

## Product Evaluation

RC263 | 0720

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-263

**Effective Date:** July 1, 2020

**Re-evaluation Date:** August 2024

**Product Name:** Flex Single-Ply Roofing Systems Over Concrete, Steel, and Lightweight Concrete Decks

**Manufacturer:** Flex Membrane International Corp.  
2670 Leicz's Bridge Road  
Suite 400  
Leesport, PA 19533-9433  
(610) 916-9506

### General Description:

- **Flex Tripolymer FB** is a KEE membrane with polyester fleece backing in a thickness range of 0.045" to 0.120".
- **Flex Tripolymer MF/R** is a KEE membrane in a thickness range of 0.045" to 0.120".
- **Flex MFR PVC FB** is a polyvinyl chloride membrane with polyester fleece backing in a thickness range of 0.050" to 0.080".
- **Flex MFR PVC** is a polyvinyl chloride membrane in a thickness range of 0.050" to 0.080".
- **SBS 80 s/s Base Sheet** is a glass fiber reinforced SBS modified bitumen membrane designed for use as the base/ply in multi-ply thermoplastic roofing systems in a thickness of 0.080".
- **Flex FB Low Rise Adhesive** is an adhesive used to bond Flex Tripolymer FB membrane to substrate.
- **Flex Substrate 2375** is a synthetic rubber adhesive.

- **Flex 7008 Laminating Adhesive** is a water-based adhesive used to bond Flex MFR PVC FB membrane to substrate
- **Flex Rubber Emulsion Adhesive** is an adhesive used to bond Flex Tripolymer FB membrane to substrate.
- **Flex ISO II** is a closed-cell polyisocyanurate foam core integrally bonded to non-asphaltic, fiber-reinforced organic felt facers.
- **Flex ISO III** is a closed-cell polyisocyanurate foam core integrally bonded to inorganic coated glass.

#### **Other Manufacturer's Product Description:**

- **GAFGLAS FlexPly 6** is a Type VI asphalt impregnated glass felt with asphalt coating manufactured by GAF.
- **GAFGLAS Ply 4** is a Type IV asphalt impregnated glass felt with asphalt coating manufactured by GAF.
- **GAFGLAS Stratavent Nailable Venting Base Sheet** is a smooth-surfaced asphaltic nailable venting base sheet reinforced with fiberglass mat manufactured by GAF.
- **SBS Plus NP180p/s** is designed for use as a ply in two-ply protected membrane roofing system manufactured by Henry Company, LLC.
- **Pliobond 7008 Water Based Adhesive** is a water-based adhesive used to bond Flex MFR PVC FB membrane to substrate manufactured by Ashland, Inc.
- **Polyset CR-20** is polyurethane two component low-rise insulation adhesive manufactured by ICP Adhesives and Sealants, Inc.
- **Polyset Board-Max** is a spray polyurethane two component insulation adhesive manufactured by ICP Adhesives and Sealants, Inc.
- **FA636 Water Borne Adhesive** is a water-based membrane adhesive manufactured by ITW TACC, a Division of Illinois Tool Works, Inc.
- **LA432M Bonding Adhesive** is a low VOC membrane adhesive manufactured by ITW TACC, a Division of Illinois Tool Works, Inc.
- **Millennium One Step Foamable Adhesive** is a polyurethane one-step, all-purpose, foamable adhesive manufactured by H.B. Fuller Company.
- **Millennium PG-1 Pump Grade Adhesive** is a polyurethane two component low-rise adhesive manufactured by H.B. Fuller Company.
- **H-Shield** is a rigid roof insulation panel composed of a closed cell polyisocyanurate foam core manufactured on-line to fiber reinforced facers on each side manufactured by Hunter Panels, LLC.
- **ACFoam-II** is a closed-cell polyisocyanurate foam core integrally bonded to non-asphaltic, fiber-reinforced organic felt facers manufactured by Atlas Roofing Corporation.
- **ACFoam-III** is a closed-cell polyisocyanurate foam core integrally bonded to inorganic coated glass facers manufactured by Atlas Roofing Corporation.
- **ACFoam-HS Coverboard** is a closed-cell polyisocyanurate foam core integrally bonded high performance ACFoam-IV coated glass facers manufactured by Atlas Roofing Corporation.
- **ENRGY 3** is a rigid closed-cell polyisocyanurate foam core bonded in the manufacturing process to universal fiber glass reinforced facers manufactured by Johns Manville Corporation.

- **ENRGY 3 25 PSI** is a rigid closed-cell polyisocyanurate foam core bonded in the manufacturing process to universal fiber glass reinforced facers manufactured by Johns Manville Corporation.
- **Multi-Max FA-3** is an energy-efficient thermal insulation board composed of a closed-cell polyisocyanurate foam core bonded to glass fiber/organic mat facers on both sides manufactured by Rmax Operating, LLC.
- **DensDeck** is a non-structural, glass mat faced gypsum product with a silicone-treated, water resistant gypsum core and glass surface mats front, back and long edges, the primed board has both sides coated with an acrylic limestone filled binder manufactured by Georgia Pacific Gypsum, LLC.
- **Henry Recover Board** is a closed-cell polyisocyanurate foam core integrally bonded to inorganic coated glass facers manufactured by Henry Company LLC
- **SECUROCK Gypsum-Fiber Roof Board** is a rigid, gypsum based board stock for use as an overlayment, underlayment or bonding surface manufactured by USG Corporation.
- **STYROFOAM DECKMATE** is an extruded polystyrene insulation with smooth, high-density skins manufactured by The Dow Chemical Company.
- **OlyBond 500** is a dual component polyurethane foam adhesive. OlyBond 500 is available in 5 gal. containers or 1,500 ml SpotShot cartridges manufactured by OMG, Inc.
- **OMG XHD** is a truss head, self-drilling, drill point, high thread fastener for use in wood or steel decks manufactured by OMG, Inc.
- **OMG 2-3/4" Super XHD Barbed Plate** is a round galvanized steel stress plates for use with OMG fasteners manufactured by OMG, Inc.
- **OMG 2-3/8" Barbed XHD Plate** is a round galvanized steel stress plates for use with OMG fasteners manufactured by OMG, Inc.
- **OMG Super XHD** is a truss head, self-drilling, pinch point, high thread fastener manufactured by OMG, Inc.
- **OMG 3" Galvalume Steel Plate** is a galvalume coated steel plate for use with approved fasteners manufactured by OMG, Inc.
- **#12 Standard Roofgrip** is a modified buttress thread, Phillips head, carbon steel fastener for use in steel or wood decks manufactured by OMG, Inc.
- **RhinoBond Insulation Plate** is a black primer coated plate for use with PVC membranes manufactured by OMG, Inc.
- **RhinoBond Insulation Plate Bonding Tool** is a superior attachment system for PVC membranes based on patented electromagnetic induction welding technology manufactured by OMG, Inc.
- **CR Assembled Base Sheet Fastener (1.7")** is a G-90 galvanized fastener for base sheet attachment to lightweight insulating concrete decks with OMG CR-10 fluorocarbon coating with a base sheet plate manufactured by OMG, Inc.
- **Dekfast DF-#15-PH3** is a truss head, modified BP type, self-drilling point, 13 threads per inch, carbon fastener with sentry (black) coating manufactured by SFS Group USA, Inc.
- **Dekfast PLT-R-2-3/8-6B** is a galvalume AZ 50 steel, barbed plate for use with all Dekfast fasteners manufactured by SFS Group USA, Inc.

**Limitations:**

**Roof Framing:** The maximum allowable spacing of the roof framing must be as specified in this evaluation report.

**Roof Deck:** For new applications, the roof deck (wood structural panel and steel deck) must be secured to the roof framing to resist the required uplift loads. Concrete decks (structural and LWC) must be designed to resist the required loads.

**Positive Drainage of Roof Deck:** Roof decks, in which this product is to be installed upon, must be provided with positive drainage. A minimum roof slope after construction of 1/4" per foot is recommended.

**Design Wind Pressures:** The design wind uplift pressures must be specified in the assemblies listed in this evaluation report.

**Installation:**

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

**Membrane Attachment:** The membrane must be either mechanically attached or fully adhered using the fasteners, plates and adhesives specified in this evaluation report.

**Fasteners:** Fasteners must be of sufficient length to penetrate into and through the steel deck a minimum of 3 threads beyond the bottom of the steel deck.

**Installation:** Installation must be in accordance with the assemblies listed in this evaluation report.

<b>APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE</b>					
<b>Table</b>	<b>Deck</b>	<b>Assembly No.</b>	<b>Application</b>	<b>Description</b>	<b>Page</b>
1A	Concrete	C-1 – C-8	New, or Reroof (Tear-Off)	Bonded Insulation, Bonded Roof Cover	6-10
1B	LWC	LWC-1 – LWC-3	New, or Reroof (Tear-Off)	Bonded Insulation, Bonded Roof Cover	10-12
2	Steel	S-1 & S-2	New, or Reroof (Tear-Off)	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	13-14
3A	Steel	S-3 – S-5	New or Reroof (Tear-Off)	Mech. Attached Insulation, Heat Welded Roof Cover	15-16
3B	Steel	S-6 & S-7	New or Reroof (Tear-Off)	Loose-Laid Base Insulation, Mech. Attached Top Insulation, Bonded Roof Cover	16-17
3C	Steel	S-8	New or Reroof (Tear-Off)	Mech. Attached Insulation, Bonded Roof Cover	17
3D	Wood	W-1 – W-4	New, Reroof(Tear-Off) or Recover	Mech. Attached Insulation, Bonded Roof Cover	18-20
3E	Wood	W-5 & W-6	New, Reroof(Tear-Off) or Recover	Mech. Attached Insulation, Mech. Attached Roof Cover	20-21
4	Steel	S-9 – S-13	New or Reroof (Tear-Off)	Prelim. Attached Insulation, Mech. Attached Roof Cover	22-24
5	LWC	LWC-4 & LWC-7	New or Reroof (Tear-Off)	Non-Insulated, Bonded Roof Cover	24-26
6	Concrete	C-10	New or Reroof (Tear-Off)	Non-Insulated, Bonded Roof Cover	26
7	LWC	LWC-8	New or Reroof (Tear-Off)	Non-Insulated, Mech. Attached Roof Cover	27

**Installation:**

TABLE 1A: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#1 (C-1)	Concrete (minimum compressive strength of 2,500 psi) primed with Elastocol Primer at a rate of 0.5 gal./sq.	Sopravap'r, self-adhered to the primed concrete	Min. 1.5" ACFoam-II or Flex ISO II	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Min. 1/4" DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Flex MFR PVC FB or Flex Tripolymer FB	FA636 Water Borne Adhesive applied at 100 ft <sup>2</sup> /gal
<b>Design Pressure: -45.0 psf</b>								

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#2 (C-2)	Concrete (minimum compressive strength of 2,500 psi) primed with Elastocol Primer at a rate of 0.5 gal./sq.	Sopravap'r, self-adhered to the primed concrete	Min. 1.5" ACFoam-II or Flex ISO II	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Min. 1/4" DensDeck Prime	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Flex Tripolymer MF/R or Flex MFR PVC	Flex Substrate 2375 or LA432M Bonding Adhesive applied at 120 ft <sup>2</sup> /gal
<b>Design Pressure: -67.5 psf</b>								

**Installation (Continued):**

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#3 (C-3)	Concrete (minimum compressive strength of 2,500 psi) primed with Elastocol Primer at a rate of 0.5 gal./sq.	Sopravap'r, self-adhered to the primed concrete	Min. 2" STYROFOAM DECKMATE Plus FA	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Min. 1/4" DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Flex Tripolymer MF/R or Flex MFR PVC	Flex Substrate 2375 or LA432M Bonding Adhesive applied at 120 ft <sup>2</sup> /gal
<b>Design Pressure: -75.0 psf</b>								

**Installation (Continued):**

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#4 (C-4)	Concrete (minimum compressive strength of 2,500 psi)	Min. 2" STYROFOAM DECKMATE roof insulation	Adhered to deck and subsequent layers with OlyBond 500 adhesive fastener installed in 3/4" wide ribbons applied 12" on center	Min. 1/2" DensDeck	Adhered with OlyBond 500 adhesive fastener installed in 3/4" wide ribbons applied 12" on center	Flex Tripolymer FB	Flex Substrate 2375 adhesive applied at 0.83 gal./ft <sup>2</sup>
<b>Design Pressure: -150.0 psf</b>							

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Vapor Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attach	Type	Attachment	Type	Attachment	Type	Attachment
#5 (C-5)	Concrete (minimum compressive strength of 2,500 psi) primed with ASTM D41 asphalt primer at 0.75 gal./ft <sup>2</sup>	One ply of GAFGLAS FlexPly 6	Hot asphalt applied at rate of 20-25 lbs./ft <sup>2</sup>	Min. 1-1/2" Hunter H-Shield	Hot asphalt applied at rate of 20-25 lbs./ft <sup>2</sup>	Two plies of GAFGLAS Ply 4	Each hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Flex Tripolymer FB	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>
<b>Design Pressure: -195.0 psf</b>									



**Installation (Continued):**

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Vapor Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attach	Type	Attachment	Type	Attachment	Base	Top
#6 (C-6)	Concrete (minimum compressive strength of 2,500 psi) primed with ASTM D-41 asphalt primer applied at a rate of 0.75 gal./ft <sup>2</sup>	One ply of GAFGLAS FlexPly 6	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Minimum 1/2" ACFoam-II or Flex ISO II roof insulation	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Min. 1/2" SECUROCK gypsum fiberboard cover board	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Two plies of GAFGLAS Ply 4 adhered to cover board with hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Flex Tripolymer FB. Hot asphalt applied at a rate of 25 lbs./ft <sup>2</sup> . 3" wide laps are sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -225.0 psf</b>									

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Vapor Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attach	Type	Attachment	Type	Attachment	Base	Top
#7 (C-7)	Concrete (minimum compressive strength of 2,500 psi) primed with ASTM D-41 asphalt primer applied at a rate of 0.75 gal./ft <sup>2</sup>	One ply of SBS 80 s/s	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Min. 1/2" ACFoam-II or Flex ISO II roof insulation	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Min. 1/2" SECUROCK gypsum fiberboard cover board	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	One ply of SBS 80 s/s adhered to the cover board with hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Flex Tripolymer FB. Hot asphalt applied at a rate of 25 lbs./ft <sup>2</sup> . 3" wide laps are sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -255.0 psf</b>									

**Installation (Continued):**

TABLE 1A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Vapor Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attach	Type	Attachment	Type	Attachment	Type	Attachment
#8 (C-8)	Concrete (minimum compressive strength of 2,500 psi)	One ply of GAFGLAS FlexPly 6	Hot asphalt applied at rate of 20-25 lbs./ft <sup>2</sup>	Min. 1-1/2" Hunter H-Shield	Hot asphalt applied at rate of 20-25 lbs./ft <sup>2</sup>	Min. 1/8" Henry Recover Board	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Flex Tripolymer FB	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>
<b>Design Pressure: -300.0 psf</b>									

TABLE 1B: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover		
			Type	Attachment	Type	Attachment	Type	Attachment	
#9 (LWC-1)	Concrete (minimum compressive strength of 2,500 psi)	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete over concrete deck (minimum 350 psi compressive strength)	Min. 1.5" Flex ISO II, ACFoam-II	Adhered with Polyset Board-Max applied in 3/4" ribbons spaced max. 12" o.c.	Min. 1.5" Flex ISO II, ACFoam-II	Adhered with OMG OlyBond 500 applied in 3/4" ribbons spaced max. 12" o.c.	Flex MFR PVC	FA636 Water Borne Adhesive at a rate of 1 gal./sq	
<b>Design Pressure: -165.0 psf</b>									

**Installation (Continued):**

TABLE 1B (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#10 (LWC-2)	Concrete (minimum compressive strength of 2,500 psi)	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete over concrete deck (minimum 350 psi compressive strength)	Min. 1.5" Flex ISO II, ACFoam-II	Adhered with Polyset Board-Max applied in 3/4" ribbons spaced max. 12" o.c.	Min. 1/4" DensDeck Prime	Adhered with OMG OlyBond 500 applied in 3/4" ribbons spaced max. 12" o.c.	Flex MFR PVC	FA636 Water Borne Adhesive at a rate of 1 gal./sq
<b>Design Pressure: -210.0 psf</b>								

