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

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

Tamko Building Products, Inc.
220 West 4th Street
Joplin, MO 64801

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: TAMKO Modified Bitumen Roof System 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 renews and revises NOA No.14-0827.20 and consists of pages 1 through 15.
The submitted documentation was reviewed by Jorge L. Acebo.

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Modified Bitumen
Material: SBS
Deck Type: Wood
Maximum Design Pressure: -60 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Awaplan™	39 3/8" wide	ASTM D 6164 Type I	Polyester reinforced SBS modified membrane surfaced with granules. Applied in hot asphalt or cold adhesive
Tamko SA Cap	39 3/8" wide	ASTM D 6164 Type I	Self-adhering rubberized asphalt cap sheet surfaced with granules.
Tam-Cap™	39 3/8" wide	ASTM D 3909	Asphalt impregnated and coated felt surfaced with mineral granules used as the top ply in conventional built-up roof membranes.
Awastar SA	39 3/8" wide	ASTM D 6164 Type I	Self-adhering rubberized asphalt cap sheet surfaced with white acrylic film.
Glass-Base™	39 3/8" wide	ASTM D 4601 Type II	Type II asphalt impregnated and coated glass fiber base sheet for use in conventional and modified bitumen built-up roofing.
Awabase SA	39 3/8" wide	ASTM D 4601 Type II	Self-adhering rubberized asphalt base sheet. **Direct adhesion to wood deck not permitted in the HVHZ. Shall only be mechanically fastened to wood deck. Do Not Remove Release Film!**
Awa Nailbase	39 3/8" wide	ASTM D 4601 Type II	Fiberglass rubberized asphalt base sheet.
Tamko SA Base	39 3/8" wide	ASTM D 1970	Self-adhering rubberized asphalt base sheet. **Direct adhesion to wood deck not permitted in the HVHZ. Shall only be mechanically fastened to wood deck. Do Not Remove Release Film!**
Tam-Ply IV™	39 3/8" wide		Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing.
Type 43 Base Sheet	36" wide	ASTM D 2626	An organic felt reinforced asphalt base sheet. Applied in hot asphalt or mechanically fastened.
Versa-Base™	39 3/8" wide	ASTM D 6163 Type I	Asphalt impregnated and coated glass fiber base sheet for use in conventional and modified bitumen built-up roofing.
Tam-Pro 846 Fibered Emulsion Coating	5 gallon	ASTM D 1227, Type II	Protective coating.
Tam-Pro 813 Quick Dry Primer	5 gallon	ASTM D 41	Asphalt based primer

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ACFoam Composite	Isocyanurate Insulation with perlite facer.	Atlas Roofing Corp.
ACFoam II	Isocyanurate Insulation.	Atlas Roofing Corp.
EnergyGuard Perlite	Expanded mineral fiber Insulation.	GAF Materials Corp.
ENRGY 3, ENRGY 3 25 PSI	Isocyanurate Insulation.	Johns Manville
Retro-Fit Board	A high-density perlite roof insulation.	Johns Manville
Fesco Board	Rigid perlite roof insulation board.	Johns Manville
Structodek High Density Fiberboard	High Density Wood Fiber insulation board.	Blue Ridge Fiberboard
H-Shield	Isocyanurate Insulation.	Hunter Panels, LLC
H-Shield WF	Wood fiber/ Isocyanurate Composite Insulation.	Hunter Panels, LLC

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	#12 Standard Roofgrip	#12 Insulation fastener for wood and steel.	N/A	OMG, Inc.
2.	#14 Roofgrip	#14 Insulation fastener.	N/A	OMG, Inc.
3.	OMG Accutrac Fastener	#12 Insulation fastener for wood and steel.	N/A	OMG, Inc.
4.	Accutrac Plate	Galvalume AZ50 steel plate.	3” square	OMG, Inc.
5.	3” Round Metal Plate	Galvalume stress plate.	3” round	OMG, Inc.
6.	OMG Plastic Plate	Polypropylene plastic plate.	3.25" round	OMG, Inc.
7.	#12 Dekfast	#12 Insulation fastener for steel and wood decks.	N/A	SFS Intec, Inc.
8.	#14 Dekfast	#14 Insulation fastener for steel and wood decks.	N/A	SFS Intec, Inc.
9.	Dekfast 3” Round Steel Insulation Plate	Galvalume AZ50 steel plate.	3" round	SFS Intec, Inc.
10.	Trufast #12 DP Fastener	#12 Insulation fastener for steel and wood decks.	N/A	Altenloh, Brinck & Co. U.S., Inc.
11.	Trufast 3” Metal Insulation Plate	Galvalume AZ55 steel plate.	3" round	Altenloh, Brinck & Co. U.S., Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Name/Report	Test Identifier	Date
Underwriters Laboratories, Inc.	UL 790	R3225	04/03/17
Factory Mutual Research Corp.	Class 4470	J.I. 4D0A7.AM	10/21/98
	Class 4470	J.I. 0Z4A3.AM	08/27/97
	Class 4470	J.I. 1D4A7.AM	10/20/97
	Class 4470	J.I. 3B5A9.AM	08/27/98
	Class 4470	3027787	08/14/06
	Class 4470	3027789	08/14/06
	Class 4470	3027790	08/14/06
	Class 4470	3010612	04/16/01
	Class 4470	797-09988-267	12/11/14
	Class 4470	3027791	08/14/06
Exterior Research & Design, LLC	TAS 114	4444.06.98-1	06/15/98
	TAS 114	4449.08.99-1	08/03/99
Trinty|ERD	TAS 117(B)/ ASTM D 6862	C8500SC.11.07	11/30/07
	TAS 117 & TAS 114	C12410.08.09	08/14/09
	ASTM D 4601 Type II	SC10960.02.16-1	02/11/16
	ASTM D 2178 Type IV	SC10960.02.16-2	02/11/16
	ASTM D 3909	SC10960.02.16-3	02/11/16
PRI Construction Materials Technologies LLC	ASTM D 1227	TAP-099-02-10	03/13/08
	ASTM D 41	TAP-099-02-18	04/02/08
	ASTM D 4601	TAP-238-02-01	08/25/10
	ASTM D 4601	TAP-255-02-02	11/04/11
	ASTM D 2178	TAP-256-02-02	11/04/11
	ASTM D 3909	TAP-257-02-03	11/18/11
	ASTM D 2626	TAP-257-02-01	12/12/11
	ASTM D 6163	TAP-254-02-02	01/24/12
	ASTM D 1970	TAP-262-02-02	01/24/12
	ASTM D 6164	TAP-298-02-01	11/10/15
	TAS 114 J	TAP-324-02-01	11/11/15
	TAS 117-B/ASTM D 903/TAS 114-D	TAP-373-02-01	04/14/17
	TAS 114 J	TAP-374-02-01	04/17/17

APPROVED ASSEMBLIES:

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

Deck Description: Minimum $^{15}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using wood screws spaced 6" o.c. at perimeters and intermediate supports.

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

All General and System Limitations apply.

Anchor Sheet: One ply of Tamko Glass-Base fastened to the deck as described below:

Fastening: ***(Option #1)*** Attach anchor sheet using 11 ga. annular ring shank nails and 1-5/8" diameter tin caps spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: –52.5 psf. (See General Limitation #7)

(Option #2) Attach anchor sheet using #12 or #14 Dekfast Fasteners with OMG Accutrac Fasteners and 3" Square Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: –60 psf. (See General Limitation #7)

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam II		
Minimum 1.2" thick	**N/A**	**N/A**
ENRGY 3, ENRGY 3 25 PSI, H-Shield		
Minimum 1.4" thick	**N/A**	**N/A**

Top or Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard Perlite, Fesco Board, Retro-Fit Board or Structodek High Density Fiberboard		
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 ft². 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.

Base Sheet: (Optional) One ply of Glass-Base or Versa-Base adhered to the substrate with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

Maximum Design Pressure: ***See Anchor Sheet Fastening Options above.***

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

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

System Type B(1): Base layer of insulation mechanically fastened; optional top layer adhered with approved asphalt.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ACFoam II, H-Shield Minimum 1.2" thick	**1, 3, 5 or 10**	**1:2 ft²**
ACFoam II Minimum 1.4" thick	**1, 3, 5 or 10**	**1:4 ft²**
ENRGY 3 Minimum 1.4" thick	**1, 3, 5 or 10**	**1:2 ft²**
ACFoam Composite, H-Shield WF Minimum 1.5" thick	**1, 3, 5 or 10**	**1:4 ft²**
EnergyGuard Perlite, Fesco Board, Structodek High Density Fiberboard Minimum 1" thick	**1, 3, 5 or 10**	**1:2 ft²**

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).

Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
EnergyGuard Perlite, Fesco Board, Retro-Fit Board Minimum ½" thick	**N/A**	**N/A**
ACFoam Composite, H-Shield-WF Minimum 1.5" thick	**N/A**	**N/A**

Note: Apply optional top layer of insulation shall be adhered with approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please 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 face down.

Base Sheet: (Optional) One ply of Glass-Base or Versa-Base adhered to the substrate with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

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

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

Deck Description: $^{19}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using wood screws spaced 6" o.c. at perimeters and intermediate supports.

System Type B(2): Base layer of insulation mechanically fastened; top layer adhered with approved asphalt.

All General and System Limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam II, ENRGY 3, ENRGY 3 25 PSI, H-Shield Minimum 1.5" thick	**5 or 8**	**1:1.33 ft²**

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).

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**

Note: Apply optional top layer of insulation shall be adhered with approved hot asphalt within the EVT range and at a rate of 20-40 lbs./100 ft². Please 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 face down.

Base Sheet: (Optional) One ply of Glass-Base or Versa-Base adhered to the substrate with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

Maximum Design Pressure: **-60 psf.** (See General Limitation #7.)

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

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

System Type C: All layers of insulation simultaneously mechanically fastened.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ACFoam II, H-Shield Minimum 1.2" thick	**N/A**	**N/A**
ENRGY 3, ENRGY 3 25 PSI Minimum 1.4" thick	**N/A**	**N/A**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
EnergyGuard Perlite, Fesco Board Minimum 1" thick	**1, 3, 5 or 10**	**1:2 ft²**

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. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of Glass-Base or Versa-Base adhered to the substrate with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

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

Membrane Type: SBS

Deck Type 1I: Wood, Insulated

Deck Description: Minimum $^{15}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using wood screws spaced 6" o.c.

System Type D: Base sheet attached over insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations adhered to deck:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam II, H-Shield Minimum 1.2" thick	**N/A**	**N/A**
ENRGY 3, ENRGY 3 25 PSI Minimum 1.4" thick	**N/A**	**N/A**
EnergyGuard Perlite, Fesco Board Minimum ¾"" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Minimum ½"" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor 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. See base/anchor sheet below for fasteners and density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of Tamko Glass-Base or Versa-Base fastened to the deck as described below:

Fastening: Attach base/anchor sheet through the insulation using #12 or #14 Dekfast Fasteners with Hex Plates or OMG Accutrac Fasteners and 3" Square Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.

Ply Sheet: (Optional) One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

Maximum Design Pressure: **-60 psf.** (See General Limitation #7.)

Membrane Type: SBS

Deck Type 1: Wood, Non-insulated

Deck Description: Minimum $^{15}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using wood screws spaced 6" o.c.

System Type E(1): Base sheet mechanically fastened.

All General and System Limitations apply.

Anchor Sheet: One ply of Tamko Glass-Base or Versa-Base fastened to the deck as described below:

Fastening: ***(Option #1)*** Attach anchor sheet using 11 ga. annular ring shank nails and 1-5/8" diameter tin caps spaced 9" o.c. in a 4" lap and 9" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: –52.5 psf. (See General Limitation #7)

(Option #2) Attach anchor sheet using #12 or #14 Dekfast Fasteners with Plates or OMG Accutrac Fasteners and 3" Square Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two staggered rows in the center of the sheet.
Maximum Design Pressure: –60 psf. (See General Limitation #7)

Ply Sheet: (Optional) One or more plies of Tam-Ply IV, Glass Base or Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

Maximum Design Pressure: ***See Anchor Sheet Fastening Options above.***

Membrane Type: SBS

Deck Type 1: Wood, Non-insulated

Deck Description: Minimum $^{15}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using 0.113" x 2 ⅜" ring shank nails spaced 6" o.c.

System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply.

Anchor Sheet: One ply of Tamko Awa Nailbase or Tamko Awabase SA fastened to the deck as described below:

Fastening: Attach anchor sheet using 11 ga. annular ring shank nails and 1-5/8" diameter tin caps spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced and staggered rows in the center of the sheet.

Ply Sheet: (Optional) One or more plies of Awabase SA or SA Base self-adhered to the base or ply sheet.

Membrane: One ply of Tamko SA Cap or Awastar SA, self-adhered to the base or ply sheet.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

Maximum Design Pressure: **-60 psf.** (See General Limitation #7.)

Membrane Type: SBS

Deck Type 1: Wood, Non-insulated

Deck Description: Minimum $^{15}/_{32}$" or greater plywood or wood plank. Deck shall be attached to wood supports spaced 24" o.c. using 0.113" x 2 ⅜" ring shank nails spaced 6" o.c.

System Type E(3): Base sheet mechanically fastened.

All General and System Limitations apply.

Anchor Sheet: One ply of Tamko Awa Nailbase or Versa-Base fastened to the deck as described below:

Fastening: Attach anchor sheet using 12 ga. x 1 ½" annular ring shank nails and 1-5/8" diameter tin caps spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced and staggered rows in the center of the sheet.

Ply Sheet: (Optional) One or more plies of Versa-Base adhered with a full mopping of approved asphalt applied within the EVT range, at a rate of 20-40 lbs./sq.

Membrane: Awaplan adhered with a full mopping of approved asphalt applied at 400º F at the point of contact, at a rate of 20-40 lbs./sq.

Surfacing: Optional for mineral surfaced Membranes. Required for smooth surfaced membranes. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

1. 400 lbs./sq. gravel or 300 lbs./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lbs./sq..
2. Henry 520 or Karnak 97AF applied at 1½ gal./sq., or Grundy Fibered Asphalt Emulsion, or Tam-Pro Fibered Emulsion at 3 gal./sq.

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

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 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. 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 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE