MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786)315-2590 F (786) 31525-99
www.miamidade.gov/economy

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

NOTICE OF ACCEPTANCE (NOA)

Johns Manville Corporation
717 17th Street
Denver, CO 80202

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: Johns Manville Modified Bitumen Roofing Systems over Concrete 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. 13-0529.19 and consists of pages 1 through 84.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Materials:	SBS
Deck Type:	Concrete
Maximum Design Pressure:	-536.5 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
JM BaseGrip SD/SA	36" x 72’	ASTM D4601	Glass reinforced, self-adhering SBS modified bitumen base sheet
DynaBase	39-3/8” x 49’2”	ASTM D 6163	A glass reinforced SBS modified bitumen base sheet.
DynaBase HW	39-3/8” x 49’2”	ASTM D 6163	A glass reinforced SBS modified bitumen base sheet for heat welded applications.
DynaBase PR	39-3/8” x 49’2”	ASTM D6164	A polyester reinforced SBS modified bitumen base sheet.
DynaBase XT	39-3/8" x 49’-2”	ASTM D 6163	A glass reinforced SBS modified bitumen base or inner ply sheet.
DynaClad	39-3/8" x 33’10”	ASTM D6298	A glass reinforced base sheet SBS modified bitumen membrane surfaced with foil.
DynaFast 180 HW	39-3/8” x 49’2”	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet for use in heat weld applications.
DynaFast 180 S	39-3/8” x 49’2”	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet.
DynaFast 250 HW	39-3/8” x 32’10”	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet for use in heat weld applications.
DynaGlas	39-3/8" x 32’-10"	ASTM D6163	A glass reinforced SBS modified bitumen membrane surfaced with granules.
DynaGlas 30 FR	39-3/8" x 32’-10”	ASTM D6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules.
DynaGlas FR	39-3/8" x 32’-10”	ASTM D6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules.
DynaGlas FR CR	39-3/8" x 32’-10”;	ASTM D6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules and a reflective white coating for use in heat weld applications.
DynaGlas FR CR G	39-3/8" x 32’10”	ASTM D 6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules and cool roof coating.

Product	Dimensions	Test Specification	Product Description
DynaGlas FR XT	39-3/8" x 32'-10"	ASTM D6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules.
DynaGrip Base SD/SA	39-3/8" x 65'-7"	ASTM D4601	Glass reinforced, self-adhering SBS modified bitumen base sheet
DynaKap FR T1	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.
DynaKap FR T1 CR G	39-3/8" x 32'10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules and cool roof coating.
DynaKap FR T1 HW CR G	39-3/8" x 32'10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules with cool roof coating for use in heat weld applications.
DynaLastic 180	39-3/8" x 32'-10"	ASTM D6164	A polyester reinforced SBS modified bitumen membrane surfaced with granules.
DynaLastic 180 FR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules.
DynaLastic 180 FR CR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules.
DynaLastic 180 FR CR G	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules and cool roof coating.
DynaLastic 180 S	39-3/8" x 32'10"	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet.
DynaLastic 250 FR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules.
DynaLastic 250 FR CR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules and a reflective white coating.
DynaLastic 250 FR CR G	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules, cool roof coating and a reflective white coating.
DynaLastic 250 S	39-3/8" x 32'-10"	ASTM D 6164	A polyester reinforced SBS modified bitumen base or inner ply sheet.
DynaMax FR	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.
DynaMax FR Plus	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.

Product	Dimensions	Test Specification	Product Description
DynaMax FR HW	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.
DynaMax FR HW CR	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.
DynaMax FR CR	39-3/8" x 32'-10"	ASTM D6162	A fire resistant, composite reinforced SBS modified bitumen membrane surfaced with granules.
DynaMax S	39-3/8" x 32'-10"	ASTM D6162	A composite reinforced SBS modified bitumen base or inner ply sheet.
DynaPly T1	39-3/8" x 32'-10"	ASTM D6162	A composite reinforced SBS modified bitumen base or inner ply sheet.
DynaWeld 180 S	39-3/8" x 32'-10"	ASTM D6162	A polyester reinforced SBS modified bitumen base or inner ply sheet for use in heat weld applications.
DynaWeld 250 S	39-3/8" x 32'-10"	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet for use in heat weld applications.
DynaWeld Base	39'-3/8" x 32'-10"	ASTM D6163	A glass reinforced SBS modified bitumen base sheet for heat welded applications.
DynaWeld Cap 180 FR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.
DynaWeld Cap 180 FR CR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.
DynaWeld Cap 250	39-3/8" x 32'-10"	ASTM D6164	A polyester reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.
DynaWeld Cap 250 FR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.
DynaWeld Cap 250 FR CR	39-3/8" x 32'-10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules and a reflective white coating for use in heat weld applications.
DynaWeld Cap 250 FR CR G	39-3/8" x 32'10"	ASTM D6164	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules, cool roof coating and a reflective white coating for use in heat weld applications.
DynaWeld Cap FR	39'-3/8" x 32'-10"	ASTM D6163	A fire resistant, glass reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.
DynaWeld Cap FR XT	39'-3/8" x 32'-10"	ASTM D6163	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules for use in heat weld applications.

Product	Dimensions	Test Specification	Product Description
DynaWeld Cap FR CR	39’-3/8” x 32’-10”	ASTM D6163	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules and a reflective white coating for use in heat weld applications.
DynaWeld Cap FR CR G	39-3/8" x 32’10”	ASTM D6163	A fire resistant, polyester reinforced SBS modified bitumen membrane surfaced with granules, cool roof coating and a white reflective coating for use in heat weld applications.
GlasBase Plus	36" x 108'	ASTM D4601	Type II asphalt impregnated and coated glass fiber base sheet for use in conventional and modified bitumen built-up roofing.
GlasKap	36” x 36’	ASTM D3909	A mineral surfaced, asphalt coated, fiberglass cap sheet.
GlasKap CR	36” x 36’	ASTM D3909	A white mineral surfaced, white acrylic coated, fiberglass cap sheet.
GlasKap Plus	36” x 36’	ASTM D3909	A mineral surfaced, asphalt coated, fiberglass cap sheet.
GlasPly IV	36" x 180'	ASTM D2178	Type IV asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing.
GlasPly Premier	36" x 180'	ASTM D2178	Type VI asphalt impregnated glass felt for use in conventional and modified bitumen built-up roofing.
PermaPly 28	36" x 106'	ASTM D4601	Type II asphalt impregnated and coated glass fiber base sheet for use in conventional and modified bitumen built-up roofing.
Ventsulation Felt	36" x 36'	ASTM D4897	Heavy duty fiber glass base sheet impregnated and coated on both sides with asphalt with or without fine mineral stabilizer. Surfaced on the bottom side with coarse mineral granules embedded in asphaltic coating.
FesCant Plus Cant Strips, and Taper Edge	various	ASTM C728	Factory pre-fabricated cant strips and taper edge, manufactured from expanded perlite insulation.
MBR Flashing Cement Base and Activator	N/A	Proprietary	A two component elastomeric, cold application adhesive, consisting of a modified proprietary compound with an asphalt base.
MBR Bonding Adhesive	N/A	proprietary	A two component urethane cold application adhesive.
MBR Cold Application Adhesive	5, 55, and 350 gal.	ASTM D3019 Type III	One part, elastomeric cold application adhesive

Product	Dimensions	Test Specification	Product Description
Urethane Insulation Adhesive	N/A	Proprietary	Urethane insulation adhesive.
JM Roofing System Urethane Adhesive	Various	Proprietary	A two-component, cold-applied adhesive
JM Two Part Urethane Insulation Adhesive	Various	Proprietary	A two-component, cold-applied adhesive
One-Step Foamable Adhesive	N/A	Proprietary	A two-part urethane insulation adhesive
Bestile Industrial Roof Cement	various	ASTM D4586 Type I	A trowel grade, cutback bitumen flashing grade cement mixture including inorganic fibers and mineral stabilizers.
Flex-I-Drain	various	BOCA 76-61, SBCCI 89204, UBC 3236	Two-piece flexible drain system composed of a Noryl deck flange, a flexible neoprene bellows and no hub connection. Available in various sizes and styles for most retro-fit applications.
PC/PET RetroDrain	various	N/A	Engineered resin copolymer fabricated drain for retrofit applications.
USII RetroDrain	various	N/A	One piece, aluminum fabricated drain for retrofit applications.
SuperDome RetroDrain	various	N/A	Cast aluminum, heavy-duty drain for retrofit applications.
FP-10 Vents	10" deck flange, base diameter of 4" and a height of 6"	N/A	One-way roof vent, designed for use in various roof systems, for the release of pressure created by gases or moisture vapor trapped within the roofing system.
Expand-O-Guard	various	N/A	Elastomeric expansion joint cover for vertical expansion and seismic joints. Manufactured from non-reinforced, form-supported elastomeric bellows with a bifurcated waterproof attachment to metal flanges.
Expand-O-Flash	various	N/A	Expansion joint covers manufactured from non-reinforced, form-supported elastomeric bellows with a bifurcated waterproof attachment to metal flanges.
Presto-Lok Fascia and Flashing System	various	TAS 114	A multi-piece fascia and flashing system for built-up and modified bitumen roofing systems manufactured from aluminum or steel.
DynaTred & DynaTred Plus Roof Walkway	various	N/A	Preformed, skid-resistant boards.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3.E	Polyisocyanurate Insulation.	Johns Manville
ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI	Isocyanurate Insulation with glass reinforced facers	Johns Manville
ENRGY 3 FR, ENRGY 3 FR 25 PSI	Isocyanurate Insulation with inorganic coated glass reinforced facers; bottom face is premium coated for combustible decks.	Johns Manville
Fesco Foam, DuraFoam	Polyisocyanurate Insulation with perlite facer	Johns Manville
Retro-Fit Board, DuraBoard, RetroPlus Roof Board	High-density perlite roof insulation.	Johns Manville
Fesco Board	Rigid perlite roof insulation board.	Johns Manville
JM SECUROCK Gypsum-Fiber Roof Board	Rigid, gypsum-based board stock	Johns Manville
Invinsa Roof Board	High density polyisocyanurate board	Johns Manville

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	All Purpose Fastener	Insulation fastener for concrete decks.	#14 x 16” max. length; #3 Phillips head	Johns Manville
2.	Structural Concrete Deck Fastener	Insulation fastener for concrete decks.	Various	Johns Manville
3.	UltraFast 3” Round Metal Plate or UltraFast Square Recessed Metal Plate	Galvalume AZ55 steel plate	3” round 3” square	Johns Manville
4.	High Load Plates	Galvalume steel plate	2-3/8”	Johns Manville

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Factory Mutual Research Corp.	3001482	FM 4470	08/11/98
	3001629	FM 4470	09/10/98
	0Z8A9.AM	FM 4470	09/10/98
	3D4A4.AM	FM 4470	09/28/98
	3007148	FM 4450	04/19/00
	3006346	FM 4450	09/15/00
	3001457	FM 4470	03/04/02
	3009499	FM 4470	04/04/01
	3011248	FM 4470	11/01/02
	3014090	FM 4470	09/05/02
	3012974	FM 4450	06/03/02
	3037222	FM 4470	10/02/09
	3026130	FM 4470	04/26/09
	3037540	FM 4470	10/20/10
	3012064	FM 4470	06/25/02
	3053754	FM 4470	03/04/15
	3040986	FM 4470	09/23/11
	3054150	FM 4470	05/13/15
	3036559	FM 4470	10/02/09
	3046174	FM 4470	04/03/13
	3004299	FM 4470	10/02/01
	3043824	FM 4470	06/04/12
	3023458	FM 4470	07/18/06
	3040986	FM 4470	09/23/11
	3052113	FM 4470	08/29/14
	RR205623	FM 4470	07/08/16
Dynatech Engineering, Inc.	4361.5.95-1	TAS 114	05/95
Underwriters Laboratories, Inc.	R10167	UL 790	05/27/13
Exterior Research & Design, LLC	#10390A-12.97-1	TAS 114	12/97
	10391.01.03	TAS 114	01/29/03
	02843.02.05-10-R1	TAS 114	02/07/07
	02843.02.07	TAS 114	02/07/07
Trinity | ERD	J7670.06.08	ASTM D3909	06/16/08
	J6990.12.07-R1	ASTM D6162/D6164	03/24/10
	J13700.05.10-1-R1	ASTM D6163	01/25/11
	J17040.11.09-R1	ASTM D6164	03/11/10
	JM-11190.03.16	TAS 114 (J)	03/11/16
	JM-SC11320.03.16	TAS 114 (D)	03/10/16
	J45020.07.13	TAS 114	07/12/13
Independent Roof Testing & Consultants of South Florida	IRT 99006	TAS 114	01/20/99
	IRT 99007	TAS 114	01/20/99
	IRT 99008	TAS 114	01/20/99
	IRT 99016	TAS 114	01/20/99
	IRT 99009	TAS 114	02/10/99
	IRT 99010	TAS 114	02/10/99
IRT-ARCON Inc.	02-026	TAS 114	07/26/02
	02-011	TAS 114	02/06/02

EVIDENCE SUBMITTED: (CONTINUED)

Test Agency/Identifier	Name	Report	Date
Atlantic & Caribbean Roof	ACRC 06-003	TAS 114	03/27/06
Consulting, LLC	ACRC 06-009	TAS 114	06/28/06
PRI Construction Materials	JMC-063-02-01	ASTM D6163	06/11/12
Technologies, LLC	JMC-065-02-01	ASTM D6163	05/29/12
	JMC-066-02-01	ASTM D6163	06/04/12
	JMC-069-02-01	ASTM D3909	06/04/12
	JMC-070-02-01	ASTM D2178	04/17/12
	JMC-071-02-01	ASTM D2178	04/17/12
	JMC-072-02-02.1	ASTM D4601	05/25/16
	JMC-074-02-01	ASTM D4897	04/17/12
	JMC-075-02-04.3	ASTM D6164	03/29/16
	JMC-076-02-02	ASTM D4601	04/17/12
	JMC-078-02-01	ASTM D6298	07/17/12
	JMC-081-02-01.02	TAS 117 B & C	06/11/12
	JMC-091-02-01.1	ASTM D4601	05/26/16
	JMC-093-02-01	ASTM D4601	08/02/12
	JMC-105-02-02 Rev 1	ASTM D6162	05/22/13
	JMC-106-02-01	ASTM D6164	04/15/13
	JMC-107-02-01.7	ASTM D903/D1876/D5147 TAS 114(C)/TAS 117 A & B	03/31/16
	JMC-108-02-01	TAS 114 (J)	04/16/13
	JMC-113-02-01	ASTM D6164	04/19/13
	JMC-114-02-01	TAS 114 (J)	08/20/13
	JMC-141-02-01	TAS 114 (J)	04/18/13
	JMC-147-02-01	ASTM D4601	05/28/13
	JMC-168-02-01	TAS 114 (J)	08/20/13
	JMC-171-02-01	ASTM D6163	01/10/14
	JMC-171-02-02	ASTM D6163	01/10/14
	JMC-171-02-03	ASTM D6164	01/10/14
	JMC-171-02-04.1	ASTM D6163	05/26/16
	JMC-171-02-07.1	ASTM D6164	05/26/16
	JMC-171-02-10	ASTM D6162	01/10/14
	JMC-171-02-11	ASTM D6164	03/14/14
	JMC-227-02-01.3	ASTM D6162	06/29/16
	JMC-234-02-01.2	ASTM D6162	06/29/16
	JMC-234-02-02	ASTM D6163	04/29/15
	JMC-234-02-03.1	ASTM D6163	05/26/16
	JMC-234-02-04	ASTM D6162	03/23/16
	JMC-234-02-05	ASTM D6164	04/29/15
	JMC-234-02-06.1	ASTM D6164	05/26/16
	JMC-238-02-01.1	ASTM D6163	06/29/16
	JMC-238-02-03	ASTM D6164	12/01/15
	JMC-238-02-04	ASTM D6162	03/31/16
	JMC-243-02-01	ASTM D5147/D4798	02/29/16
	JMC-268-02-01	TAS 114 (J)	03/30/16
	JMC-272-02-01	TAS 114 (J)	04/07/16
	ADCO-001-02-01	Physical Properties	06/16/13

APPROVED ASSEMBLIES

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(1): One or more layers of insulation adhered with approved asphalt or adhesive.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**
Fesco Foam, DuraFoam		
Minimum 1.5" thick	**N/A**	**N/A**
Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**
Retro-Fit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the primed deck 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.

Base Sheet: (Optional) One ply of GlasPly Premier, GlasPly IV or PermaPly 28 Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Or

One ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or MBR Bonding Adhesive applied at a rate of 1.5-2.0 gal/sq. Or One ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation). Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-305 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(2): Optional anchor sheet bonded in hot asphalt or heat welded; One or more layers of insulation fully adhered with approved asphalt or adhesive.

Anchor Sheet: (Optional) One or more plies of GlasBase Plus, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier, PermaPly 28 or GlasPly IV adhered to the properly primed concrete deck with a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or DynaWeld Base, heat welded.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**
Fesco Foam, DuraFoam		
Minimum 1.5" thick	**N/A**	**N/A**
Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**
Retro-Fit Board		
Minimum ½" thick	**N/A**	**N/A**
Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Tapered Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**
Retro-Fit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet or primed deck 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.

Base Sheet:	(Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Ply Sheet:	One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. Or One ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation). Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-167.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(3): Optional anchor sheet bonded in hot asphalt or heat welded; One or more layers of insulation fully adhered with approved asphalt or adhesive.

All General and System limitations apply.

