlite Composite, BMCA EnergyGuard Composite		
Minimum 1.25" thick	**9**	**1:2.67 ft.²**
	1, 6, 9, 14, 19 or 22	**1:4 ft.²**

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment. US Intec requires either a ply of Supreme Eliminator Perforated Venting Base Sheet laid dry or a layer of BMCA EnergyGuard Perlite or wood fiber overlay board on all isocyanurate applications.

Base Sheet: (Optional) WorkHorse Ultra Base Sheet, Brai Supreme SBS Glass Base or Brai Supreme SBS Poly Smooth adhered to the insulated substrate with a full mopping of approved asphalt applied at a rate of 20-35 lbs./sq. or Supreme Eliminator Perforated Venting Base Sheet (laid dry)

Ply Sheet: Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25 lbs./sq. ± 15%.

Cap Sheet: (Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.

Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively. 2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq. 3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.
Maximum Design Pressure:	-45 psf; (See General Limitation #9.)

Deck Type 1I: Wood, Insulated, New Construction

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

System Type D: All layers of insulation and base sheet simultaneously fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Insulation for Base Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
USIso, ACFoam II, Multi-Max, Multi-Max FA, Pyrox, Whiteline, BMCA EnergyGuard PolyIso, BMCA EnergyGuard RA PolyIso		
Minimum 1.3" thick	N/A	N/A
ENRGY-2		
Minimum 1.4" thick	N/A	N/A
USIso/Perlite Composite, BMCA EnergyGuard RA Composite		
Minimum 1.5" thick	N/A	N/A
BMCA EnergyGuard Perlite		
Minimum ¾"" thick	N/A	N/A
BMCA EnergyGuard Perlite Recover (Top Layer Only)		
Minimum ½" thick	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an 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.

Base Sheet: WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Glass Base HS, Brai Supreme SBS Poly Smooth, Intec Flex G4 Smooth or Supreme Eliminator Nailable Venting Base Sheet fastened to the deck as described below:

Fastening: Fasten base sheet with Drill-Tec fasteners and Drill-Tec Metal Plates at a 2" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.

Ply Sheet: Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25-35 lbs./sq.

Cap Sheet: (Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.

Surfacing:	(Required if no cap sheet is used) Install one of the following: 1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively. 2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq. 3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.
Maximum Design Pressure:	-45 psf; (See General Limitation #9.)

Deck Type 1: Wood, Non-insulated

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

System Type E(1): Base sheet mechanically fastened

All General and System Limitations apply.

Fire Barrier: (Optional) Type X gypsum board, BMCA Dens Deck or Dens Deck loose laid over deck or Fire Shield at an application rate of ¼-½ gal./sq.

Base Sheet: WorkHorse Ultra Base, Brai Supreme SBS Glass Base, Brai Supreme SBS Glass Base HS, Brai Supreme SBS Poly Smooth, Intec Flex G4 Smooth or Supreme Eliminator Nailable Venting Base Sheet fastened to the deck as described below:

Fastening: Fasten base sheet with approved annular ring shank nails and minimum 1 $^{5}/_{8}$" tin caps or Drill-Tec fasteners and Drill-Tec Metal Plates at a 2" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.

Ply Sheet: Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25-35 lbs./sq.

Cap Sheet: (Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:

1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.
2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq.
3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.

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

Deck Type 1: Wood, Non-insulated

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

System Type E(2): Base sheet mechanically fastened
All General and System Limitations apply.

Fire Barrier: (Optional) Type X gypsum board, BMCA Dens Deck or Dens Deck loose laid over deck or Fire Shield at an application rate of ¼ to ½ gal./sq.

Base Sheet: Brai Supreme SBS Glass Base, Brai Supreme SBS Glass Base Poly Smooth or Supreme Eliminator Nailable Venting Base Sheet fastened to the deck as described below:

Fastening Options: Brai Supreme Ply 6, Ultra Base Sheet or any of above Base sheets attached to deck with approved annular ring shank nails and tin caps at a fastener spacing of 9" o.c. at the 4" lap staggered and in two rows 9" o.c. in the field
(Maximum Design Pressure –52.5 psf, See General Limitation #7)

Any of above Base sheets attached to deck with Drill-Tec #12 or #14 Screws and 3" Plates, 8" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet.
(Maximum Design Pressure –75 psf, See General Limitation #7)

Any of above Base sheets attached to deck with Drill-Tec #12 or #14 Screws and 3" Plates, 12" o.c. in 4 rows. One row is in the 2" side lap. The other rows are equally spaced approximately 9" o.c. in the field of the sheet.
(Maximum Design Pressure –60 psf, See General Limitation #7)

Any of above Base sheets attached to deck approved annular ring shank nails and 3" inverted Drill-Tec insulation plates at a fastener spacing of 9" o.c. at the 4" lap staggered in two rows 9" in the field.
(Maximum Design Pressure –60 psf, See General Limitation #7)

Ply Sheet: Two or more plies of Brai Supreme Ply 4 or Brai Supreme Ply 6 ply sheet adhered in a full mopping of approved asphalt at an application rate of 25 lbs./sq. ± 15%.

Cap Sheet: (Optional) One ply of WorkHorse™ Ultra Cap Sheet, WorkHorse Ultra Cap 730 Premier, Brai Supreme SBS Poly Granule, Brai Supreme SBS Poly Granule FR, Brai Supreme Plus SBS Poly Granule FR, Brai Supreme SBS Glass Granule FR or Intec G4 Cap adhered in full mopping of approved asphalt applied at a rate of 20-35 lbs./sq.

Surfacing: (Required if no cap sheet is used) Install one of the following:
1. Flood coat of hot asphalt with an application rate of 60 lbs./sq. ± 20%; plus gravel or slag with an application rate of 400 lbs./sq. & 300 lbs./sq., respectively.
2. Matrix™ 301 System Pro Fibered Aluminum Roof Coating, at 1.5 gal./sq.
3. Matrix™ 715 MB Coating, Applied at 1 to 1.5 gal./sq.

Maximum Design Pressure: See Fastening Options Above

WOOD DECK SYSTEM LIMITATIONS:

1 A slip sheet is required with Ply 4 and Flex Ply 6 when used as a mechanically fastened base or anchor sheet.
2. Minimum ¼" Dens Deck or ½ Type X gypsum board is acceptable to be installed directly over the wood deck.

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. **(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