



Product Evaluation

RC440 | 0816

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC 440

Effective Date: May 1, 2015

Revised: August 1, 2016

Re-evaluation Date: April 2019

Product Name: Polyglass Modified Bitumen Roofing Systems

Manufacturer: Polyglass USA, Inc.
1231 American Superior Drive
Winter Haven, FL 33380
(866) 802-8017

Polyglass USA, Inc.
555 Oak Ridge Road
Humbolt Industrial Park (SW)
Hazleton, PA 18201
(800) 894-4563

Polyglass USA, Inc.
150 Lyon Drive
Fernley, NV 89408
(800) 222-9782

General Description:

- **XtraFlex SBS Glass Base** is a modified bitumen coated fiberglass reinforced base sheets.
- **XtraFlex SBS Base SA** is a nominal 80-mil (2.0-mm) thick, self-adhering, fiberglass reinforced modified bitumen membranes with a smooth top surface.
- **XtraFlex SBS G SA** is a self-adhering, polyester reinforced modified bitumen membranes with a granule top surface and fire retardant chemistry.
- **XtraFlex SBS Poly Base** is a torch, hot asphalt, or cold adhesive applied polyester reinforced, modified bitumen membranes with a polyethylene or sanded top surface.

- **XtraFlex SBS Poly G** is a torch, hot asphalt, or cold adhesive applied polyester reinforced, modified bitumen membranes with a granule top surface and fire retardant chemistry.
- **XtraFlex SBS Glass Interply** is a torch, hot asphalt, or cold adhesive applied fiberglass reinforced, modified bitumen membrane with a sanded top surface.
- **XtraFlex SBS Glass G** is a torch, hot asphalt or cold adhesive applied fiberglass reinforced, modified bitumen membranes with a granule top surface and fire retardant chemistry.
- **XtraFlex APP S** is a torch applied polyester reinforced, modified bitumen membranes with a smooth or sanded top surface.
- **XtraFlex APP G** is a torch applied polyester reinforced, modified bitumen membranes with a granule top surface and fire retardant chemistry.
- **XtraFlex APP G SA** is an elastomeric, polyester reinforced membranes consisting of an APP compound on the top layer, a self-adhesive compound on the bottom layer and fire retardant chemistry.
- **Polyfresko G APP SA** is a self-adhered, polyester reinforced, APP modified bitumen membrane with a self-adhering back face, and a reflective white granule top surface
- **Polyfresko G APP SA FR** is a self-adhered, polyester reinforced, APP modified bitumen membrane with a self-adhering back face, a reflective white granule top surface and fire retardant chemistry.
- **Polyfresko G SBS SA** is a self-adhered, polyester reinforced, SBS modified bitumen membrane with a self-adhering back face, and a reflective white granule top surface.
- **Polyfresko G SBS SA FR** is a self-adhered, polyester reinforced, SBS modified bitumen membrane with a self-adhering back face, a reflective white granule top surface and fire retardant chemistry.
- **Polyfresko G SBS** is a hot asphalt applied SBS modified bitumen membrane with reflective white granules on the top surface.
- **Polyfresko G SBS FR** is a hot asphalt applied SBS modified bitumen membrane with reflective white granules on the top surface and fire retardant chemistry.
- **Polyfresko G and XtraFlex Kool APP G** is a torch applied APP modified bitumen membranes with reflective white granules on the top surface.
- **Polyfresko G FR** is a torch applied APP modified bitumen membrane with reflective white granules on the top surface and fire retardant chemistry.
- **XtraFlex Kool APP S SA** is a self-adhered, polyester reinforced, modified bitumen membranes with a reflective white film laminate on the top surface.
- **Xtraflex** is a torch applied polyester reinforced, TPO modified bitumen membrane with a smooth top surface.
- **Xtraflex G** is a torch applied polyester reinforced, TPO modified bitumen membrane with a granule top surface.
- **Xtraflex G FR** is a torch applied polyester reinforced, TPO modified bitumen membrane with a granule top surface and fire retardant chemistry.

Limitations and Installation:

General installation Requirements:

All IRC and the IBC requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

For All applications: Roof decks, in which this product is to be installed upon, shall be provided with positive drainage. A minimum roof slope after construction of 1/4" per foot is recommended.