Anchor Sheet: (Optional) One or more plies of GlasBase Plus, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier, PermaPly 28 or GlasPly IV adhered to the properly primed concrete deck with a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or DynaWeld Base, heat welded.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**
Fesco Foam, DuraFoam		
Minimum 1.5" thick	**N/A**	**N/A**
Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**
Retro-Fit Board		
Minimum ½" thick	**N/A**	**N/A**

Top Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Tapered Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**
Retro-Fit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: All insulation shall be adhered to the anchor sheet or primed deck 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.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -150 psf. (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(4): All layer of insulation adhered to deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**
Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with MBR Bonding Adhesive at an application rate of 1.5 gal./ 100 ft^2. 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: GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -187.5 psf. (for Fesco Board or DuraBoard) (See General Limitation #9).
-375 psf. (for ENRGY 3) (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(5): All layer of insulation adhered to a primed deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Fesco Foam, DuraFoam Minimum 1.5" thick	**N/A**	**N/A**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI Minimum 1.4" thick	**N/A**	**N/A**
Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Retro-Fit Board, DuraBoard Minimum ½" thick	**N/A**	**N/A**

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

Base Sheet: GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (Optional unless a GlasKap membrane listed in the membrane options is used.) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts 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 DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).

Or

(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -155 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(6): All layer of insulation adhered to a primed deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Fesco Foam, DuraFoam Minimum 1.5" thick	**N/A**	**N/A**
Fesco Board, DuraBoard Minimum ¾" thick	**N/A**	**N/A**

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

Base Sheet: GlasBase Plus, PermaPly 28 DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier, PermaPly 28 or GlasPly IV fiber glass felts 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 DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -130 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(7): All layer of insulation adhered to a primed deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.4" thick	**N/A**	**N/A**
Fesco Board, DuraBoard		
Minimum ¾" thick	**N/A**	**N/A**

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

Base Sheet: GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts 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 DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -107 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(8): All layer of insulation adhered to a primed or unprimed deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Fesco Board, DuraBoard		
Minimum ½" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered to primed deck with 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. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -82.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(9): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Fesco Board Minimum ¾" thick	**N/A**	**N/A**
DuraBoard Minimum ½" thick	**N/A**	**N/A**
RetroFit Board Minimum ½" thick	**N/A**	**N/A**

Note: Insulation shall be adhered with JM Two Part Urethane Insulation Adhesive in ¾" to 1" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded. (to DuraBoard only).

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-285 psf. for Fesco Board (See General Limitation #9). -305 psf. for DuraBoard or RetroFit Board (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(10): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DuraBoard Minimum ½" thick	**N/A**	**N/A**

Note: Insulation shall be adhered with JM Two Part Urethane Insulation Adhesive in ¾" to 1" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -187.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(11): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 2" 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: Insulation shall be adhered with JM Two Part Urethane Insulation Adhesive or JM Roofing System Urethane Adhesive in ¾" to 1" wide beads at maximum spacing of 12" o.c. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded..

Or

(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-442.5 psf. with JM Two Part Adhesive (except AGF) (See General Limitation #9) -397.5 psf. for AGF boards with JM Two Part Adhesive (See General Limitation #9) -367.5 psf. with MBR Bonding Adhesive (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(12): Insulation adhered to primed deck in approved asphalt or to unprimed deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 2" 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 layers of insulation shall be adhered to primed deck with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2 or to unprimed deck in OlyBond in full coverage at 1 gal./square or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S. DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-495 psf. with hot-asphalt or OlyBond (except AGF) (See General Limitation #9) -397.5 psf. for AGF boards with asphalt or OlyBond (See General Limitation #9) -367.5 psf. with MBR Bonding Adhesive (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(13): Insulation adhered to primed deck in approved asphalt or to unprimed deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 2" 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 layers of insulation shall be adhered to primed deck with approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft^2 or to unprimed deck in OlyBond in full coverage at 1 gal./square. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet:	One or more plies of or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Ply Sheet:	None
Membrane:	One ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-536.5 psf. (except AGF Insulation Boards) (See General Limitation #9) -397.5 psf. for AGF Insulation Boards (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(14): All layer of insulation adhered to deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**

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

Note: All layers of insulation shall be adhered with MBR Bonding Adhesive or JM Two Part Urethane Insulation Adhesive in ¾" to 1" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: One ply of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -147.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(15): Anchor sheet heat welded; One or more layers of insulation adhered with insulation adhesive.

Anchor Sheet: DynaWeld Base, heat welded.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with MBR Bonding Adhesive in ¾" to 1" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: One ply of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -147.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(16): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Fesco Board		
Minimum ¾" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with JM Urethane Insulation Adhesive in ½" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply GlasPly Premier, GlasPly IV or PermaPly 28 Base Sheet adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet: One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation).
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -112.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(17): All layer of insulation adhered to deck. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**
Fesco Board		
Minimum ¾" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with JM Urethane Insulation Adhesive in ½" wide beads at maximum spacing of 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: GlasBase Plus, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, GlasPly Premier or GlasPly IV applied to the insulation in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: (Optional) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

Maximum Design Pressure: -112.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(18): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 2" thick	**N/A**	**N/A**

Note: Insulation shall be adhered with MBR Bonding Adhesive applied in full coverage at an application rate of 1.5 gal./sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the insulated substrate with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: Two or more plies of GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S or DynaPly T1 adhered to the base sheet with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.

Surfacing: (Optional) Install one of the following:

1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. and 400 lbs./sq., respectively.

Maximum Design Pressure: -367.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(19): All layer of insulation adhered to deck. Membrane is subsequently fully adhered.

All General and System Limitations apply.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm, ValuTherm 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, R-Panel, R-Panel 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**
DuraBoard		
Minimum ½" thick	**N/A**	**N/A**

Middle Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm, ValuTherm 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, R-Panel, R-Panel 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
DuraBoard		
Minimum ½" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with JM Urethane Adhesive applied in ½" ribbons spaced 12" o.c.. 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: One ply of DynaPly T1, DynaLastic 250 S, or DynaMax S adhered to the insulated substrate with MBR Cold Application Adhesive applied at an application rate of 2.0 gal./sq.

Ply Sheet:	One or more plies of DynaPly T1, DynaLastic 180 S, DynaFast 180 S, GlasPly IV, GlasPly Premier or DynaLastic 250 S fully adhered to the base sheet with MBR Cold Application Adhesive applied at an application rate of 2.0 gal./sq., Or, One or more plies of DynaPly T1, DynaLastic 180 S, DynaFast 180 S, GlasPly IV, GlasPly Premier or DynaLastic 250 S fully adhered to the base sheet with approved mopping asphalt at an application rate of 20-40 lbs./sq. Or, One or more plies of DynaWeld 180 S, DynaWeld Base, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	One or more plies of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR fully adhered to the base sheet with MBR Cold Application Adhesive fully adhered to the base sheet at an application rate of 2.0 gal./sq. Or, One or more plies of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR fully adhered to the base sheet with approved mopping asphalt at an application rate of 20-40 lbs./sq. Or, One or more plies of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-82.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(20): All layer of insulation adhered to deck. Membrane is subsequently fully adhered.

All General and System Limitations apply.
One or more layers of the following insulations:

Bottom Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm, ValuTherm 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, R-Panel, R-Panel 25 PSI		
Minimum 1.5 thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
DuraBoard		
Minimum 1/2" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered with MBR Bonding Adhesive applied in ½" – ¾" ribbons spaced 12" o.c. 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: One ply of PermaPly 28 fully adhered to the insulation with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Ply Sheet: Optional one or more plies DynaLastic 180S, DynaPly T1, DynaFast 180 S, DynaMax S or DynaLastic 250 S with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.

Membrane: One ply of DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus adhered in MBR Bonding Adhesive or MBR Cold Application Adhesive at an application rate of 1.5 gal./sq. or approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Or
One ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.

Maximum Design Pressure: -147.5 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(21): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

One or more layers of the following insulations:

Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI		
Minimum 1.5" thick	**N/A**	**N/A**

Note: All layers of insulation shall be adhered to primed deck with JM Roofing System Urethane Adhesive, JM Two Part Urethane Insulation Adhesive, or One-Step Foamable Adhesive applied in maximum of 3/4 – 1" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq.

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering

Maximum Design Pressure:
-245 psf. w/ JM Roofing System Urethane Adhesive (See General Limitation #9)
-225 psf. w/ JM Two Part Urethane Insulation Adhesive (See General Limitation #9)
-225 psf. w/ One-Step Foamable Adhesive (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(22): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

Vapor Barrier: One ply of DynaBase HW torch adhered over ASTM D 41 primed deck

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3 CGF, ENRGY 3 GCF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI Minimum 1.5" thick	**N/A**	**N/A**

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

Note: All layers of insulation shall be adhered with JM Roofing System Urethane Adhesive or JM Two Part Urethane Insulation Adhesive applied in maximum of 3/4 – 1" wide beads spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-245 psf. w/ JM Roofing System Urethane Adhesive (See General Limitation #9) -225 psf. w/ JM Two Part Urethane Insulation Adhesive (See General Limitation #9) -225 psf. if using a torch adhered base sheet (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(23): Insulation adhered to deck in insulation adhesive. Membrane is subsequently fully adhered.

All General and System limitations apply.

Vapor Barrier: One ply of DynaBase HW torch adhered over ASTM D 41 primed deck.

One or more layers of the following insulations:

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

Note: All layers of insulation shall be adhered with JM Roofing System Urethane Adhesive or JM Two Part Urethane Insulation Adhesive applied in 3/4" to 1" wide ribbons spaced maximum 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering

Maximum Design Pressure: -225 psf. (See General Limitation #9)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1.45 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**
Invinsa Roof Board		
Minimum 0.25" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with JM Roofing System Urethane Adhesive or JM Two Part Urethane Insulation Adhesive. Apply 3/4-1" wide continuous ribbons 12-inch o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: DynaGrip Base SD/SA fully bonded by self-adhering.

Ply Sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering

Maximum Design Pressure: -52.5 psf. (See general limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

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

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 2" thick	**1 with 3 or 2 with 3**	**1:1.45 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**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI		
Minimum 1½" thick	**N/A**	**N/A**
Fesco Board Minimum 1" thick	**N/A**	**N/A**
Fesco Foam Minimum 1½" thick	**N/A**	**N/A**
Retro-Fit Board Minimum ½" 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.

Base Sheet: One ply of GlasPly IV, GlasPly Premier, PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet:	(Optional unless a GlasKap membrane listed in the membrane options is used.) One or more plies of GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	One or more plies of DynaGlas FR CR, DynaGlas FR CR G, DynaKap FR T1, DynaKap FR T1 CR G, DynaMax FR, DynaMax FR CR, DynaMax FR Plus, DynaGlas, DynaGlas FR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180, FR CR G, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G or DynaPly T1 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 DynaWeld Cap FR, DynaWeld Cap FR XT, DynaWeld Cap FR CR, DynaWeld Cap 250 FR CR G, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-75 psf. (See general limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: Minimum 2500 psi structural concrete or concrete plank

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

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1 ft^2**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RetroPlus Roof Board		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with hot asphalt applied in EVT range at a rate of 20-40 lbs/sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or JM Two Part Urethane Insulation Adhesive or One-Step Foamable Adhesive applied in 3/4" ribbons spaced maximum 12" o.c. Apply continuous ribbons 12-inch o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Maximum Design Pressure: -90 psf (See general limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: Minimum 2500 psi structural concrete or concrete plank

System Type B(4): Base layer of insulation mechanically fastened, top layer fully adhered with approved asphalt.

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1.33 ft^2**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RetroPlus Roof Board		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with hot asphalt applied in EVT range at a rate of 20-40 lbs/sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or JM Two Part Urethane Insulation Adhesive or One-Step Foamable Adhesive applied in 3/4" ribbons spaced maximum 12" o.c. Apply continuous ribbons 12-inch o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Maximum Design Pressure: -67.5 psf (See general limitation #7)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: Minimum 2500 psi structural concrete or concret plank

System Type B(5): Base layer of insulation mechanically fastened, top layer fully adhered with approved asphalt.

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1.78 ft^2**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RetroPlus Roof Board		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with hot asphalt applied in EVT range at a rate of 20-40 lbs/sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or JM Two Part Urethane Insulation Adhesive or One-Step Foamable Adhesive applied in 3/4" ribbons spaced maximum 12" o.c. Apply continuous ribbons 12-inch o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Maximum Design Pressure: -60 psf (See general limitation #7)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: Minimum 2500 psi structural concret or concrete plank

System Type B(6): Base layer of insulation mechanically fastened, top layer fully adhered with approved asphalt.

All General and System limitations apply.

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1.45 ft^2**

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

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RetroPlus Roof Board		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Top layer of insulation shall be adhered with hot asphalt applied in EVT range at a rate of 20-40 lbs/sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or JM Two Part Urethane Insulation Adhesive or One-Step Foamable Adhesive applied in 3/4" ribbons spaced maximum 12" o.c. Apply continuous ribbons 12-inch o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Membrane: One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with asphalt applied in the EVT range at a rate of 20-40 lbs./sq., MBR Bonding Adhesive applied at 2.0 gal/sq., or MBR Cold Application Adhesive applied at 1.5-2 gal/sq.

Maximum Design Pressure: -90 psf (See general limitation #7)

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(1): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Fesco Board, DuraBoard		
Minimum ¾" thick	**1 with 3**	**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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.

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

Membrane Type: SBS

Deck Type 3I: Concrete Decks, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(2): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1" thick	**N/A**	**N/A**
Fesco Foam, DuraFoam Minimum 1.5" thick	**N/A**	**N/A**
Fesco Board, DuraBoard Minimum ¾" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
Fesco Foam, DuraFoam Minimum 1.5" thick	**1 or 2 with 3**	**1:2 ft²**
Fesco Board, DuraBoard Minimum ¾" thick	**1 or 2 with 3**	**1:2 ft²**
Retro-Fit Board Minimum ½" thick	**1 or 2 with 3**	**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. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: (Optional) One ply of PermaPly 28, DynaBase or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Ply Sheet:	One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or one ply DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation). Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq. 2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-52.5 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(3): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	**1 with 3 or 2 with 3**	**1:1.45 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: One ply of DynaGrip Base SD/SA or BaseGrip SD/SA fully bonded by self-adhering with minimum 4" side laps.
Or
DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaMax S, or DynaLastic 250 S fully bonded in MBR Cold Application Adhesive applied at a rate of 1.5 gal/sq. with minimum 3" side laps

Ply sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

.

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-67.5 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(4): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
JM SECUROCK Gypsum Fiber Roof		
Minimum 0.25" thick	**1 with 3 or 2 with 3**	**1:1.45 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: One ply of DynaGrip Base SD/SA or BaseGrip SD/SA self-adhered with minimum 4" side laps.
Or
One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180S, DynaFast 180 S, DynaPly T1, DynaMax S, DynaLastic 250 S applied in MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or hot asphalt within EVT range at a rate of 20-25 lbs/sq. with minimum 4" side laps.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW torch adhered with minimum 4" slide laps.

Ply sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-60 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(5): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
JM SECUROCK Gypsum Fiber Roof Board		
Minimum 0.25" thick	**1 with 3 or 2 with 3**	**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.

Base Sheet: One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering
Or \
One ply of DynaGrip Base SD/SA or JM BaseGrip SD/SA self-adhered with a hot asphalt or heat welded ply and/or cap sheet.

Ply sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-60 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(6): All layers of insulation simultaneously mechanically fastened.

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, Fesco Foam, DuraFoam, ENRGY 3.E Minimum 2.0" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
JM SECUROCK Gypsum-Fiber Roof Board Minimum ½" thick	**1 with 3 or 2 with 3**	**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.

Base Sheet: One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S, or GlasBase Plus adhered to the insulated substrate in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Or,
One ply of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S adhered to the insulated substrate with MBR Cold Application Adhesive at an application rate of 1.5 gal./sq.
Or
One or more plies of DynaWeld 180 S, DynaWeld Base, DynaBase HW, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Or
One ply of DynaGrip Base SD/SA or BaseGrip SD/SA self-adhered with a hot asphalt or heat welded ply and/or cap sheet.

Ply Sheet:	(Optional unless a GlasKap membrane listed in the membrane options is used.) One or more plies of GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive at an application rate of 1.5 gal./sq. Or One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S adhered with MBR Cold Application Adhesive at an application rate of 1.5 gal./sq. Or One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	One or more plies of DynaGlas FR CR, DynaGlas FR CR G, DynaKap FR T1, DynaKap FR T1 CR G, DynaMax FR, DynaMax FR CR, DynaMax Plus, DynaGlas, DynaGlas FR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., MBR Bonding Adhesive at an application rate of 1.5 gal./sq., MBR Cold Application Adhesive at an application rate of 1.5 gal./sq. Or One ply DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap FR XT, DynaMax FR HW, DynaMax FR HW CR, DynaKap FR T1 HW CR G, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, or DynaWeld Cap 250 FR CR G heat welded. Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional with FR membranes) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.. 2. Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.
Maximum Design Pressure:	-75 psf. (See general limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(7): All layers of insulation simultaneously mechanically fastened

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 2" thick	**1 with 3 or 2 with 3**	**1:1.45 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: One ply of DynaGrip Base SD/SA or BaseGrip SD/SA fully bonded by self-adhering with minimum 4" side laps.
Or
DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaMax S, or DynaLastic 250 S fully bonded in MBR Cold Application Adhesive applied at a rate of 1.5 gal/sq. with minimum 3" side laps.

Ply sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

.

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-90 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type C(8): All layers of insulation simultaneously mechanically fastened

All General and System limitations apply.

One or more layers of the following insulations:

Base Insulation Layer (Optional)	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 0.5" thick	**N/A**	**N/A**

Note: Both layers of insulation shall be simultaneously mechanically fastened; see top layer below for fasteners and density.

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 2" thick	**1 with 3 or 2 with 3**	**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.

Base Sheet: One ply of DynaGrip Base SD/SA or BaseGrip SD/SA fully bonded by self-adhering with minimum 4" side laps.
Or
DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaMax S, or DynaLastic 250 S fully bonded in MBR Cold Application Adhesive applied at a rate of 1.5 gal/sq. with minimum 3" side laps.

Ply sheet: (Optional) One or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq.
Or
One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

.

Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus fully bonded with MBR Cold Application Adhesive (not for use with self-adhering base) at a rate of 1.5 gal/sq. or asphalt applied in the EVT range at a rate of 20-40 lbs./sq. Or One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Maximum Design Pressure:	-52.5 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(1): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
RetroFit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 150 S fastened to the deck as described below:
Fastening:	Fasten base sheet over the 4-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c.
Ply Sheet:	DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-112.5 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(2): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI , ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
RetroFit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 250 S fastened to the deck as described below:
Fastening:	Fasten base sheet within the 5-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c. The lap is heat welded.
Ply Sheet:	(Optional) DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-112.5 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(3): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
Fesco Board **Minimum ¾" thick**	**N/A**	**N/A**

Middle Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E **Minimum 1" thick**		

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Plywood **Minimum 5/8" thick**	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 250 S fastened to the deck as described below:
Fastening:	Fasten base sheet within the 5-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c. The lap is heat welded.
Ply Sheet:	(Optional) DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-135 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(4): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
RetroFit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 250 S fastened to the deck as described below:
Fastening:	Fasten base sheet within the 5-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c. The lap is heat welded.
Ply Sheet:	(Optional) DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-135 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(5): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
Fesco Board **Minimum ¾" thick**	**N/A**	**N/A**

Middle Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E **Minimum 1" thick**		

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
Plywood **Minimum 5/8" thick**	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 250 S fastened to the deck as described below:
Fastening:	Fasten base sheet over the 4-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c.
Ply Sheet:	DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-150 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 2I: Concrete, Insulated

Deck Description: 2,500 psi structural concrete or concrete plank

System Type D(6): All layers of insulation simultaneously mechanically fastened with base sheet.

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**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
RetroFit Board		
Minimum ½" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment prior to the installation of the base sheet at a minimum application rate of five (5) fasteners per 4 x 8 ft. board. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet:	DynaLastic 180 S or DynaLastic 250 S fastened to the deck as described below:
Fastening:	Fasten base sheet over the 4-inch wide laps using Structural Concrete Deck Fastener and High Load Plates spaced 6" o.c.
Ply Sheet:	DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded.
Membrane:	DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded.
Maximum Design Pressure:	-150 psf. (See General Limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(7): All layers of insulation simultaneously mechanically fastened with base sheet.

All General and System limitations apply.

One or more layers of any of the following insulations:

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft²**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.5" thick	**N/A**	**N/A**

Note: Top layer shall have preliminary attachment, prior to the installation of the base 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.

Base Sheet: PermaPly 28, GlasBase Plus, DynaBase, DynaBase XT, DynaBase PR, or Ventsulation Felt fastened to the deck through the insulation as described below:

Fastening: Fasten base sheet with Structural Concrete Deck Fastener or All Purpose Fastener and UltraFast Metal Plates at a 4" side lap 9" o.c. and two rows staggered in the center of the sheet 12" o.c.

Ply Sheet: Option 1: Over PermaPly 28 only, one or more plies of GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt within the EVT range and at a rate of 20-40 lbs./sq.
Or
Option 2: Over GlasBase Plus or PermaPly 28 only, one of DynaGrip Base SD/SA self-adhered to the base sheet with a cap or additional plies applied in hot asphalt by torch adhering
Or
Option 3: Over SBS base sheets only, one or more plies of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, or DynaMax S fully bonded with MBR Cold Application Adhesive or MBR Bonding Adhesive at a rate of 1.5-2.0 gal/sq.
Or
Option 4: One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW fully bonded by torch adhering

Membrane: One or more plies of DynaGlas FR CR, DynaGlas FR CR G, DynaKap FR T1, DynaKap FR T1 CR G, DynaMax FR, DynaMax FR CR, DynaMax FR Plus, DynaGlas, DynaGlas FR, DynaGlas 30 FR, DynaGlas FR XT, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180, FR CR G, DynaLastic 180 S, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G or DynaPly T1 adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. or with MBR Bonding Adhesive or MBR Cold Application Adhesive at an application rate of 1.5-2.0 gal./sq.
Or
One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR fully bonded by torch adhering
Or
(Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap, GlasKap Plus or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

Surfacing: (Optional) Install one of the following:
1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq.
2. (Optional with FR membranes) Henry 280 in two coats applied at a rate of 1.0 gal./sq./coat.

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

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(8): All layers of insulation simultaneously mechanically fastened with base sheet.

All General and System Limitations apply.

One or more layers of any of the following insulations:

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S fastened to the deck through the insulation as described below:

Fastening: Fasten base sheet with All Purpose Fasteners and High Load Plates at a minimum 4" side lap at 6" o.c. Side laps are heat welded.

Ply Sheet: (Optional) One or more plies of DynaFast 180 S, DynaPly T1 or DynaLastic 250 S adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq.

Cap Sheet: One ply of DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq. while maintaining 4" side laps and 6" end laps.

Maximum Design Pressure: -105 psf. (See general limitation #7).

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(9): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E		
Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet:	One ply of DynaFast 250 HW mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 6" o.c. in the center of the minimum 4" torch welded side laps.
Ply Sheet:	(Optional) One or more plies of DynaFast 250 HW a heat welded while maintaining minimum 4" side laps and 6" end laps.
Membrane:	One ply of DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded while maintaining 4" side laps and 6" end laps.
Maximum Design Pressure:	- 165 psf. (See General Limitation #7.)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(10): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 HW, DynaFast 180 S, or DynaFast 250 HW mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 12" o.c. in the center of the minimum 4" torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded while maintaining minimum 4" side laps and 6" end laps.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap FR XT, DynaMax FR HW, DynaMax FR HW CR, DynaKap FR T1 HW CR G, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, or DynaWeld Cap 250 FR CR G heat welded while maintaining 4" side laps and 6" end laps.

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

Membrane Type: SBS

Deck Type 3I: Steel, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(11): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.5" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 12" o.c. in the center of the minimum 4" torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 S, DynaPly T1 or DynaLastic 250 S adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq

Membrane: One ply of DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq. while maintaining 4" side laps and 6" end laps.

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

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(12): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.0" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 HW, DynaFast 180 S, or DynaFast 250 HW mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 6" o.c. in the center of the minimum 4" torch welded side laps.

Ply Sheet: (Optional) One or more plies of DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded while maintaining minimum 4" side laps and 6" end laps.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap FR XT, DynaMax FR HW, DynaMax FR HW CR, DynaKap FR T1 HW CR G, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, or DynaWeld Cap 250 FR CR G heat welded while maintaining 4" side laps and 6" end laps.

Maximum Design Pressure: - 142.5 psf. (See General Limitation #7.)

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(13): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft^2
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.0" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S or DynaFast 250 HW mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 6" o.c. in every other lap of the minimum 4" torch welded side laps in rows maximum 70" o.c.

Ply Sheet: (Optional) One or more plies of DynaFast 180 HW, DynaWeld 250 S or DynaFast 250 HW heat welded while maintaining minimum 4" side laps and 6" end laps.

Membrane: One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap FR XT, DynaMax FR HW, DynaMax FR HW CR, DynaKap FR T1 HW CR G, DynaWeld Cap 180 FR, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, or DynaWeld Cap 250 FR CR G heat welded while maintaining 4" side laps and 6" end laps.

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

Membrane Type: SBS

Deck Type 3I: Concrete, Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type D(14): All layers of insulation simultaneously mechanically fastened with base sheet

All General and System Limitations apply.

Base or Top Insulation Layer	**Insulation Fasteners (Table 3)**	**Fastener Density/ft^2**
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI, ENRGY 3.E Minimum 1.0" thick	**N/A**	**N/A**

Note: Insulation shall be loose-laid and membrane mechanically fastened. See base sheet attachment below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with All Purpose Fasteners and High Load Plates spaced 6" o.c. in every other lap of the minimum 4" torch welded side laps in rows maximum 70" o.c.

Ply Sheet: (Optional) One or more plies of DynaFast 180 S, DynaPly T1 or DynaLastic 250 S adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq

Membrane: One ply of DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR Plus adhered in MBR Cold Application Adhesive at a rate of 1.5-2 gal./sq. or approved asphalt with the EVT range at a rate of 20-40 lbs./sq. while maintaining 4" side laps and 6" end laps.

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

Membrane Type: SBS

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(1): Base sheet fully adhered.

All General and System limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet.

Base Sheet:	One or more plies of One ply of DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or Ventsulation Felt applied to the deck in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Ply Sheet:	(Optional) One or more plies of GlasPly Premier or GlasPly IV fiber glass felts adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR adhered in MBR Bonding Adhesive at an application rate of 1.5 gal./sq.
Surfacing:	(Optional) Install one of the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. and 400 lbs./sq., respectively.
Maximum Design Pressure:	-495 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(2): (Optional) Base sheet fully adhered

All General and System limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet.

Base Sheet:	One or more plies of DynaWeld Base, DynaBase HW, DynaWeld 180 S, DynaFast 180 HW, DynaWeld 250 S, or DynaFast 250 HW heat welded to concrete deck.
Membrane:	One ply of DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded to the base sheet.
Maximum Design Pressure:	-315 psf. (See General Limitation #9).

Membrane Type: SBS

Deck Type 3: Concrete Decks, Non-Insulated

Deck Description: 2500 psi structural concrete or concrete plank

System Type F(3): (Optional) Base sheet fully adhered with approved asphalt.

All General and System limitations apply.

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of anchor sheet.

Base Sheet:	One ply of PermaPly 28, DynaBase, DynaBase PR, DynaBase XT, DynaLastic 180 S, DynaFast 180 S, DynaPly T1, DynaLastic 250 S, DynaMax S or GlasBase Plus adhered to the properly primed concrete deck in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Ply Sheet:	(Optional unless a GlasKap membrane listed in the membrane options is used.) One or more plies of GlasBase Plus, PermaPly 28, GlasPly Premier, GlasPly IV, DynaLastic 180 S, DynaFast 180 S, DynaLastic 250 S, DynaBase, DynaBase PR, DynaBase XT, DynaMax S or DynaPly T1 adhered to the base sheet with approved mopping of asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Membrane:	One ply of DynaGlas 30 FR, DynaGlas, DynaGlas FR CR, DynaGlas FR, DynaGlas FR CR G, DynaLastic 180, DynaLastic 180 FR, DynaLastic 180 FR CR, DynaLastic 180 FR CR G, DynaGlas FR XT, DynaKap FR T1, DynaKap FR T1 CR G, DynaLastic 250 FR, DynaLastic 250 FR CR, DynaLastic 250 FR CR G, DynaMax FR, DynaMax FR CR, or DynaMax FR 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 DynaWeld Cap FR, DynaWeld Cap FR CR, DynaWeld Cap FR CR G, DynaWeld Cap 180 FR CR, DynaWeld Cap 180 FR, DynaWeld Cap FR XT, DynaWeld Cap 250, DynaWeld Cap 250 FR, DynaWeld Cap 250 FR CR, DynaWeld Cap 250 FR CR G, DynaKap FR T1 HW CR G, DynaMax FR HW, or DynaMax FR HW CR heat welded. (See application instructions for approved method of installation). Or (Requires to be used with a Modified Bitumen Ply Sheet listed above.) GlasKap or GlasKap CR adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.
Surfacing:	(Optional) Install the following: 1. Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
Maximum Design Pressure:	-275 psf. (See General Limitation #9).

CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.

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 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 to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE