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

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

NOTICE OF ACCEPTANCE (NOA)

Mule-Hide Products Co, Inc.
1195 Prince Hall Drive
Beloit, WI 53511

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: Mule-Hide 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 revises NOA #15-1201.09 and consists of pages 1 through 48.
The submitted documentation was reviewed by Hamley Pacheco, P.E.

ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Materials	SBS/APP
Deck Type:	Wood
Maximum Design Pressure	-120 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
G2 Base	108’ x 36”	ASTM D 4601 Type II	Asphalt-coated fiberglass reinforced base sheet
Nail Base	65’ 8” x 3’ 3-3/8”	ASTM D 6163	SBS modified asphalt coated fiberglass reinforced base sheet.
SA Base Sheet	66’ 8” x 3’ 3-$^{3}/_{8}$”	ASTM D 6163, Type I	Self-adhered, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
SA Base Sheet FR	66’ 8” x 3’ 3-$^{3}/_{8}$”	ASTM D 6163	Self-adhered, fire-rated, fiberglass reinforced, SBS modified bitumen membrane with a self-adhering back face and a smooth top surface.
Nail Base P	65’ 8” x 3’ 3-3/8”	ASTM D 6164	SBS modified asphalt coated polyester reinforced base sheet.
APP Torch S	32’ 10” x 3’ 3-3/8”	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a smooth or sanded top surface.
APP Torch G	32’ 10” x 3’ 3-3/8”	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
APP Torch G FR	32’ 10” x 3’ 3-3/8”	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.
APP Torch KoolCap® G	32’ 10” x 3’ 3-3/8”	ASTM D 6222	Torch applied, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface.
APP Torch KoolCap® G FR	32’ 10” x 3’ 3-3/8”	ASTM D 6222	Torch applied, fire-rated, polyester reinforced, APP modified bitumen membrane with a burn off polyethylene back face and a granule top surface and fire retardant chemistry.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Poly ISO 2	Polyisocyanurate foam insulation	Mule-Hide Products Co, Inc.
Mule-Hide Poly ISO 1	Polyisocyanurate foam insulation	Mule-Hide Products Co, Inc.
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
ACFoam-III	Polyisocyanurate foam insulation	Atlas Roofing Corporation
DensDeck	Gypsum insulation board	Georgia Pacific Gypsum LLC
DensDeck Prime	Gypsum insulation board	Georgia Pacific Gypsum LLC
FescoBoard	Rigid perlite roof insulation board.	Johns Manville Corp.
H-Shield-CG	Polyisocyanurate/perlite composite insulation	Hunter Panels, LLC
ENRGY 3	Polyisocyanurate foam insulation	Johns Manville Corp.
Multi-Max FA-3	Polyisocyanurate foam insulation	Rmax Operating, LLC
SECUROCK Gypsum-Fiber Roof Board	Fiber reinforced coverboard	USG Corporation
EnergyGuard Polyiso Insulation	Polyisocyanurate foam insulation	GAF
ISO 95+ GL	Polyisocyanurate foam insulation	Firestone Building Products Company, LLC
Structodek High Density Fiberboard Roof Insulation	Wood fiber board	Blue Ridge Fiberboard, Inc.

APPROVED FASTENERS/ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Dekfast DF-#12-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
2.	Dekfast DF-#14-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
3.	Dekfast DF-#15-PH3	Insulation fastener for wood, steel and concrete decks	Various	SFS Group USA, Inc.
4.	Dekfast PLT-H-2-7/8	Galvalume hex stress plate.	2 7/8" x 3 ¼"	SFS Group USA, Inc.
5.	#12 Standard Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
6.	#14 Roofgrip	Insulation and membrane fastener	Various	OMG, Inc.
7.	Flat Bottom Metal Plate	Galvalume AZ50 stress plate	3" square	OMG, Inc.
8.	Mule-Hide HDP Fastener	Insulation fastener for steel and wood decks	Various	Mule-Hide Products Co, Inc.
9.	Mule-Hide 3" Insulation Plate	Galvalume steel plate	3" round	Mule-Hide Products Co, Inc.
10.	3 in. Round Metal Plate	Galvalume stress plate.	3" round	OMG, Inc.
11.	OMG Heavy Duty	Truss head, self-drilling, pinch point fastener	Various	OMG, Inc.
12.	Trufast #12 DP Fastener	Carbon steel screw with #3 phillips drive	Various	Altenloh, Brinck & Co. U.S., Inc.
13.	OMG 3" Galvalume Steel Plate	Galvalume coated steel plate	3" round	OMG, Inc.
14.	AccuTrac Flat Bottom	Aluminized steel plate	3" square	OMG, Inc.
15.	Simplex MAXX Cap Fasteners	Polymer stress plate with two ring shank nails	3" round x 1" long	Simplex Nails. Inc.
16.	Insta Stik Quik Set Insulation Adhesive	A single component urethane foam adhesive		The Dow Chemical Co.
17.	Millennium One Step Foamable Insulation Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company
18.	Millennium One Step Green Foamable Insulation Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company
19.	Millennium PG-1 Pump Grade Adhesive	A two component, low rise, polyurethane foam adhesive		H.B. Fuller Company
20.	OMG OlyBond 500	A two component polyurethane foam adhesive		OMG, Inc.

APPROVED FASTENERS/ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
21.	OMG OlyBond 500 Green	A two component, low rise, polyurethane foam adhesive		OMG, Inc.
22.	PG 100	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	Polyglass USA, Inc.
23.	XtraFlex 10	A penetrating solution of solvent and a blend of selected asphalts used to promote adhesion.	1, 3, 5, 50, 55 gal, tube or 17 oz. spray can	Polyglass USA, Inc.
24.	PG 350	A fibered rubberized adhesive designed for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
25.	POLYPLUS 35	A fibered rubberized adhesive designed for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
26.	XtraFlex 35	A fibered rubberized adhesive designed for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
27.	PG 450	A thick, fibered, rubberized flashing cement.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
28.	PG 500	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
29.	POLYPLUS 45	A thick, fibered, rubberized flashing cement.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
30.	POLYPLUS 50	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
31.	XtraFlex 50 Premium Modified Wet/Dry Cement	A thick, fibered, rubberized flashing cement for use with modified bitumen membranes.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
32.	PG 400	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.

APPROVED FASTENERS/ADHESIVES:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
33.	PG 425	A thick, fibered, rubberized flashing cement for use in dry or damp conditions.	1, 3, 5, 50, 55 gal. or tube	Polyglass USA, Inc.
34.	WB-3000	A low-VOC, water-based acrylic primer to enhance adhesion of self-adhered membranes.	5 gallon pail	Polyglass USA, Inc.

APPROVED SURFACING:

TABLE 4

Chosen components must be applied according to manufacturer's application instructions.

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
1.	Gravel	To be installed in a flood coat of approved asphalt at 60 lbs/sq	400 lbs/sq	N/A	Generic
2.	Slag	To be installed in a flood coat of approved asphalt at 60 lbs/sq	300 lbs/sq	N/A	Generic
3.	KM Acryl 15	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
4.	KM Acryl 15 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
5.	KM Acryl 25	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
6.	KM Acryl 25 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
7.	KM-PS #220	A single component, white or tinted, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
8.	KM-PS #250	A premium grade high solids, white or tinted, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
9.	PG 300	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
10.	PG 600	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
11.	PG 650	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
12.	PG 700	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.

APPROVED SURFACING:

TABLE 4

Chosen components must be applied according to manufacturer's application instructions.

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
13.	PG 700 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
14.	PG 800	An asphalt based, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.
15.	PolyBrite 70	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
16.	PolyBrite 70 QS	A premium white or tinted quick setting, elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
17.	PolyBrite 90	A premium grade high solids, white or tinted, single component, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
18.	PolyBrite 95	A single component, white or tinted, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
19.	POLYPLUS 60	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
20.	POLYPLUS 65	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
21.	XtraFlex 60 Aluminum Roof Coating	Non-fibered aluminum roof coating.	½-1 gal/sq	ASTM D2824 Type I	Polyglass USA, Inc.
22.	XtraFlex 65 Aluminum Roof Coating Fibered	Fibered aluminum roof coating.	1½-2 gal/sq	ASTM D2824 Type III	Polyglass USA, Inc.
23.	XtraFlex 70 Premium Acrylic FR Roof Coating	A premium white or tinted elastomeric acrylic based roof coating (water-based). A polyester fabric may be used for reinforcement with this coating.	1-1½ gal/sq	ASTM D6083	Polyglass USA, Inc.
24.	XtraFlex 80 Emulsion Roof Coating	An asphalt based, non-fibered clay emulsion	3 gal/sq in two coats	ASTM D1227	Polyglass USA, Inc.

APPROVED SURFACING:

TABLE 4

Chosen components must be applied according to manufacturer's application instructions.

Number	Product Name	Product Description	Application Rate	Specification	Manufacturer
25.	XtraFlex 30 Bituminous Roof Coating Fibered	An asphalt cutback fibered roof coating. May be applied by brush or spray equipment to rejuvenate aged BUR	1½-2 gal/sq	ASTM D4479	Polyglass USA, Inc.
26.	XtraFlex SRC 8000	A single component, white or tinted, solvent, moisture cure silicone coating.	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.
27.	XtraFlex SRC 9600	A premium grade high solids, single component, white or tinted, moisture cure, fluid applied silicone coating	1.25 gal/sq	ASTM D6694	Polyglass USA, Inc.

EVIDENCE SUBMITTED:

Test Agency	Test Name/Report	Report No.	Date
Factory Mutual Research Corporation	4470	2W7A7.AM	08.04.94
	4470	3000857	01.12.00
	4470	3004091	01.12.00
	4470	3001334	02.15.00
	4470	3031350	09.27.07
	4470	RR202591	10.22.15
Underwriters Laboratory	TAS 114	00NK20869	06.08.00
	UL 790	R14571	06.30.15
Trinity | ERD	TAS 114	11751.05.03	05.30.03
	TAS 114	11758.08.03	08.11.03
	TAS 114	P1738.02.07	02.05.07
	TAS 117(B)-ASTM D6862	C8500SC.11.07	11.30.07
	ASTM D 6164 / D 6222	P10490.10.08-R1	10.03.08
	TAS 114	P13760.09.09	09.10.09
	ASTM D6163 / ASTM D 4601	P33960.03.11	03.15.11
	FM 4470 & TAS 114	P33970.03.11	03.15.11
	TAS 117 (B) & TAS 114	P39680.03.13	03.04.13
	ASTM D6164	P37590.03.13-3A	03.06.13
	TAS 114	11757.12.00-1-R1	04.29.13
	TAS 114	11757.04.01-1-R1	04.30.13
	ASTM D6509	P37590.03.13-1-R1	06.26.13
	ASTM D6222	P37590.07.13-2	07.01.13
	ASTM D6222	P37590.03.13-5-R1	07.01.13
	ASTM D6163	P37590.03.13-2-R1	07.01.13
	ASTM D6164	P37590.07.13-1	07.02.13
	TAS 114 & FM 4474	P41630.08.13	08.06.13
	ASTM D4601 / TAS 117	P45940.09.13	09.04.13
	ASTM D4601	P44370.10.13	10/04/13
	ASTM D6162	SC5170.05.15	05.08.15
	ASTM D6162	SC5170.12.15-1	12.29.15
	ASTM D6163	PLYG-P45440SC.03.15-2-R1	12.29.15
	ASTM D6163	PLYG-P45440SC.03.15-1-R1	02.19.16
	TAS 114 & FM 4474	PLYG-SC8905.05.16-1	05.17.16
	TAS 114 & FM 4474	PLYG-SC8905.05.16-2	05.17.16
	TAS 114	P1734.07.06-R2	08.24.16
PRI Asphalt Technologies	ASTM D6222	PUSA-062-02-01	12.04.07
	ASTM D6163	PUSA-064-02-02	02.27.08
	ASTM D6694	PUSA-134-02-01	05.16.14
	ASTM D6694	PUSA-135-02-01	05.16.14

APPROVED ASSEMBLIES

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type A(1): All insulation layers are adhered to a mechanically attached anchor sheet. Membrane is subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of Nail Base*, or G2 Base fastened to the deck as described below:
**Only with OMG or Trufast fastening components.*

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

Fastening #2: Attach anchor sheet using OMG Roofgrip Fasteners with Flat Bottom Metal Plates, Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8, or Mule-Hide HDP Fastener Fasteners with Mule-Hide 3" Insulation Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ISO 95+ GL, ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, Multi-Max FA-3		
Minimum 1.5" 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.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FescoBoard		
Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation		
Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**

Note: Apply top layer of insulation in a full mopping of any approved mopping 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.

Primer: (Optional)	(*For self-adhering base sheets only*) Top insulation is primed with WB-3000.
Base Sheet:	One ply of Nail Base, Nail Base Nail Base P or one ply of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One ply of Nail Base, Nail Base Nail Base P or APP Torch S, torch applied. Or One ply of SA Base Sheet*, SA Base Sheet FR*, self-adhered to DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.*Requires torch-applied ply or cap sheet.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base Nail Base P, one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One or more plies of Nail Base, Nail Base Nail Base P or APP Torch S, torch applied.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-52.5 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.

System Type A(2): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of Nail Base*, or G2 Base, fastened to the deck as described below:
**Only with OMG or Trufast fastening components.*

Fastening: Attach anchor sheet using Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plate or Simplex MAXX Cap Fasteners spaced 10" o.c. in 4" lap and 10" o.c. in three equally spaced staggered center rows**.**

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in a full mopping of approved 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P, APP Torch S, torch applied.

Or

One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base Nail Base P, APP Torch S, torch applied. Or One or more plies of Nail Base or Nail Base Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied. Or One ply of APP Torch KoolCap® G SBS or APP Torch KoolCap® G SBS FR, torch or hot asphalt applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-52.5 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type A(3): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of Nail Base or G2 Base, fastened to the deck as described below:

Fastening: Attach anchor sheet using OMG #14 Roofgrip fasteners with Flat Bottom Metal Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ISO 95+ GL, ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, Multi-Max FA-3		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board		
Minimum ¼" thick	**N/A**	**N/A**
FescoBoard		
Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation		
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.

Primer: (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

(Optional)

Base Sheet: One ply of Nail Base, Nail Base P, or one ply of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet*, SA Base Sheet FR* or SA Base Sheet PLUS*, self-adhered to DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-60 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type A(4): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of Nail Base or G2 Base fastened to the deck as described below:

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

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ISO 95+ GL, ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, Multi-Max FA-3 Minimum 1.5" 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.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: Apply top layer of insulation in a full mopping of any approved mopping 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet:	One ply of Nail Base, Nail Base P or one ply of Type IV or VI ply sheet, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered to DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. *Requires torch-applied ply or cap sheet.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-60 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type A(5): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of Nail Base or Nail Base P, fastened to the deck as described below:

Fastening: Attach anchor sheet using 12 ga. annular ring shank nails and 1-5/8" tin-caps attached 6" o.c. in 4" lap and 6" o.c. in four equally spaced staggered center rows**.**

One or more layers of any of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, H-Shield-CG, Multi-Max FA-3, ENRGY 3		
Minimum 1" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet with Millennium One-Step Foamable Adhesive, Millennium One Step Green Foamable Insulation Adhesive, Millennium PG-1 Pump Grade Adhesive, OMG OlyBond 500, OMG OlyBond 500 Green Adhesive, Insta Stik™ Quik Set Insulation Adhesive, applied in continuous rows 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base or Nail Base P or one ply of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base or Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One or more plies of Nail Base Nail Base P or APP Torch S, torch applied.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.

System Type A(6): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of G2 Base fastened to the deck as described below:

Fastening: Attach anchor sheet using 12 ga. annular ring shank nails and 1-5/8" tin-caps attached 8" o.c. in 4" lap and 8" o.c. in four equally spaced staggered center rows**.**

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in a full mopping of approved 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One or more plies of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-67.5 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 screws at 6" o.c.

System Type A(7): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of G2 Base fastened to the deck as described below:

Fastening: Attach anchor sheet using Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plates spaced 9" o.c. in 4" lap and 9" o.c. in four equally spaced staggered center rows**.**

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in a full mopping of approved 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.

Primer: (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

(Optional)

Base Sheet: One ply of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P, APP Torch S, torch applied. Or One or more plies of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-82.5 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 screws at 6" o.c.

System Type A(8): All insulation layers are adhered to a mechanically attached anchor sheet. Membranes subsequently adhered to insulation

All General and System Limitations apply.

Anchor Sheet: One ply of G2 Base fastened to the deck as described below:

Fastening: Attach anchor sheet using 12 ga. annular ring shank nails and 1-5/8" tin-caps attached 8" o.c. in 4" lap and 8" o.c. in four equally spaced staggered center rows**.**

One or more layers of any of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ACFoam-II, Poly ISO 2, ACFoam-III, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3 Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall be adhered in a full mopping of approved 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One or more plies of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -90.0 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type B(1): Base layer of insulation mechanically fastened, top insulation layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

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, Poly ISO 2, Mule-Hide Poly ISO 1, , ENRGY 3 Minimum 1.5" thick	**2 with 4; 8 with 9**	**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
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**

Note: Insulation shall be adhered with approved 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. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (*Optional if using ply sheet*) One ply of Nail Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (*Optional if using base sheet*) One or more plies of APP Torch S torch applied.

Or

One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type B(2): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

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, Poly ISO 2, Mule-Hide Poly ISO 1, ENRGY-3 Minimum 1.5" thick	**2 with 4; 8 with 9**	**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
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**N/A**	**N/A**

Note: Optional top layer of insulation shall be adhered with approved 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. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: (*Optional if using ply sheet*) One ply of Nail Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (*Optional if using base sheet*) One or more plies of Polybond, Polyflex or XtraFlex APP S torch applied.

Or

One or more plies of Nail Base, Nail Base Nail Base P, Elastoflex S6, Elastoflex V, Elastoshield HT, XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS HT Base 650 or XtraFlex SBS Poly Base, one or more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type B(3): Base layer of insulation mechanically fastened, top layer adhered with approved asphalt. Membranes subsequently adhered to insulation.

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, Poly ISO 2, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation Minimum 2.0" thick	**2 with 4; 8 with 9; 11 with 13**	**1:1 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**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with approved 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. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One ply of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base, Nail Base P, APP Torch S, torch applied.

Or

One or more plies of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.

System Type C(1): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

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, Poly ISO 2, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation, Minimum 1.0" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4;8 with 9; 11 with 13**	**1:1.78 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered.
*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One or more plies of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-45 psf; (See General Limitation #7)

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type C(2): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any approved Polyisocyanurate Listed in Table 2 Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**2 with 4**	**1:1.33 ft²**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4**	**1:1.33 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: (*Optional if using ply sheet in hot asphalt*) One ply of Nail Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet*, SA Base Sheet FR*, self-adhered to DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.

*Requires torch-applied ply or cap sheet.

Ply Sheet: (*Optional if using base sheet in hot asphalt*) One or more plies of APP Torch S torch applied.

Or

One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 4" o.c.

System Type C(3): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any approved Polyisocyanurate Listed in Table 2 Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**2 with 4**	**1:1.33 ft²**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4**	**1:1.33 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: (*Optional if using ply sheet in hot asphalt*) One ply of Nail Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet* or SA Base Sheet FR*, self-adhered to DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board.

*Requires torch-applied ply or cap sheet.

Ply Sheet: (*Optional if using base sheet in hot asphalt*) One or more plies of APP Torch S torch applied.

Or

One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.

System Type C(4): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

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, Poly ISO 2, Mule-Hide Poly ISO 1, ENRGY 3, Multi-Max FA-3, EnergyGuard Polyiso Insulation, Minimum 1.0" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4; 8 with 9; 11 with 13**	**1:1 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.

Primer: (Optional) (*For self-adhering base sheets only*) Top insulation is primed with WB-3000.

Base Sheet: One ply of Nail Base, Nail Base P, APP Torch S, torch applied.

Or

One ply of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply of SA Base Sheet*, SA Base Sheet FR*, self-adhered.

*Requires torch-applied ply or cap sheet.

Ply Sheet: (Optional) One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied.

Or

One or more plies of Nail Base, Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type C(5): All layers of insulation are mechanically attached to roof deck. Membranes subsequently adhered to insulation.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Any approved Polyisocyanurate Listed in Table 2 Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Structodek High Density Fiberboard Roof Insulation Minimum ½" thick	**2 with 4**	**1:1.33 ft²**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**2 with 4**	**1:1.33 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 if using ply sheet in hot asphalt*) One ply of Nail Base, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (*Optional if using base sheet in hot asphalt*) One or more plies of APP Torch S torch applied.

Or

One or more plies of Nail Base, Nail Base P or one to more plies of Type IV or VI ply sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.

System Type D(1): All layers of insulation and base sheet mechanically fastened. Membranes subsequently adhered to insulation.

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/ft^2**
Any Approved Polyisocyanurate listed in Table 2 Minimum 1" thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane 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.

Base Sheet: One ply of Nail Base, G2 Base, fastened to the deck as described below.

Fastening: Attach base sheet using OMG #14 Roofgrip fasteners with Flat Bottom Metal Plates, Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8, Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plates, spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

Ply Sheet: (Optional) One or more plies of APP Torch Storch applied.

Or

One or more plies of Nail Base, Nail Base P orone or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One or more plies of SA Base Sheet* or SA Base Sheet FR*, self-adhered.

*Requires torch-applied ply or cap sheet.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type: SBS/APP

Deck Type 1I: Wood, Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.

System Type D(2): All layers of insulation and base sheet mechanically fastened. Membranes subsequently adhered to insulation.

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**
Any approved Polyisocyanurate Listed in Table 2 Minimum 1" thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
FescoBoard Minimum ¾" thick	**N/A**	**N/A**
Structodek High Density Fiberboard Minimum ½" thick	**N/A**	**N/A**
DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum ¼" thick	**N/A**	**N/A**

Note: All insulation shall have preliminary attachment, prior to the installation of the roofing membrane 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.

Base Sheet: One ply of Nail Base, Nail Base P or G2 Base, fastened to the deck as described below:
* Requires torch-applied ply or cap sheet.

Fastening: Attach base sheet using OMG #14 Roofgrip fasteners with Flat Bottom Metal Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.

Ply Sheet: (Optional) One or more plies of APP Torch S, torch applied.
Or
One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

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

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non- Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.
System Type E(1):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of Nail Base, G2 Base, fastened to the deck as described below:
Fastening #1:	(*Polyglass Base or G2 Base only*) Attach base sheet using 11 ga. annular ring shank and 1-5/8" diameter tin caps spaced 8" o.c. in a 4" lap and 8" o.c. in three equally spaced staggered rows in the center of the sheet
Fastening #2:	Attach base sheet using OMG #14 Roofgrip fasteners with Flat Bottom Metal Plates, Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8,or Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plates, spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-52.5 psf; (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
System Type E(2):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of Nail Base, sheet fastened to the deck as described below:
Fastening:	Attach base sheet using Simplex MAXX Cap fasteners spaced 9" o.c. in a 2" lap and 12" o.c. in two equally spaced staggered center rows.
Membrane:	One ply of APP Torch G or APP Torch KoolCap® G torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-52.5 psf; (See General Limitation #7)

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.
System Type E(3):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of Nail Base, APP Torch S, G2 Base, fastened to the deck as described below:
Fastening:	Attach base sheet using OMG #14 Roofgrip fasteners with Flat Bottom Metal Plates spaced 12" o.c. in a 4" lap and 12" o.c. in two equally spaced staggered rows in the center of the sheet.
Ply Sheet: (Optional)	One or more plies of APP Torch S torch applied. Or One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-60 psf; (See General Limitation #7)

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 screws at 6" o.c.
System Type E(4):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of G2 Base fastened to the deck as described below:
Fastening:	Attach base sheet using 11 ga. annular ring shank and 1-5/8" diameter tin caps spaced 8" o.c. in a 4" lap and 8" o.c. in three equally spaced staggered rows in the center of the sheet.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P, or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-60 psf; (See General Limitation #7)

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
System Type E(5):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of G2 Base fastened to the deck as described below: *Requires torch-applied ply or cap sheet.
Fastening:	Attach base sheet using 12 ga. annular ring shank nails and 1-5/8" tin-caps attached 8" o.c. in 4" lap and 8" o.c. in four equally spaced staggered center rows.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied. Or One or more plies of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-67.5 psf; (See General Limitation #7)

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non- Insulated
Deck Description:	Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with 8d ring shank nails at 6" o.c.
System Type E(6):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of G2 Base fastened to the deck as described below:
Fastening:	Attach base sheet using Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plate or Simplex MAXX Cap Fasteners spaced 10" o.c. in 4" lap and 10" o.c. in three equally spaced staggered center rows**.**
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied. Or One or more plies of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-75.0 psf; (See General Limitation #7)

Membrane Type:	APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
System Type E(7):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of G2 Base sheet fastened to the deck as described below:
Fastening:	Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in three equally spaced staggered center rows.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-90.0 psf; (See General Limitation #7)

Membrane Type:	SBS/APP
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{15}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
System Type E(8):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of G2 Base fastened to the deck as described below:
Fastening:	Attach base sheet using Dekfast DF-#14-PH3 with Dekfast PLT-H-2-7/8 or OMG Heavy-Duty with OMG 3" Galvalume Steel Plates or OMG #14 Roofgrip fasteners with Flat Bottom Plates or AccuTrac Flat Bottom Plates or Mule-Hide HDP Fastener with Mule-Hide 3" Insulation Plate or Simplex MAXX Cap Fasteners spaced 9" o.c. in 4" lap and 9" o.c. in four equally spaced staggered center rows**.**
Ply Sheet: (Optional)	One ply of Nail Base, Nail Base P or APP Torch S, torch applied. Or One ply of Nail Base or Nail Base P, adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-90.0 psf; (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 6" o.c.
System Type E(9):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of or Nail Base, sheet fastened to the deck as described below:
Fastening:	Attach base sheet using Simplex MAXX Cap fasteners spaced 6" o.c. in a 2" lap and 6" o.c. in two equally spaced staggered center rows.
Membrane:	One ply of APP Torch G or APP Torch KoolCap® G torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-90.0 psf; (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 4" o.c.
System Type E(10):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of Nail Base, fastened to the deck as described below:
Fastening:	Attach base sheet using Simplex MAXX Cap fasteners spaced 6" o.c. in a 2" lap and 6" o.c. in three equally spaced staggered center rows.
Membrane:	One ply of APP Torch G or APP Torch KoolCap® G, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-105.0 psf; (See General Limitation #7)

Membrane Type:	SBS
Deck Type 1:	Wood, Non-Insulated
Deck Description:	Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #8 wood screws at 6" o.c.
System Type E(11):	Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet:	One ply of Nail Base or Nail Base P, fastened to the deck as described below:
Fastening:	11 ga. Annular ring shanked nails and 1-5/8" tin-caps 6" o.c. in 4" lap and 6" o.c. in four equally spaced staggered rows. Tin-caps are primed with PG 100 or XtraFlex 10.
Ply Sheet: (Optional)	One or more plies of Nail Base, Nail Base P or one or more plies of Type IV or VI ply sheet adhered in full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One or more plies of Nail Base, Nail Base P or APP Torch S, torch applied. Or One ply of SA Base Sheet*, SA Base Sheet FR*, self-adhered. *Requires torch-applied cap sheet.
Membrane:	One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G or APP Torch KoolCap® G FR, torch applied.
Surfacing: (Optional)	Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.
Maximum Design Pressure:	-112.5 psf; (See General Limitation #7)

Membrane Type: APP

Deck Type 1: Wood, Non-Insulated

Deck Description: Min. $^{19}/_{32}$" plywood or wood plank attached to structural supports at a maximum of 24" o.c. with #10 wood screws at 4" o.c.

System Type E(12): Base sheet is mechanically attached to roof deck. Membranes subsequently adhered.

All General and System Limitations apply.

Base Sheet: One ply of Nail Base, G2 Base, 0 sheet fastened to the deck as described below:

Fastening: Attach base sheet using OMG #12 Standard Roofgrip or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates or OMG Flat Bottom Metal Plates spaced 6" o.c. in a 4" lap and 6" o.c. in five equally spaced staggered center rows.

Membrane: One ply of APP Torch S, APP Torch G, APP Torch G FR, APP Torch KoolCap® G, APP Torch KoolCap® G FR, torch applied.

Surfacing: (Optional) Install one of the approved surfacing products listed in Table 4 to obtain desired coating or required fire classification.

Maximum Design Pressure: -120.0 psf; (See General Limitation #7)

WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Type IV and Type VI 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 side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.
   Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
11. 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