**Installation (Continued):**

TABLE 1B (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#11 (LWC-3)	Concrete (minimum compressive strength of 2,500 psi)	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete over concrete deck (minimum 350 psi compressive strength)	None	N/A	Min. 1/2" ACFoam-HD Coverboard	Adhered with Polyset Board-Max applied in 3/4" ribbons spaced max. 12" o.c.	Flex MFR PVC	FA636 Water Borne Adhesive at a rate of 1 gal./sq
<b>Design Pressure: -240.0 psf</b>								

**Installation (Continued):**

TABLE 2: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)									
STEEL DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Thermal Barrier	Vapor Barrier	Base Insulation		Top Insulation		Roof Cover	
				Type	Attachment	Type	Attachment	Type	Attachment
#12 (S-1)	Steel deck. Min. 22-gauge, Grade 33. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" DensDeck Prime or SECUROCK Gypsum secured to deck using Dekfast DF-#14-PH3-P3 fasteners with Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners with OMG 3" Galvalume Steel Plates or Trufast #14 HD fasteners with Trufast 3" Metal Insulation Plates at a fastener density of 1 per 2ft <sup>2</sup>	Sopravap'r, self-adhered to thermal barrier	Min. 1.5" ACFoam-II, Flex ISO II or Min. 2" STYROFOAM DECKMATE Plus FA	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Min. 1/4" DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board	Adhered with Millennium One Step Foamable Adhesive, Millennium PG-1 Pump Grade Adhesive or OlyBond 500 adhesive fastener installed in 1/2" – 3/4" wide ribbons applied 12" on center	Flex MFR PVC FB or Flex Tripolymer FB	FA636 Water Borne Adhesive applied at 100 ft <sup>2</sup> /gal
<b>Design Pressure: -45.0 psf</b>									

**Installation (Continued):**

TABLE 2 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)							
STEEL DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#13 (S-2)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653/ASTM A653M-01a. Secured to steel supports spaced a max. of 6'	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 PSI, or Multi-Max FA-3 roof insulation	Secured to the deck with OMG 3" Galvalume steel plates and OMG No. 12 standard fasteners at a rate of 1 per 1 ft <sup>2</sup> (16 per 4x4 board, 32 per 4x8 board)	Min. 1/2" ACFoam-HS cover board	Adhered with OlyBond 500 adhesive fastener installed in 3/4" wide ribbons applied 12" on center	Flex Tripolymer FB	Flex FB Low Rise adhesive applied at a rate of 60 ft <sup>2</sup> /gal. 3" wide laps are sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -82.5 psf</b>							

**Installation (Continued):**

TABLE 3A: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, MECHANICALLY ATTACHED INSULATION, HEAT WELDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#14 (S-3)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 PSI, or Multi-Max FA-3 roof insulation	Secured to the deck with Rhinobond Insulation Plates and OMG Super XHD fasteners at a rate of 1 per 6 ft <sup>2</sup> (1 per 2x3 ft grid pattern)	None	N/A	Flex Tripolymer MF/R	Heat welded to the Rhinobond Insulation Plates with the Rhinobond Tool at a rate of 6 seconds per plate, tool reaches 400 <sup>o</sup> F. The laps are sealed with a 2" heat weld
<b>Design Pressure: -45.0 psf</b>							

TABLE 3A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, MECHANICALLY ATTACHED INSULATION, HEAT WELDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#15 (S-4)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Secured to the deck with Rhinobond Insulation Plates and OMG Super XHD fasteners at a rate of 1 per 4 ft <sup>2</sup> (1 per 2x2 ft grid pattern)	None	N/A	Flex Tripolymer MF/R	Heat welded to the Rhinobond Insulation Plates with the Rhinobond Tool at a rate of 6 seconds per plate, tool reaches 400 <sup>o</sup> F. The laps are sealed with a 2" heat weld
<b>Design Pressure: -60.0 psf</b>							

**Installation (Continued):**

TABLE 3A (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, MECHANICALLY ATTACHED INSULATION, HEAT WELDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#16 (S-5)	Steel Deck. Min. 22-gauge, Grade 80, ASTM 1008 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACfoam-II or Flex ISO II roof insulation	Secured to the deck with Rhinobond Insulation Plates and OMG Super XHD fasteners at a rate of 1 per 4 ft <sup>2</sup> (1 per 2x2 ft grid pattern)	None	N/A	Flex Tripolymer MF/R	Heat welded to the Rhinobond Insulation Plates with the Rhinobond Tool at a rate of 6 seconds per plate, tool reaches 400° F. The laps are sealed with a 2" heat weld
<b>Design Pressure: -75.0 psf</b>							

TABLE 3B: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Base	Top
#17 (S-6)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653/ASTM A653M-01a. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACfoam-II, ACfoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Loose Laid	Min. 1/4" SECUROCK gypsum fiberboard cover board	Secured to the deck with OMG 3" Galvalume steel plates and OMG #12 Standard Roofgrip fasteners at a rate of 1 per 1 ft <sup>2</sup> (16 per 4x4 board, 32 per 4x8 board)	One ply of SBS 80 s/s. Adhered to the cover board with hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>	Flex Tripolymer FB. Hot asphalt applied at a rate of 25 lbs./ft <sup>2</sup> . 3" wide laps are sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -82.5 psf</b>							



**Installation (Continued):**

TABLE 3B (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)							
STEEL DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#18 (S-7)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653/ASTM A653M-01a. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Loose Laid	Min. 1/2" SECUROCK gypsum fiberboard cover board	Secured to the deck with OMG 3" Galvalume steel plates and OMG XHD fasteners at a rate of 1 per 1.6 ft <sup>2</sup> (10 per 4x4 board, 20 per 4x8 board)	Flex Tripolymer FB	Flex Rubber Emulsion Adhesive applied at a rate of 60 ft <sup>2</sup> /gal. 3" wide laps are sealed with a 2" wide heat weld
<b>Design Pressure: -90.0 psf</b>							

TABLE 3C: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)							
STEEL DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#19 (S-8)	Steel deck. Min. 22-gauge, Grade 33, ASTM A653/ASTM A653M-01a. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Secured to the deck with OMG 3" Galvalume steel plates and OMG #12 standard fasteners at a rate of 1 per 1 ft <sup>2</sup> (16 per 4x4 board, 32 per 4x8 board)	None	N/A	Flex MFR PVC FB	Pliobond 7008 water based adhesive or Flex 7008 Laminated Adhesive at a rate of 100 ft <sup>2</sup> /gal. 3" wide laps are sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -82.5 psf</b>							

**Installation (Continued):**

TABLE 3D: FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#20 (W-1)	Min. 15/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 1.6 ft <sup>2</sup> (10 per 4x4 board, 20 per 4x8 board)	Flex Tripolymer FB	Flex FB Low Rise Adhesive applied in continuous ribbons spaced max. 12" o.c.
<b>Design Pressure: -37.5 psf</b>							

TABLE 3D (CONTINUED): FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment	Type	Attachment
#21 (W-2)	Min. 15/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Loose laid	Min. 1/4" DensDeck Prime	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 1.78 ft <sup>2</sup> (9 per 4x4 board, 18 per 4x8 board)	Flex Tripolymer FB	Flex FB Low Rise Adhesive applied in continuous ribbons spaced max. 12" o.c.
<b>Design Pressure: -37.5 psf</b>									

**Installation (Continued):**

TABLE 3D (CONTINUED): FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER									
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment	Type	Attachment
#22 (W-3)	Min. 15/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Loose laid	Min. 1/4" DensDeck Prime	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 1.78 ft <sup>2</sup> (9 per 4x4 board, 18 per 4x8 board)	Flex MFR PVC FB	Polyset CR-20 applied as a "Spatter pattern" at a rate of 3.75 lbs./sq.
<b>Design Pressure: -45.0 psf</b>									

**Installation (Continued):**

TABLE 3D (CONTINUED): FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER							
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#23 (W-4)	Min. 15/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 1.6 ft <sup>2</sup> (10 per 4x4 board, 20 per 4x8 board)	Flex Tripolymer MF/R	Flex Substrate 2375 applied at 55-70 ft <sup>2</sup> /gal.
<b>Design Pressure: -60.0 psf</b>							

TABLE 3E: FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#24 (W-5)	Min. 23/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 8 ft <sup>2</sup> (2 per 4x4 board, 4 per 4x8 board)	Flex MFR PVC	Dekfast DF-#15-PH3 with Dekfast PLT-R-2-3/8- 6B spaced max. 6" o.c. within min. 6" wide laps spaced max. 75" o.c. Laps sealed with min. 1.5" wide heat weld.
<b>Design Pressure: -52.5 psf</b>							

**Installation (Continued):**

TABLE 3E (CONTINUED): FLEX SINGLE PLY – NEW, RE-ROOF (TEAR-OFF) OR RECOVER WOOD DECK, MECHANICALLY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Thermal Barrier		Base Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#25 (W-6)	Min. 23/32" Plywood	N/A	N/A	Min. 1.5" ACFoam-II or Flex ISO II	Secured to the deck with OMG 3" Galvalume steel plates and OMG #14 fasteners at a rate of 1 per 8 ft <sup>2</sup> (2 per 4x4 board, 4 per 4x8 board)	Flex MFR PVC	Dekfast DF-#15-PH3 with Dekfast PLT-R-2-3/8- 6B spaced max. 6" o.c. within min. 5" wide laps spaced max. 55" o.c. Laps sealed with min. 1.5" wide heat weld.
<b>Design Pressure: -82.5 psf</b>							

**Installation (Continued):**

TABLE 4: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)							
STEEL DECK, PRELIMINARY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#26 (S-9)	Steel deck. Min. 22-gauge, Grade 80, ASTM A653 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Preliminarily attached to the deck	None	N/A	Flex Tripolymer MF/R or Flex MFR PVC. 120" wide sheet	OMG 2-3/8" Barbed XHD Plates and OMG Super XHD fasteners installed 6" on center in the 5-1/2" wide laps sealed with a 2" wide heat weld
<b>Design Pressure: -37.5 psf</b>							

TABLE 4 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF)							
STEEL DECK, PRELIMINARY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#27 (S-10)	Steel deck. Min. 22-gauge, Grade 80, ASTM A653 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Preliminarily attached to the deck	None	N/A	Flex Tripolymer MF/R or Flex MFR PVC. 120" wide sheet	OMG 2-3/4" Barbed XHD Plates and OMG Super XHD fasteners installed 12" on center in the 6" wide laps sealed with a 2" wide heat weld
<b>Design Pressure: -37.5 psf</b>							

**Installation (Continued):**

TABLE 4 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, PRELIMINARY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#28 (S-11)	Steel deck. Min. 22-gauge, Grade 80, ASTM A1008 SS. Secured to steel supports spaced a maximum of 6' on center	Min. 1/2" ACFoam-II or Flex ISO II roof insulation	Preliminarily attached to the deck	None	N/A	Flex Tripolymer MF/R or Flex MFR PVC. 120" wide sheet	OMG 2-3/4" Barbed XHD Plates and OMG Super XHD fasteners installed 12" on center with rows spaced 114-1/2" sealed with a 1-1/2" wide heat weld
<b>Design Pressure: -37.5 psf</b>							

TABLE 4 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, PRELIMINARY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#29 (S-12)	Steel deck. Min. 22-gauge, Grade 80, ASTM A653 SS. Secured to steel supports spaced a max. of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 PSI, or Multi-Max FA-3 roof insulation	Preliminarily attached to the deck	None	N/A	Flex Tripolymer MF/R or Flex MFR PVC. 81" wide sheet	OMG 2-3/8" Barbed XHD Plates and OMG Super XHD fasteners installed 6" on center in the 5-1/2" wide laps sealed with a 2" wide heat weld
<b>Design Pressure: -45.0 psf</b>							

**Installation (Continued):**

TABLE 4 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) STEEL DECK, PRELIMINARY ATTACHED INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	Substrate	Base Insulation		Top Insulation		Roof Cover	
		Type	Attachment	Type	Attachment	Type	Attachment
#30 (S-13)	Steel deck. Min. 22-gauge, Grade 80, ASTM A653 SS. Secured to steel supports spaced a maximum of 6' on center	Min. 1/2" ACFoam-II, ACFoam-III, Flex ISO II, Flex ISO III, ENRGY 3, ENRGY 3 25 psi, or Multi-Max FA-3 roof insulation	Preliminarily attached to the deck	None	N/A	Flex Tripolymer MF/R or Flex MFR PVC. 81" wide sheet	OMG 2-3/4" Barbed XHD Plates and OMG Super XHD fasteners installed 12" on center in the 5-3/4" wide laps sealed with a 2" wide heat weld
<b>Design Pressure: -45.0 psf</b>							

TABLE 5: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#31 (LWC-4)	Steel deck. Min. 22-gauge, Grade 40, secured to steel supports spaced a maximum of 6' on center	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete (minimum 350 psi compressive strength) over steel deck	None	N/A	None	N/A	Flex MFR PVC FB	OlyBond 500 Adhesive applied as a "Spatter pattern" at a rate of 0.32 gal./sq.
<b>Design Pressure: -52.5 psf</b>								



**Installation (Continued):**

TABLE 5 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#32 (LWC-5)	Concrete deck (minimum compressive strength of 2,500 psi). Primed with Celcore PVA Curing Compound at a rate of 300 ft <sup>2</sup> /gal	3" Celcore lightweight insulating concrete (minimum 350 psi compressive strength) over concrete deck	None	N/A	None	N/A	Flex Tripolymer FB	Flex Rubber Emulsion Adhesive applied at a rate of 60 ft <sup>2</sup> /gal
<b>Design Pressure: -105.0 psf</b>								

TABLE 5 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#33 (LWC-6)	Concrete deck (minimum compressive strength of 2,500 psi). Primed with Celcore PVA Curing Compound at a rate of 300 ft <sup>2</sup> /gal	3" Celcore lightweight insulating concrete (minimum 350 psi compressive strength) over concrete deck	None	N/A	None	N/A	Flex Tripolymer FB	Hot asphalt applied at a rate of 20-25 lbs./ft <sup>2</sup>
<b>Design Pressure: -135.0 psf</b>								

**Installation (Continued):**

TABLE 5 (CONTINUED): FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Insulation		Top Insulation		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#34 (LWC-7)	Concrete (minimum compressive strength of 2,500 psi)	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete (minimum 350 psi compressive strength) over concrete deck	None	N/A	None	N/A	Flex MFR PVC FB	OlyBond 500 Adhesive applied as a "Spatter pattern" at a rate of 0.32 gal./sq.
<b>Design Pressure: -417.5 psf</b>								

TABLE 6: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER									
Assembly No.	Substrate	Vapor Barrier		Base Insulation		Top Insulation		Roof Cover	
		Type	Attach	Type	Attachment	Type	Attachment	Type	Attachment
#35 (C-10)	Concrete (minimum compressive strength of 2,500 psi)	None	N/A	None	N/A	None	N/A	Flex Tripolymer FB	Flex FB Low Rise adhesive applied at a rate of 60 ft <sup>2</sup> /gal
<b>Design Pressure: -382.5 psf</b>									

**Installation (Continued):**

TABLE 7: FLEX SINGLE PLY – NEW OR RE-ROOF (TEAR-OFF) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, MECHANICALLY ATTACHED ROOF COVER								
Assembly No.	Substrate	Lightweight Concrete	Base Sheet		Ply Sheet		Roof Cover	
			Type	Attachment	Type	Attachment	Type	Attachment
#36 (LWC-8)	Steel deck. Min. 22-gauge, Grade 40, secured to steel supports spaced a maximum of 6'	Min. 1" rigid EPS holey board placed in a min. 1/8" slurry-coat of lightweight insulating concrete then shall be covered with a min. 2" topcoat cast of Celcore Cellular Concrete lightweight insulating concrete (minimum 350 psi compressive strength) over steel deck	GAFGLAS Stratavent Nailable Venting Base Sheet	OMG CR Assembled Base Sheet Fastener (1.7"), 7" o.c. at the 4" laps and 7" o.c. at two equally spaced, staggered center rows	SBS Plus NP180p/s	Torched	Flex Tripolymer FB	Flex FB Low Rise Adhesive applied in continuous ribbons spaced max. 6" o.c.
<b>Design Pressure: -45.0 psf</b>								

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