Prime decks were required, in accordance with requirements and recommendations of the primer and deck manufacturer (if applicable). For re-roofing and re-cover applications, existing roof surfaces must be primed as necessary with Polyglass 100A asphalt primer or an asphalt primer meeting ASTM D-41 specification and allow to dry prior to installing the Polyglass roofing system.

Polyglass recommends when applying the self-adhered membranes to new wood decking, that the wood be clean and dry. Application of ASTM D-41 asphalt primer is not required. When applying the self-adhered membrane in a re-cover or re-roofing application, cleaning, and priming of the wood decking is required.

Please note that direct application of the roof covering to a wood deck to a habitable environment, i.e. living space can effect ventilation issues; as such, Polyglass suggests the option of a mechanically attached base sheet or recover board, before applying self-adhered membranes. Refer to Polyglass application guidelines as published in the Polyglass Technical Guide, available from Polyglass U.S.A., Inc.

The following notes apply to the systems outlined herein:

1. The roof decking shall meet or exceed the uplift requirements of the IRC and IBC along with applicable Texas Revisions adopted by TDI. Install as required for resistance to wind loads.
2. Space roof framing members a maximum of 24" o.c.
3. Insulation / base sheet fasteners must be long enough for the following deck engagement:
 - Wood: Minimum 3/4" penetration.
4. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads must expand as noted in the manufacturer's published instructions.
 - Hot asphalt at 20-40 lbs/square.
 - Dow Insta Stik™ Quik Set Insulation is continuous 3/4 to 1" wide beads, 12" o.c.
 - Millennium One Step Foamable Adhesive in continuous 1/2 to 3/4" wide beads, 12" o.c.
 - OlyBond 500 Adhesive Fastener in continuous 3/4 to 1" wide ribbons, 12" o.c. using OMG PaceCart or SpotShot dispensing system. Note: OlyBond 500 Green may be used in any system listing OlyBond 500.
 - 3M CR-20 in continuous 2-1/2-3-1/2" wide ribbons, 12" o.c.
5. Unless otherwise noted, the insulation may be any polyisocyanurate, polystyrene, fiberboard, perlite and/or gypsum-based insulation board that meet the requirements of the IRC and IBC along with applicable Texas Revisions adopted by TDI.
6. Bonded polyisocyanurate insulation boards must be maximum 4 x 4'.
7. Unless otherwise noted, all base sheets specified in this report are metric.

8. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted. Tapered polyisocyanurate at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table:

- Insta Stik™ Quik Set Insulation Adhesive: MDP -120.0 psf (min. 1/2" thick)
- Millennium One Step Foamable Adhesive: MDP -157.5 psf (min. 1/2" thick)
- OlyBond 500 Adhesive Fastener: MDP -45.0 psf (min. 1/2" Multi-Max FA-3)
- OlyBond 500 Adhesive Fastener: MDP -315.0 psf (min. 1/2" ENRGY 3)
- OlyBond 500 Adhesive Fastener: MDP -487.5 psf (min. 1/2" ACFoam-II)
- 3M CR-20: MDP -117.5 psf (min. 1" thick)

9. Unless otherwise noted, refer to the following references for bonded base, ply or cap sheet applications.

Table 1: Polyglass Roof Covers			
Reference	Layer	Material	Application
BP-AA (Ply sheets, Asphalt-Applied)	Ply	ASTM D2178, Type IV or VI	Hot asphalt at 20-40 lbs/square
SBS-AA (SBS, Asphalt-Applied)	Base or Ply	XtraFlex SBS Glass Base, XtraFlex SBS Glass Interply, XtraFlex SBS Poly Base	Hot asphalt at 20-40 lbs/square
	Cap	XtraFlex SBS Poly Base, XtraFlex SBS Poly G, Polyfresko G SBS, Polyfresko G SBS FR	
SBS-TA (SBS, Torch-Applied)	Base or Ply	XtraFlex SBS Glass Interply, XtraFlex SBS Poly Base	Torch-Applied
	Cap	XtraFlex SBS Glass Interply, XtraFlex SBS Glass G, XtraFlex SBS Poly Base, XtraFlex SBS Poly G, Polyfresko G SBS, Polyfresko G SBS FR	
SBS-SA (SBS, Self-Adhering)	Base or Ply	XtraFlex SBS Base SA	Self-Adhering
	Cap	XtraFlex SBS G SA, Polyfresko G SBS SA, Polyfresko G SBS SA FR, SA-SBS Cap Sheet, SA-SBS Cap Sheet (FR), SA-SBS KoolCap, SA-SBS KoolCap (FR)	

Table 1: Polyglass Roof Covers			
Reference	Layer	Material	Application
APP-TA (APP, Torch-Applied)	Base or Ply	XtraFlex APP S	Torch-Applied
	Cap	XtraFlex APP S, XtraFlex APP G, Polyfresko G, XtraFlex Kool APP G, Polyfresko G FR	
APP-SA (APP, Self-Adhering)	Cap	XtraFlex APP G SA, Polyfresko G APP SA, Polyfresko G APP SA FR, XtraFlex Kool APP S SA	Self-Adhering
TPO-TA (TPO, Torch-Applied)	Ply	XtraFlex	Torch-Applied
	Cap	XtraFlex, XtraFlex G, XtraFlex G FR	

10. Any of the following coatings may be applied to the top roof membrane. Apply the coatings in accordance with the manufacturer’s installation instructions.

- XtraFlex 20 Bituminous Roof Coating;
- XtraFlex 80 Emulsion Roof Coating;
- XtraFlex 60 Aluminum Roof Coating;
- XtraFlex 65 Aluminum Roof Coating Fibered;
- XtraFlex 70 Premium Acrylic FR Roof Coating
- XtraFlex SRC 9600 High Solids Silicone Roof Covering
- XtraFlex SRC 8000 Silicone Roof Covering
- XtraFlex EP Primer

TABLE 2A: POLYGLASS MODIFIED BITUMEN WOOD DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Anchor Sheet		Insulation		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
1	Min. 15/32" OSB or plywood	None	N/A	Min. 1.5" ACFoam II, ACFoam III, ENRGY 3, H-Shield, H-Shield CG or Multi-Max FA-3" 3M CR-20	(Optional) Additional layer(s) or base insulation in 3M CR-20	SBS-SA	(Optional) SBS-SA, SBS-AA, SBS-TA, APP-TA or BP-AA	SBS-SA, SBS-AA, SBS-TA, APP-SA, APP-TA or TPO-TA
Design Pressure (psf)		Attachment						
0 < P ≤ -52.5		3M CR-20 in rows 12" o.c.						

Limitations and Installation (cont.):

TABLE 2B: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Anchor Sheet		Insulation		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
2	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Fiberboard Roof Insulation in hot asphalt	SBS-AA	(Optional) One or more BP-AA or SBS-AA	SBS-AA, SBS-TA, APP-TA or TPO-TA
3	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board in hot asphalt	SBS-SA, SBS-TA or APP-TA	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Anchor Sheet Attachment						
0 < P ≤ -52.5		8" o.c. at 4" laps and 8" o.c. at three, equally spaced, staggered center rows.						

Limitations and Installation (cont.):

TABLE 2C: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Anchor Sheet		Insulation		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
4	Min. 19/32" plywood at 24" spans attached 4-inch o.c. with 8d common nails or 6" o.c. with #8 screws	CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32 ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard in hot asphalt	SBS-AA	(Optional) One or more BP-AA or SBS-AA	SBS-AA, SBS-TA, APP-TA or TPO-TA
5	Min. 19/32" plywood at 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board in hot asphalt	SBS-SA, SBS-TA or APP-TA	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Anchor Sheet Attachment						
0 < P ≤ -60		8" o.c. at 4" laps and 8" o.c. at three, equally spaced, staggered center rows.						

Limitations and Installation (cont.):

TABLE 2D: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Anchor Sheet		Insulation		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
6	Min. 19/32" plywood at 24" spans attached 4" o.c. with 8d common nails or 6-inch o.c. with #8 screws	XtraFle x SBS Glass Base	32-ga., 1-5/8" diameter tin caps with 12-ga. annular ring shank nails	Min. 2" ACFoam-II, ACFoam-III, H-Shield, H-Shield CG, Multi-Max FA-3 or ENRGY-3 in Insta Stick™ Quik Set Insulation Adhesive, OlyBond 500, 3M CR-20 or Millennium One Step Foamable , 7" o.c. atop anchor sheet fastener rows	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board in Insta Stick™ Quik Set Insulation Adhesive, OlyBond 500, 3M CR-20 or Millennium One Step Foamable , 12" o.c.	SBS-AA	(Optional) One or more BP-AA, SBS-AA, SBS-SA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA, TPO-TA, SBS-SA or APP-SA
7	Min. 19/32" plywood at 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	XtraFle x SBS Glass Base	32-ga., 1-5/8- diameter tin caps with 12-ga. annular ring shank nails	Min. 2" ACFoam-II, ACFoam-III, H-Shield, H-Shield CG, Multi-Max FA-3 or ENRGY-3 in Insta Stick™ Quik Set Insulation Adhesive, OlyBond 500, 3M CR-20 or Millennium One Step Foamable , 7" o.c. atop anchor sheet fastener rows	(Optional) Additional layers base insulation in Insta Stick™ Quik Set Insulation Adhesive, OlyBond 500, 3M CR-20 or Millennium One Step Foamable , 12" o.c.	SBS-SA	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Anchor Sheet Attachment						
0 < P ≤ -60		6" o.c. at 4" laps and 6" o.c. at four, equally spaced, staggered center rows.						

Limitations and Installation (cont.):

TABLE 2E: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Anchor Sheet		Insulation		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
8	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with #14 Roofgrip, Dekfast Galvalume Steel Hex with Dekfast #14 or TruFast 3" Metal Insulation Plate with TruFast #14 HD Fastener	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard in hot asphalt	SBS-AA	(Optional) One or more BP-AA or SBS-AA	SBS-AA, SBS-TA, APP-TA or TPO-TA
9	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with #14 Roofgrip, Dekfast Galvalume Steel Hex with Dekfast #14 or TruFast 3" Metal Insulation Plate with TruFast #14 HD Fastener	ASTM C1289, type II polyisocyanurate in hot asphalt	Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board in hot asphalt	SBS-SA, SBS-TA or APP-TA	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Anchor Sheet Attachment						
0 < P ≤ -52.5		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.						

Limitations and Installation (cont.):

TABLE 3A: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Base Insulation Layer(s)		Top Insulation Layer		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
10	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	Min. 1.5" ENRGY 3, H-Shield or Polytherm	Dekfast Galvalume Steel Hex with Dekfast #14 or #15 HS or TruFast 3" Metal Insulation Plate with TruFast #14 HD or #15 EHD	Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard	Hot asphalt	(Optional if using AA Ply) SBS-AA	(Optional if using AA Base) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Insulation Attachment						
		Density (ft ² / fastener)	Parts per 4 x 4' board		Parts per 4 x 8' board			
0 < P ≤ -52.5		1.33	12		24			

Limitations and Installation (cont.):

TABLE 3B: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Base Insulation Layer(s)		Top Insulation Layer		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
11	Min. 19/32" plywood at 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	Min. 1.5" ENRGY 3, H-Shield or Polytherm	Dekfast Galvalume Steel Hex with Dekfast #14 or #15 HS or TruFast 3" Metal Insulation Plate with TruFast #14 HD or #15 EHD	Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard	Hot asphalt	(Optional if using AA Ply) SBS-AA	(Optional if using AA Base) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Insulation Attachment						
		Density (ft2 / fastener)	Parts per 4 x 4' board		Parts per 4 x 8' board			
0 < P ≤ -60		1.33	12		24			

Limitations and Installation (cont.):

TABLE 4A: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Base Insulation Layer(s)		Top Insulation Layer		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
12	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	(Optional) One or more layers, any combination	loose laid	Min. 1/2" Structodek High Density Wood Fiberboard or min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast Galvalume Steel Hex with Dekfast #14 or #15 HS	(Optional if using AA Ply) SBS-AA	(Optional if using AA Base) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Insulation Attachment						
		Density (ft2 / fastener)	Parts per 4 x 4' board		Parts per 4 x 8' board			
0 < P ≤ -52.5		1.33	12		24			

Limitations and Installation (cont.):

TABLE 4B: POLYGLASS MODIFIED BITUMEN								
WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Base Insulation Layer(s)		Top Insulation Layer		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
13	Min. 19/32" plywood at 24" spans attached 4" o.c. with 8d common nails	(Optional) One or more layers, any combination	loose laid	Min. 1/2" Structodek High Density Wood Fiberboard or min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast Fasteners #12, #14 and #15 HS	(Optional if using AA Ply) SBS-AA	(Optional if using AA Base) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Insulation Attachment						
		Density (ft2 / fastener)		Parts per 4 x 4' board		Parts per 4 x 8' board		
0 < P ≤ -67.5			1.33		12		24	

Limitations and Installation (cont.):

TABLE 4C: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Base Insulation Layer(s)		Top Insulation Layer		Roof Cover		
		Type	Attach	Base	Top	Base	Ply	Cap
14	Min. 19/32" plywood at 24" spans attached 6" o.c. with #8 screws	(Optional) One or more layers, any combination	loose laid	Min 1.5" ENRGY 3, H-Shield, or Polytherm,	Dekfast Galvalume Steel Hex with Dekfast #14 or #15 HS or TruFast 3" Steel Insulation Plate with TruFast #14 HD or #15 EHD	SBS-SA	(Optional) One or more SBS-TA, APP-TA, TPO-TA or SBS-SA	SBS-TA, APP-TA, TPO-TA, SBS-SA or APP-SA
15	Min. 19/32" plywood at 24" spans attached 6" o.c. with #8 screws	(Optional) One or more layers, any combination	loose laid	Min. 1/2" Structodek High Density Wood Fiberboard or min. 1/4" DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Dekfast Galvalume Steel Hex with Dekfast #14 or #15 HS	(Optional if using AA Ply) SBS-AA	(Optional if using AA Base) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Insulation Attachment						
		Density (ft ² / fastener)	Parts per 4 x 4' board		Parts per 4 x 8' board			
0 < P ≤ -82.5		1.33	12		24			

Limitations and Installation (cont.):

TABLE 5A: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER							
Assembly No.	Substrate	Insulation Layer(s)		Base Sheet		Roof Cover	
		Base Layer	Top Layer	Type	Fasteners	Ply	Cap
16	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails.	One or more layers, any combination	(Optional) Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard, loose laid	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with #14 Roofgrip, Dekfast Galvalume Steel Hex with Dekfast #14 or TruFast 3" Metal Insulation Plate with TruFast #14 HD Fastener	(Optional) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment					
0 < P ≤ -52.5		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.					

TABLE 5B: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER							
Assembly No.	Substrate	Insulation Layer(s)		Base Sheet		Roof Cover	
		Base Layer	Top Layer	Type	Fasteners	Ply	Cap
17	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	One or more layers, any combination	(Optional) Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard, loose laid	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #14 Roofgrip	(Optional) One or more SBS-SA	SBS-SA, APP-SA, SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment					
0 < P ≤ -52.5		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.					

Limitations and Installation (cont.):

TABLE 5C: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER							
Assembly No.	Substrate	Insulation Layer(s)		Base Sheet		Roof Cover	
		Base Layer	Top Layer	Type	Fasteners	Ply	Cap
18	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	One or more layers, any combination	(Optional) Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 1/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard, loose laid.	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #12 Standard Roofgrip	(Optional) One or more BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment					
0 < P ≤ -60		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.					

TABLE 5D: POLYGLASS MODIFIED BITUMEN WOOD DECK, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER							
Assembly No.	Substrate	Insulation Layer(s)		Base Sheet		Roof Cover	
		Base Layer	Top Layer	Type	Fasteners	Ply	Cap
19	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	One or more layers, any combination	(Optional) Min. 1/4" DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, Min. 3/4" FescoBoard or min. 1/2" Structodek High Density Wood Fiberboard, loose laid.	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #12 Standard Roofgrip	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Base Sheet Attachment					
0 < P ≤ -60		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.					

Limitations and Installation (cont.):

TABLE 6A: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Slip Sheet	Base Sheet		Roof Cover	
			Type	Fasteners	Ply	Cap
20	Min. 15/32" OSB	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	11-ga. ring shank cap nails with a min. 1" dia. round cap	(Optional) SBS-SA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -30		6" o.c. at 3" laps and 6" o.c. at two, equally spaced, staggered center rows.				

TABLE 6B: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Slip Sheet	Base Sheet		Roof Cover	
			Type	Fasteners	Ply	Cap
21	Min. 15/32" Plywood	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	11-ga. ring shank cap nails with a min. 1" dia. round cap	(Optional) SBS-SA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -37.5		6" o.c. at 3" laps and 6" o.c. at two, equally spaced, staggered center rows.				

Limitations and Installation (cont.):

TABLE 6C: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Slip Sheet	Base Sheet		Roof Cover	
			Type	Fasteners	Ply	Cap
22	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	(Optional) One or more BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
23	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	(Optional) One or more SBS-SA	SBS-SA or APP-SA
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -52.5		8" o.c. at 4" laps and 8" o.c. at two, equally spaced, staggered center rows.				

TABLE 6D: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Slip Sheet	Base Sheet		Roof Cover	
			Type	Fasteners	Ply	Cap
24	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	(Optional) One or more BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
25	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	32-ga., 1-5/8" diameter tin caps with 11-ga. annular ring shank nails	(Optional) One or more SBS-SA, BP-AA or SBS-AA	SBS-SA, APP-SA, SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -60.0		8" o.c. at 4" laps and 8" o.c. at three, equally spaced, staggered center rows.				

Limitations and Installation (cont.):

TABLE 6E: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Slip Sheet	Base Sheet		Roof Cover	
			Type	Fasteners	Ply	Cap
26	Min. 19/32" plywood at max. 24" spans attached 6" o.c. with #8 screws	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	32-ga., 1-5/8" diameter tin caps with 12-ga. annular ring shank nails Tin caps primed with PG100 or ASTM D41 primer	XtraFlex SBS Base SA	SBS-SA, APP-SA, SBS-AA, SBS-TA, APP-TA or TPO-TA
27	Min. 19/32" plywood at max. 2" spans attached 6" o.c. with #8 screws	(Optional) ASTM D 4601, Type II base sheet loose laid	XtraFlex SBS Glass Base	32-ga., 1-5/8" diameter tin caps with 12-ga. annular ring shank nails Tin caps primed with PG100 or ASTM D41 primer	(Optional) One or more BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -112.5		6" o.c. at 4" laps and 6" o.c. at four, equally spaced, staggered center rows.				

TABLE 6F: POLYGLASS MODIFIED BITUMEN						
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER						
Assembly No.	Substrate	Base Sheet		Roof Cover		
		Type	Fasteners	Ply	Cap	
28	Min. 19/32" plywood at 24" spans attached 4" o.c. or 6" o.c. with 8d common nails or 6" o.c. with #8 screws	XtraFlex SBS Glass Base, CertainTeed Glasbase, Firestone MB Base, JM Perma-Ply 28, Tamko Glass Base or GAFGLAS #75	OMG Flat Bottom Plates (square) with #14 Roofgrip, Dekfast Galvalume Steel Hex with Dekfast #14 or TruFast 3" Metal Insulation Plate with TruFast #14 HD Fastener	(Optional) One or more BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA	
Design Pressure (psf)		Base Sheet Attachment				
0 < P ≤ -52.5		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.				

Limitations and Installation (cont.):

TABLE 6G: POLYGLASS MODIFIED BITUMEN					
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
29	Min. 19/32" plywood at 24" spans attached 6" o.c. with 8d common nails	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #14 Roofgrip, Dekfast Galvalume Steel Hex with Dekfast #14 or TruFast 3" Metal Insulation Plate with TruFast #14 HD Fastener	(Optional) One or more SBS-SA	SBS-SA, APP-SA, SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment			
0 < P ≤ -52.5		12-inch o.c. at 4-inch laps and 12-inch o.c. at two, equally spaced, staggered center rows.			

TABLE 6H: POLYGLASS MODIFIED BITUMEN					
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
30	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #12 Standard Roofgrip	(Optional) One or more BP-AA, SBS-AA, SBS-TA, APP-TA or TPO-TA	SBS-AA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment			
0 < P ≤ -60		12" o.c. at 4" laps and 12"o.c. at two, equally spaced, staggered center rows.			

Limitations and Installation (cont.):

TABLE 6I: POLYGLASS MODIFIED BITUMEN WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
31	Min. 19/32" plywood at max. 24" spans attached 4" o.c. with 8d common nails or 6" o.c. with #8 screws	XtraFlex SBS Glass Base	OMG Flat Bottom Plates (square) with #12 Standard Roofgrip	(Optional) One or more SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA, APP-TA or TPO-TA
Design Pressure (psf)		Base Sheet Attachment			
0 < P ≤ -60		12" o.c. at 4" laps and 12" o.c. at two, equally spaced, staggered center rows.			

TABLE 6J: POLYGLASS MODIFIED BITUMEN WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
32	Min. 19/32" plywood at max. 24" spans with blocking 48" o.c. attached 6-inch o.c. with #10 x 3" screws	XtraFlex SBS Glass Base	32-ga., 1-5/8- diameter tin caps with 12-ga. annular ring shank nails	(Optional) SBS-SA	SBS-SA or APP-SA
Design Pressure (psf)		Base Sheet Attachment			
0 < P ≤ -112.5		4" o.c. at 4" laps and 4" o.c. at four, equally spaced, staggered center rows			

Limitations and Installation (cont.):

TABLE 6K: POLYGLASS MODIFIED BITUMEN WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
33A	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (sand surfaced)	Simplex MAXX Cap fasteners	(Optional) BP-AA, SBS-AA or SBS-TA	SBS-AA
33B	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (poly surfaced)	Simplex MAXX Cap fasteners	(Optional) SBS-TA or APP-TA	SBS-TA or APP-TA
Design Pressure (psf)	Base Sheet Attachment				
	At Lap		Staggered Center Row(s)		
	Max Spacing (o.c.)	Min. Lap Width	Max Spacing (o.c.)	Min. # of Rows	
$0 < P \leq -45$	9"	2"	18"	2	
$-45 < P \leq -52.5$	9"	2"	12"	2	
$-52.5 < P \leq -90$	6"	2"	6"	2	
$-90 < P \leq -105$	6"	2"	6"	3	

Limitations and Installation (cont.):

TABLE 6L: POLYGLASS MODIFIED BITUMEN					
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
34A	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (poly top surface)	Original Simplex Cap Nails (1" head diameter, 11-gauge x 1-1/4" long annular grooved shank)	(Optional) SBS-SA or SBS-TA	SBS-SA, APP-SA or SBS-TA
34B	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (sand top surface)	Original Simplex Cap Nails (1-inch head diameter, 11 gauge x 1.25-inch long annular grooved shank)	(Optional) BP-AA or SBS-AA	SBS-AA
Design Pressure (psf)		Base Sheet Attachment			
		At Lap		Staggered Center Row(s)	
		Max Spacing (o.c.)	Min. Lap Width	Max Spacing (o.c.)	Min. # of Rows
0 < P ≤ -52.5		6"	3"	6"	4

TABLE 6M: POLYGLASS MODIFIED BITUMEN					
WOOD DECK, NON-INSULATED, MECHANICALLY ATTACHED BASE SHEET, BONDED ROOF COVER					
Assembly No.	Substrate	Base Sheet		Roof Cover	
		Type	Fasteners	Ply	Cap
35A	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (sand top surface)	Min. 1-5/8" OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates	(Optional) BP-AA, SBS-AA, SBS-TA or APP-TA	SBS-AA, SBS-TA or APP-TA
35B	Min. 15/32" CDX plywood	XtraFlex SBS Glass Base (sand top surface)	Min. 1-5/8" Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates	(Optional) BP-AA or SBS-AA	SBS-AA
Design Pressure (psf)		Base Sheet Attachment			
		At Lap		Staggered Center Row(s)	
		Max Spacing (o.c.)	Min. Lap Width	Max Spacing (o.c.)	Min. # of Rows
0 < P ≤ -90		6"	4"	6"	3
-90 < P ≤ -120		6"	4"	6"	5

Limitations and Installation (cont.):

TABLE 7A: POLYGLASS MODIFIED BITUMEN WOOD DECK, NON-INSULATED, BONDED ROOF COVER			
Assembly No.	Roof Cover		
	Joint Treatment	Ply	Cap
36	None	(Optional) SBS-SA	SBS-SA or APP-SA
Design Pressure (psf)	Substrate		Primer
$0 < P \leq -90$	Min. 19/32" plywood at max. 24" spans attached 6" o.c. with 8d ring shank nails		(Optional) PG100 Asphalt Primer

TABLE 8A: POLYGLASS MODIFIED BITUMEN CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER			
Assembly No.	Roof Cover		
	Base	Ply	Cap
37	SBS-SA	(Optional) SBS-SA, SBS-TA or APP-TA	SBS-SA, APP-SA, SBS-TA or APP-TA
Design Pressure (psf)	Substrate		Primer
$0 < P \leq -315$	Min. 2500 psi Structural Concrete or Concrete Plank		Approved asphalt primer

Note: Keep the manufacturer’s installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.