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)

Honeywell International Inc.
2000 Regency Parkway, suite 255
Cary, NC 27511

SCOPE:

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

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

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

DESCRIPTION: Millenium Coal Tar Modified Bitumen Membrane over Wood Decks

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

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

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

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

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

This NOA revises NOA #03-0815.02 and consists of pages 1 through 13.
The submitted documentation was reviewed by Frank Zuloaga, RRC

PRODUCT CONTROL ACCEPTED

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen

Deck Type: Wood
Maximum Design Pressure -60 psf
Fire Classification: See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Black Armor Aluminum Coating		ASTM D 2824	Asbestos free, fibrated aluminum/asphalt roof coating, to coat smooth surface membranes.
Black Armor Asphalt Primer		ASTM D 41	Cut back, asphalt based coating used to facilitate adhesion of dissimilar materials.
Black Armor Glass Fiber Base Sheet	324 sq. ft.	ASTM D 4601 type II	Asphalt coated, glass fiber mat for use as a base sheet in built-up roof systems.
Black Armor Granulated Reinforced Base Flashing	various		Nonwoven polyester, asphalt coated flashing for use in coal tar and asphalt built-up roof systems.
Black Armor Modified Base Flashing	100 sq. ft.		160 mil APP modified bitumen membrane reinforced with non-woven polyester mat for torch application.
Black Armor Organic Base Sheet	216 sq. ft.	ASTM D 2626	Asphalt saturated and coated #43 organic felt base sheet for use in modified bitumen and conventional built-up roof systems.
Black Armor Reinforced Base Flashing	150 sq. ft.		Nonwoven polyester mat coated and saturated with asphalt for use in built-up roof systems.
Black Armor TC Glass Fiber Felt	540 sq. ft. roll	ASTM D 2178	Glass fiber coal tar coated base sheet for use in conventional built-up roof systems.
Black Armor TC Premium Glass Fiber Felt	540 sq. ft.; roll weight: 65 lbs.	ASTM D 2178 type VI	Glass fiber, coal tar coated ply sheet for use in conventional built-up roof systems.
Black Armor Tar Mastic		ASTM D 5643	Coal tar based asbestos-free roof cement.
Black Armor Tarred Felt	432 sq. ft.; roll weight: 60 lbs.	ASTM D 227	Organic fiber sheet saturated with coal tar for use in coal tar built-up roof systems.
Coal Tar Roofing and Waterproofing Pitch		ASTM D 450 type I, II	Coal tar adhesive used in modified and conventional built-up roofing applications.

Product	Dimensions	Test Specification	Product Description
Millennium GMC	75 sq. ft.; roll weight: 75 lbs.	proprietary	Coal tar membrane with non-woven fiberglass reinforcement for use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhesive.
Millennium GMC-FR	75 sq. ft.; roll weight: 75 lbs.	proprietary	Coal tar membrane with non-woven fiberglass reinforcement for use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhsive.
Millennium SM	100 sq. ft.; roll weight: 84 lbs.	proprietary	Coal tar membrane reinforced with non-woven fiberglass and lightly surfaced with sand. For use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhsive.
Millennium BS, ST	150 sq. ft.; roll weight: 81 lbs.	proprietary	Coal tar membrane reinforced with non-woven fiberglass and lightly surfaced with sand. For use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhsive.
Millennium SPM.	100 sq. ft. roll weight 75 lbs.	proprietary	Coal tar membrane with polyester reinforcement for use as a modified bitumen membrane. Applied in hot coal tar, hot air heat welded, or Millennium Adhsive.
Millennium GPM	75 sq. ft.; roll weight: 75 lbs.	proprietary	Coal tar membrane with polyester reinforcement for use as a modified bitumen membrane. Applied in hot coal tar pitch, hot air heat welded, or Millennium Adhsive.
Millennium Adhesive	N/A	Proprietary	Modief coal tar adhesive.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Armor Board High Density Fiberboard	High density wood fiber insulation board	Honeywell Int'l., Inc.
Armor Lite Perlite	Perlite roof insulation board.	Honeywell Int'l., Inc.
Armor-R Glas	Fiberglass roof insulation.	Honeywell Int'l., Inc.
Armor-R Plus	Polyisocyanurate foam roof insulation.	Honeywell Int'l., Inc.
PYROX	Polyisocyanurate foam insulation	Apache Products Co.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam II	Polyisocyanurate foam insulation	Atlas Energy Products
ISO 95+	Polyisocyanurate foam insulation	Firestone Bld. Products, Inc.
ISO 95+ Composite	Polyisocyanurate/perlite ridged insulation	Firestone Bld. Products, Inc.
EPS	Extruded polystyrene insulation	Generic
Wood Fiber	Wood fiber insulation board	Generic
High Density Wood Fiberboard	Wood fiber insulation board	Generic
Perlite Insulation	Perlite insulation board	generic
Type X Gypsum	Fire resistant rated gypsum.	generic
Dens Deck	Water resistant gypsum board	G-P Gypsum Corp.
ENRGY 2 & ENRGY 2 PLUS, UltraGard Gold	Polyisocyanurate foam insulation	Johns Manville
FiberGlass Roof Insulation	Glass fiber/Mineral fiber insulation	Johns Manville
ISORoc	Polyisocyanurate foam / rockwool composite 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.	Dekfast Fasteners #12, #14 & #15	Insulation fastener for wood, steel and concrete decks		Construction Fasteners Inc
2.	Dekfast Hex Plate	Galvalume hex stress plate.	2 7/8" x 3 ¼"	Construction Fasteners Inc.
3.	Dekfast Lock Plate	Polypropylene locking plate.	3" x 3 ¼"	Construction Fasteners Inc.
4.	#12 Roofgrip Fasteners	Insulation fastener for wood and steel.		ITW Buildex Corp.
5.	Metal Plate	Galvalume stress plate.	3" round 3" square	ITW Buildex Corp.
6.	Gearlok Plastic Plate	Polypropylene round plate	3.2"	ITW Buildex Corp.
7.	Glasfast Fastener	Insulation fastener assembly with recessed plastic plate		Johns Manville

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
8.	Olympic Fastener #12 & #14	Insulation fastener		Olympic Mfg. Group, Inc.
9.	Olympic Fastener ASAP	Pre-assembled Insulation fastener and plate		Olympic Mfg. Group, Inc.
10.	Olympic Polypropylene	Polypropylene plastic plate	3.25" round	Olympic Mfg. Group, Inc.
11.	Olympic G-2	3.5" round galvalume AZ55 steel plate	3.5" round	Olympic Mfg. Group, Inc.
12.	Olympic Standard	3" round galvalume AZ50 steel plate	3" round	Olympic Mfg. Group, Inc.
13.	Rawl Fasteners #12, #14	Insulation fastener for steel and wood decks	Various	Powers Fasteners Inc.
14.	Rawl Insulation Plate	3" round Galvalume AZ55 stress plate	3" round	Powers Fasteners Inc.
15.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks		SFS/Stadler
16.	Insul-Fixx S Plate	3" round galvalume AZ50 steel plate	3" round	SFS/Stadler
17.	Insul-Fixx P Plate	3" round polyethylene stress plate	3" round	SFS/Stadler
18.	Tru-Fast	Insulation fastener for steel and wood decks		The Tru-Fast Corp.
19.	Tru-Fast Plates	3" round galvalume AZ55 steel plate	3" round	The Tru-Fast Corp.
20.	Tru-Fast Plates	Polyethylene plastic plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Description	Date
Factory Mutual Research Corp.	FM Approval Guide Listings	Current Insulation Fastening Requirements	Published Annually
Factory Mutual Research Corp.	J.I. #2X1A6.AM and Letter	Wind Uplift Resistance	04.11.94
Underwriters Laboratories, Inc.	UL Materials and Systems Directory Listings R13503(N	Fire Classification Compliance	Published Annually
Exterior Research & Design, LLC	#4502.09.96-1	Protocol PA 114(D)	09.15.96
Exterior Research & Design, LLC	#4504.04.97-1	Protocol PA 114(J)	04.14.97
Factory Mutual Research Corp.	3003320	Class 4470	09.10.99
ACRC	03004 03005	TAS 114	03.19.03 03.19.03

APPROVED ASSEMBLIES:

Deck Type 1I: Wood, Insulated

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

System Type A: Anchor sheet mechanically fastened; all layers of insulation adhered with approved asphalt or coal tar pitch.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
AC-Foam II, Armor-R Plus, ENRGY 2, ENRGY 2 Plus, ISORoc, Multi-Max Minimum 1" thick	**N/A**	**N/A**

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
High Density Wood Fiber, Armor Board High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**
Perlite, Armor Lite Perlite Minimum ¾" thick	**N/A**	**N/A**
Fiberglas, Armor-R Glas Minimum $^{15}/_{16}$" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet in full moppings of approved hot asphalt or coal tar pitch within the EVT range and at a rate of 20-40 lbs/100 ft^2. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as base layer only shall be used 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.

Anchor Sheet: One ply of Black Armor Glass Felt, Black Armor Organic Base Sheet, Vented Base Sheet, Fiber Felt, TC Standard or Premium Glass Fiber Felt with a 4" side lap mechanically fastened to the deck as described below:

Fastening #1: Annular ring shank nails and tin caps spaced 9" o.c. in the lap and 9" o.c. in two staggered rows in the center of the sheet.
(Maximum Design Pressure:-60 psf: See General Limitation #9.)

Fastening #2: Annular ring shank nails and tin caps spaced 8" o.c. in the lap and 8" o.c. in two staggered rows in the center of the sheet.
(Maximum Design Pressure:-52.5 psf: See General Limitation #7.)

Base Sheet: None.

Ply Sheet:	Two or more plies of Black Armor Tarred Felt, TC Standard or Premium Glass Fiber Felt, Type G1 or Glass Fiber Felt adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or one or two plies of Millennium SM, BS or SPM adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs/sq. or hot air heat welded or Millennium Adhesive at a rate of 1.5-2 gal/sq. to the base sheet.
Membrane:	(Optional) One ply of Millennium GMC, GMC-FR, SPM, GPM or SM hot air heat welded applied according to manufacturer's instructions or adhered in a full mopping of approved coal tar pitch applied within the EVT range and at a rate of 20-40 lbs./sq. or Millennium Adhesive at a rate of 1.5-2 gal/sq. or one ply of TC Standard or Premium Glass Fiber Felt applied in coal tar pitch.
Surfacing:	(Optional required for fire classification; not required where granular FR cap sheet is used)) Install one of the following: 1. Flood coat of hot coal tar pitch at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.
Maximum Design Pressure:	See Fastening Options Above.

Deck Type 1I: Wood, Insulated

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 or coal tar pitch.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
AC-Foam II, Armor-R Plus Minimum 1.3" thick	See any approved fasteners in table 3	**1:3**
ENRGY 2 Minimum 1.4" thick	See any approved fasteners in table 3	**1:3**
ENRGY 2 Plus Minimum 1.5" thick	See any approved fasteners in table 3	**1:4**
Multi-Max Minimum 1.5" thick	See any approved fasteners in table 3	**1:2.9**
ISORoc Minimum 1.5" thick	See any approved fasteners in table 3	**1:2.67**

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Perlite, Armor Lite Perlite Minimum ¾" thick	See any approved fasteners in table 3	**1:2**
Fiberglas, Armor-R Glas Minimum $^{15}/_{16}$" thick	See any approved fasteners in table 3	**1:2.67**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Any approved insulation noted above for top layer option.		
High Density Wood Fiber, Armor Board High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**

Note: Apply optional top layer of insulation in a full mopping of approved hot asphalt or coal tar pitch applied within the EVT range and at a rate of 20-40 lbs/100 ft^2. Refer to Roofing Application Standard RAS 117 for insulation attachment. Insulations listed as the base layer shall only be used as the base layer 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.

Base Sheet:	(Optional) Black Armor Organic Base Sheet, Millennium SM, BS, SPM or TC Standard or Premium Glass Fiber Felt adhered in a full mopping of coal tar pitch applied at not less than 20 lbs./sq. or in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate; or Millennium SM, BS or SPM adhered with Millennium adhesive applied at a rate of 1.5-2 gal/sq.
Ply Sheet:	Two or more plies of Black Armor Tarred Felt, TC Standard or Premium Glass Fiber Felt, Type G1 or Glass Fiber Felt adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or base sheet or one or two plies of Millennium SM,BS, or SPM adhered in full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. or hot air heat welded or Millennium Adhesive at a rate of 1.5-2 gal/sq. to the base sheet.
Membrane:	(Optional) One ply of Millennium GMC, GMC-FR, SPM, GPM or SM hot air heat welded applied according to manufacturer's instructions or adhered in a full mopping of approved coal tar applied within the EVT range and at a rate of 20-40 lbs./sq. or Millennium Adhesive at a rate of 1.5-2 gal/sq.or one ply of TC Standard or Premium Glass Fiber Felt applied in coal tar pitch.
Surfacing:	(Optional required for fire classification; not required where granular FR cap sheet is used)) Install one of the following: 1. Flood coat of hot coal tar pitch at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.
Maximum Design Pressure:	-45 psf (See General Limitation #9.)

Deck Type 1I: Wood, Insulated

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 shall apply.

One or more layers of any of the following insulations.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
AC-Foam II, Armor-R Plus, E'NRG'Y 2, E'NRG'Y 2 Plus, Multi-Max Minimum 1" thick	**N/A**	**N/A**
High Density Wood Fiber, Armor Board High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**

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

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ISORoc Minimum 1.5" thick	See any approved fasteners in table 3	**1:2.67**
Perlite, Armor Lite Perlite Minimum ¾" thick	See any approved fasteners in table 3	**1:2**
Fiberglas, Armor-R Glas Minimum $^{15}/_{16}$" thick	See any approved fasteners in table 3	**1:2.67**

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. Refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) Black Armor Organic Base Sheet, Millennium BS, SM, SPM or TC Standard or Premium Glass Fiber Felt adhered in a full mopping of coal tar pitch applied at not less than 20 lbs./sq. or in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate; or Millennium SM, BS or SPM adhered with Millennium adhesive applied at a rate of 1.5-2 gal/sq.

Ply Sheet: Two or more plies of Black Armor Tarred Felt, TC Standard or Premium Glass Fiber Felt, Type G1 or Glass Fiber Felt adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. to a wood fiber, perlite, fiberglass or rockwool insulation substrate or base sheet or one or two plies of Millennium SM, BS, or SPM adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. or hot air heat welded or Millennium Adhesive at a rate of 1.5-2 gal/sq. to the base sheet.

Membrane:	(Optional) One ply of Millennium GMC, GMC-FR, SPM, GPM or SM hot air heat welded applied according to manufacturer's instructions or adhered in a full mopping of approved coal tar applied within the EVT range and at a rate of 20-40 lbs./sq. or Millennium Adhesive at a rate of 1.5-2 gal/sq. or one ply of TC Standard or Premium Glass Fiber Felt applied in coal tar pitch.
Surfacing:	(Optional required for fire classification; not required where granular FR cap sheet is used)) Install one of the following: 1. Flood coat of hot coal tar pitch at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.
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

System Type E: Base sheet mechanically attached.

All General and System Limitations shall apply.

One or more layers of any of the following insulations.

Base Sheet: Black Armor Organic, Millennium BS, SM, SPM or Glass Fiber base sheet mechanically fastened to the deck as described below:

Fastening #1: Annular ring shank nails and tin caps spaced 9" o.c. in the lap and 9" o.c. in two staggered rows in the center of the sheet.
(Maximum Design Pressure:-60 psf: See General Limitation #9.)

Fastening #2: Annular ring shank nails and tin caps spaced 8" o.c. in the lap and 8" o.c. in two staggered rows in the center of the sheet.
(Maximum Design Pressure:-60 psf: See General Limitation #7.)

Ply Sheet: Two or more plies of Black Armor Tarred Felt, TC Standard or Premium Glass Fiber Felt, Type G1 or Glass Fiber Felt adhered in a full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. or one or two plies of Millennium SM,BS, or SPM adhered in full mopping of hot coal tar pitch applied at not less than 20 lbs./sq. or hot air heat welded ; or Millennium SM, BS or SPM adhered with Millennium adhesive applied at a rate of 1.5-2 gal/sq.

Membrane: (Optional) One ply of Millennium GMC, GMC-FR, SPM, GPM or SM hot air heat welded applied according to manufacturer's instructions or adhered in a full mopping of approved coal tar applied within the EVT range and at a rate of 20-40 lbs./sq. or Millennium Adhesive at a rate of 1.5-2 gal/sq. or one ply of TC Standard or Premium Glass Fiber Felt applied in coal tar pitch.

Surfacing: (Optional required for fire classification; not required where granular FR cap sheet is used)) Install one of the following:

1. Flood coat of hot coal tar pitch at an application rate of 70 lbs./sq.; plus gravel or slag at application rates of 400 and 300 lbs./sq., respectively.

Maximum Design Pressure: See Fastening Options above

WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

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 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. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
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