TDI | Texas Department of Insurance

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Product Evaluation

RC667 | 0923

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-667

Effective Date: September 1, 2023
Re-evaluation Date: September 2027

Product Name: Elevate UltraPly TPO and GenFlex EZ TPO Roofing Systems Installed over Concrete Roof Decks

Manufacturer: Holcim Solutions and Products US, LLC
26 Century Blvd
Suite 205
Nashville, TN 37214
(800) 428-4511

General Description:
Elevate Product Description:

- **UltraPly TPO** roof membranes are nominal 0.045" to 0.080" thick flexible TPO (thermoplastic olefin) sheets
- **UltraPly TPO XR 100** roof membranes are nominal 0.045" thick flexible TPO (thermoplastic olefin) sheets
- **UltraPly TPO XR 115** roof membranes are nominal 0.060" thick flexible TPO (thermoplastic olefin) sheets
- **UltraPly TPO XR 135** roof membranes are nominal 0.080" thick flexible TPO (thermoplastic olefin) sheets
- **UltraPly TPO SA** roof membranes are nominal 0.045" to 0.060" thick heat weldable flexible TPO (thermoplastic olefin) sheets

- **MB Base** is a fiberglass reinforced, asphalt-coated base sheet
- **SBS Base-P** is a fiberglass reinforced, SBS modified bitumen membrane with a sanded bottom and sanded top surface
- **SBS Base** is a fiberglass reinforced, SBS modified bitumen membrane with a sanded bottom and sanded top surface
- **SBS PolyBase** is a polyester reinforced, SBS modified bitumen membrane with a sanded bottom and sanded top surface
- **V-Force** is a vapor barrier, self-adhered membrane
- **UltraPly Bonding Adhesive** is a solvent-based contact adhesive
- **Water Based Bonding Adhesive-P** is a contact adhesive used for bonding Elevate UltraPly TPO membranes to acceptable substrates
- **Single-Ply LVOC Bonding Adhesive** is a solvent-based formulation used for bonding Elevate UltraPly TPO membranes to acceptable substrates
- **Single-Ply LVOC Bonding Adhesive 1168** is a bonding adhesive used for bonding Elevate UltraPly TPO membranes to acceptable substrates
- **XR Bonding Adhesive** is a solvent-based contact adhesive
- **XR Stick Membrane Adhesive** is a two-component, low-rise polyurethane adhesive
- **I.S.O. FIX II** is a single component, moisture cured, polyurethane adhesive
- **I.S.O. Stick** is a two-component, low-rise polyurethane insulation adhesive
- **I.S.O. Twin Pack Insulation Adhesive** is a two-component, low-rise polyurethane adhesive
- **I.S.O. Spray R** is a two-component, low-rise polyurethane adhesive
- **SA-Solvent Based (SB) Primer** is a solvent-based primer to prepare porous substrates to receive V-Force Vapor Barrier Membrane
- **SA-Water Based (WB) Primer** is a polymer emulsion-based primer used in various substrates to enhance the adhesion of V-Force Vapor Barrier Membrane
- **Elevate All-Purpose Fastener** is a roofing fastener for wood and steel decks
- **Elevate All-Purpose S Fastener** is a roofing fastener for wood and steel decks
- **Elevate Heavy Duty** is a #15 Fastener for steel, wood, or concrete decks
- **Elevate Heavy Duty Plus** is a #21 Fastener for wood, steel, or concrete decks
- **Elevate HD Seam Plate** is an AZ55 or AZ50 galvalume insulation plate
- **Elevate HD Plus Seam Plate** is an AZ55 or AZ50 galvalume TPO membrane plate
- **Elevate Insulation Fastening Plate** is a 3" diameter, 0.017 to 0.023" thick galvalume stress plate for base sheet and insulation attachment
- **UltraPly TPO InvisiWeld Plate** is a primer coated plate for use with heat welded TPO membranes
- **UltraPly TPO InvisiWeld-S Plate** is a primer coated plate for use with heat welded TPO membranes
- **Pre-Assembled Fastener and Plate** is a #12 steel fastener with an AZ-50 galvalume steel plate used in all Elevate roof systems to pre-attach insulation or base sheets to steel and wood decks
- **Pre-Assembled Heavy-Duty Fastener and Insulation Plate** is a #15 steel fastener with an AZ-50 galvalume steel plate used in all Elevate roof systems to pre-attach insulation or base sheets to steel and wood decks.

Elevate Product Description (Continued):

- **Concrete Drive Fastener** is a steel fastener used for attachment into structural concrete substrates
- **Elevate Polymer Batten Strip** is used for anchoring Elevate membranes and flashing details
- **UltraPly QuickSeam R.M.A. Strip** is a 10" wide UltraPly TPO membrane with two 3" wide strips of tape factory laminated to it along its length
- **AP AccuTrac Kits** are used in roofing applications for the attachment of insulation to steel and wood roof decks with OMG AccuTrac installation equipment
- **Two Piece Impact Nail** is a two-piece factory assembled fastener
- **LWC Base-Ply Fastener** is a base ply fastening system for lightweight concrete decks
- **ISO 95+ GL** is a polyisocyanurate foam insulation
- **ISOGARD HD** is a high-density polyisocyanurate foam with a coated fiberglass facer
- **ISOGARD HD Composite** is a polyisocyanurate foam core laminated to a ½" ISOGARD HD board, with coated fiberglass facers
- **RESISTA** is a polyisocyanurate foam core laminated to a coated fiberglass facer

GenFlex Product Description:

- **EZ TPO** roof membranes are nominal 0.045" to 0.080" thick flexible TPO (thermoplastic olefin) sheets
- **GenFlex EZ Fleece Backed TPO (45-mil)** roof membrane nominal 0.045" thick flexible TPO (thermoplastic olefin) sheets
- **GenFlex EZ Fleece Backed TPO (60-mil)** roof membrane nominal 0.060" thick flexible TPO (thermoplastic olefin) sheets
- **GenFlex EZ Fleece Backed TPO (80-mil)** roof membrane nominal 0.080" thick flexible TPO (thermoplastic olefin) sheets
- **EZ TPO Peel and Stick HW** roof membranes are nominal 0.045" to 0.060" thick heat weldable flexible TPO (thermoplastic olefin) sheets
- **EZ TPO Bonding Adhesive** is a solvent-based contact adhesive
- **GenFlex Water Based Bonding Adhesive (P)** is a contact adhesive used for bonding GenFlex TPO membranes to acceptable substrates
- **EZ TPO Bonding Adhesive LVOC** is a solvent-based formulation used for bonding GenFlex TPO membranes to acceptable substrates
- **EZ TPO Bonding Adhesive LVOC 1168** is a bonding adhesive used for bonding GenFlex TPO membranes to acceptable substrates
- **GenFlex Fleece Backed Bonding Adhesive** is a solvent-based contact adhesive
- **GenFlex I.S.O. FIX II** is a single component, moisture cured, polyurethane adhesive
- **GenFlex One Step Insulation Adhesive** is a two-component, low-rise polyurethane adhesive
- **GenFlex ISO Bond Insulation Adhesive** is a two-component, low-rise polyurethane adhesive
- **EZ TPO InvisiWeld Plate** is a primer coated plate for use with heat welded TPO membranes
- **EZ TPO InvisiWeld Plate-S** is a primer coated plate for use with heat welded TPO membranes
- **GenFlex ISO Insulation** is a polyisocyanurate foam insulation
- **GenFlex HD ISO** is a high-density polyisocyanurate foam with a coated fiberglass facer

GenFlex Product Description (Continued):

- **GenFlex HD Composite ISO** is a polyisocyanurate foam core laminated to a ½" HD ISO board, with coated fiberglass facers
- **Coated Glass Facer** is a polyisocyanurate foam core laminated to a coated fiberglass facer

Coverboards:

- **DensDeck and DensDeck Prime** are a fiberglass faced, water-resistant gypsum core coverboard manufactured by Georgia-Pacific Gypsum, LLC
- **SECUROCK Glass Mat Roof Board** is a water-resistant gypsum core coverboard manufactured by US Gypsum Corporation.
- **SECUROCK Gypsum-Fiber Roof Board** is a water-resistant gypsum core coverboard manufactured by US Gypsum Corporation.

Limitations and Installation:

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 must be secured to the roof framing to resist the required uplift 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 Over an Existing Roof Covering (Roof Recover):

Acceptable Applications: The TPO roofing system may be installed over an existing built-up roof covering or an existing TPO roof covering based on the requirements set forth in this product evaluation report.

- **Inspection of Roof Covering Recover Installation:** Inspection of the roof covering recover installation must be by a Texas Department of Insurance appointed engineer. The Texas Department of Insurance appointed engineer must determine if the roof framing can support the com

Roof Covering Replacement Versus Roof Covering Recover: All existing roof coverings must be completely removed, and a new roof covering installed if any of the following conditions occur:

- The existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for the additional roof covering.
- The existing roof has two or more applications of any type of roof covering.

Positive Drainage: The roof covering recover application must not be required to meet the minimum roof slope of 1/4" per foot if positive drainage is provided.

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

Roof Deck: The existing roof deck must be as specified in each assembly listed in this evaluation report. The underside of the roof deck must be examined by the Texas Department of Insurance appointed engineer for corrosion or deterioration. If corrosion exists, then it must be treated with a rust inhibitor. A fastener withdrawal resistance test must be conducted in the corroded or deteriorated area to determine if the withdrawal resistance of the fastener complies with the minimum fastener requirements for the roof covering recover application. If the tested fastener fails to comply, then the deteriorated roof deck must be replaced.

Fastener Withdrawal Resistance: The fastener withdrawal resistance must be conducted in accordance with ANSI/SPRI FX-1-2006 and this evaluation report. Fasteners used for the installation of the roof covering recover to the existing roof deck must be as specified in the Installation Instructions section of this evaluation report. For the withdrawal test, the fasteners must be installed in the existing roof deck as required for the roof covering recover installation. A Texas Department of Insurance appointed engineer must review the data to verify the integrity of the existing roof deck and to compare results of the withdrawal tests with the minimum fastener requirements for the roof covering recover application.

The Texas Department of Insurance appointed engineer must document all test results, including the locations on the roof surface where the tests are performed. A minimum of 10 withdrawal resistance tests are required for a roof area up to 50,000 square feet (a minimum of 50 percent of the tests must be conducted at the perimeter and the corners). Five additional tests are required for each additional 5,000 square feet of roof area or portion thereof (a minimum of 50 percent of the tests must be conducted at the perimeter and the corners). The tests must be located evenly spread across the surface of the roof. At least one withdrawal test must be performed on each roof level if the roof consists of multiple levels.

The withdrawal resistance of each tested fastener must comply with the minimum fastener requirements for the roof covering recover application. If a tested fastener fails to comply, then the Texas Department of Insurance appointed engineer must examine that area for deterioration of the roof deck by removing the existing roof covering in that area. If that area of the roof deck has deteriorated, then the deteriorated roof deck must be replaced.

Existing Roof Covering Preparation: The existing roof covering must be prepared to receive the roof covering recover as specified in the Elevate installation instructions.

- The existing roof covering surface must be dry and free of dirt and debris.
- If the existing roof covering is gravel surfaced, then the loose gravel must be completely removed. The surface of the existing roof covering must be relatively smooth.

- If the existing roof covering has blisters, buckles, ridges, folds, or other deformations, then they must be removed, and the surface patched to provide a smooth surface.
- If the existing roof covering has loose fasteners, then the existing membrane must be cut open, the loose fasteners removed, and the surface patched to provide a smooth surface.

Roof Covering Recover Installation: Installation of the roof covering recover must be specified in the Installation Instructions section of this evaluation report.

General installation Requirements:
All International Residential Code (IRC) and the International Building Code (IBC) requirements must be satisfied, and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Membrane Attachment: The membrane must be mechanically attached to the roof deck through the insulation board using the fasteners and plates specified in this evaluation report. The fasteners must be placed through the fastening tabs unless otherwise noted in this evaluation report. Also, the membrane must be fully adhered using the adhesives specified in this evaluation report. The following two lap types are used:

Standard Lap: The standard lap consists of a 2" wide lap for fully adhered systems, and a 6" wide lap for mechanically attached membranes. Both laps are to be sealed with a minimum 1.5" heat weld.

Installation: Installation must be in accordance with the following assemblies:

Installation:

Name	Definition
System	A – Fully adhered systems B – Adhered base insulation, mechanically fastened top insulation, adhered membrane C – Mechanically fastened insulation, adhered membrane D – Mechanically fastened membrane E – Non-insulated, fastened membrane F – Non-insulated, adhered membrane
AP Fasteners & Plates	Elevate All-Purpose or All-Purpose S Fasteners and Insulation Fastening Plates
HD Fasteners & Plates	Elevate Heavy-Duty Fasteners and HD Seam Plates
HD Fasteners & Insulation Plates	Elevate Heavy-Duty Fasteners and Insulation Fastening Plates
HD Plus Fasteners & Plates	Elevate Heavy-Duty Plus Fasteners with Elevate HD Plus Seam Plates
CD Fasteners & Plates	Elevate Concrete Drive and Insulation Fastening Plates
CD Fasteners & Seam Plates	
Cover Board	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -Elevate ISOGARD HD -USG SECUROCK Glass-Mat Roof Board -USG SECUROCK Gypsum-Fiber Roof Board
Cover Board II	One layer of any of the following products: -Georgia-Pacific DensDeck -Georgia-Pacific DensDeck Prime -USG SECUROCK Glass-Mat Roof Board -USG SECUROCK Gypsum-Fiber Roof Board

Name	Definition		
Insulation	One of more layers in any combination of the following products: -ISO 95+ GL -ISOGARD HD -ISOGARD HD Composite -RESISTA		
Deck Detail	*As Tested* deck construction details are described as follows:		
	Gypsum	Poured gypsum; Minimum 2" thickness	
	Concrete Deck	Min. f'_c = 2,500 psi at 28 days	
	CWF Deck	Min. 2.5" thick Tectum I cementitious wood fiber panels	
	Steel Deck	Min. 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC; 0.5% Vented and ASTM A653 G90 for LWIC applications only. The following nomenclature is used to further describe the As Tested condition.	
		F<#>	<#> #12-24 HWH self-drilling screws or equivalent fastener at each flute used to secure the deck to the structural supports; Min. 0.25" penetration
		G<#>	Min. Grade <#> of Steel Deck
		HS<#>	Hilti S-SLC 01 M HWH screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
		HXE<#>	<#> Hilti X-ENP 19 L 15 powder-driven fasteners or equivalent at each flute used to secure the deck to the structural supports; Min. 0.25" penetration
		HXH<#>	<#> Hilti X-HSN 24 powder-driven fasteners or equivalent at each flute used to secure the deck to the structural supports; Min. 0.25" penetration
		L<#>	Max. span of <#> ft.
		P	Min. 5/8-inch diameter puddle welds at each flute used to secure the deck to the structural supports
		PW	Min. 5/8" diameter puddle welds with weld washers at each flute used to secure the deck to the structural supports
		S<#>	1/4"-14 HWH x 7/8" self-drilling screws or equivalent fastener secured <#>-inch o.c. along the panel side laps
		W	0.75" O.D. flat washer used with indicated fastener
	Wood Deck	APA Span-Rated sheathing. The following nomenclature is used to further describe the As Tested condition.	
		T<#>P	Min. <#>-inch thickness of the plywood
		T<#>O	Min. <#>-inch thickness of the OSB
		L<#>	Max. span of <#> inches
		N<#1>/<#2>	Min. 0.113" diameter x 2-3/8" ring shank nails spaced <#1>-inch o.c. at all intermediate supports and spaced <#2> at the perimeter of each board

Name	Definition
DensDeck	Min. 0.25" Georgia-Pacific DensDeck
DensDeck Prime	Min. 0.25" Georgia-Pacific DensDeck Prime
Insulation Adhesive	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Stick Insulation Adhesive, or I.S.O. Fix II Adhesive
Insulation Adhesive II	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Stick Insulation Adhesive, I.S.O. Fix II Adhesive, or Elevate I.S.O. Spray R
LWIC	Poured-in-place Cellular Lightweight Concrete with encapsulated insulation board
MCRF	Minimum Characteristic Resistance Force as determined by TAS 105 for the named fastener in the selected assembly
MDP	Maximum Design Pressure
Preliminarily Secured	Fastened at minimum rate of 5 per 4 ft x 8 ft board or 4 per 4 ft x 4 ft board.
SECUROCK	Min. 0.25" USG SECUROCK Gypsum-Fiber Roof Board
V-Force	One ply of Elevate V-Force Vapor Barrier Membrane. Non-metal substrates must be primed with Elevate SA Solvent-Based (SB) Primer, SA LVOC Primer or SA Water-Based (WB) Primer
XR Stick Membrane Adhesive	Adhered 12" o.c. in 3/4"-1" wide ribbons unless otherwise stated
I.S.O. Stick, I.S.O. Fix II, or I.S.O. Spray R	Adhered 12" o.c. in 3/4"-1" wide ribbons unless otherwise stated
I.S.O. Twin Pack Insulation Adhesive	Adhered 12" o.c. in 1/2" – 3/4" wide ribbons unless otherwise stated
Membrane Adhesive	Water Based Bonding Adhesive P adhered at a rate of 100-120 ft^2/gal., or UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168 Adhered at a rate of 45-60 ft^2/gal. unless otherwise stated
XR Membrane Adhesive	XR Stick Membrane Adhesive or I.S.O. Spray R
XR Membrane Adhesive II	XR Stick Membrane Adhesive, XR Bonding Adhesive, or I.S.O. Spray R, Hot asphalt, or PermaMop
InvisiWeld	Elevate UltraPly InvisiWeld Plates or InvisiWeld S Plates with Heavy Duty Fasteners or Concrete Drive fasteners (concrete decks only)
InvisiWeld S	Elevate UltraPly InvisiWeld S Plates with SFS Intec Dekfast #15 HS, Elevate Heavy Duty Fasteners or Elevate Concrete Drive fasteners (concrete decks only)
ISO	One or more layers of GenFlex ISO Insulation or Elevate ISO 95+ GL
ISO HD	One or more layers of GenFlex HD ISO or Elevate ISOGARD HD
ISO HD-C	One or more layers of GenFlex HD Composite ISO or Elevate ISOGARD HD Composite
PermaMop	Owens Corning PermaMop Asphalt
HA	ASTM D 312, Type IV asphalt

Name	Definition
UltraPly TPO	One ply of any one of the following products: 45-mil thick, 60-mil thick, or 80-mil thick UltraPly TPO
UltraPly TPO SA	One ply of any one of the following products: 45-mil thick or 60-mil thick UltraPly TPO SA
UltraPly TPO XR	One ply of any one of the following products: UltraPly TPO XR 100, UltraPly TPO XR 115 or UltraPly XR 135

Insulation Note: GenFlex ISO Insulation is equivalent to ISO 95+ GL, GenFlex HD ISO is equivalent to ISOGARD HD, GenFlex HD ISO Composite is equivalent to ISOGARD HD Composite, and Coated Glass Facer is equivalent to RESISTA

Membrane Note: GenFlex EZ TPO is equivalent to UltraPly TPO, UltraPly TPO XR 100 is equivalent to GenFlex EZ Fleece Backed TPO (45-mil), UltraPly TPO XR 115 is equivalent to GenFlex EZ Fleece Backed TPO (60-mil), and UltraPly TPO SA is equivalent to EZ TPO Peel and Stick HW, UltraPly TPO XR 135 is equivalent to GenFlex EZ Fleece Backed TPO (80-mil)

Table	System	Deck	Description
Table 1	C-A1 to C-A35	Concrete	CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER
Table 2	LWC-A2 to LWC-A15	Lightweight Concrete	LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER
Table 3	C-B1 to C-B5	Concrete	CONCRETE DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER
Table 4	C-C3 to C-C19	Concrete	CONCRETE DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER
Table 5	C-CD2 to C-CD4	Concrete	CONCRETE DECK, LOOSE LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, MECHANICALLY ATTACHED ROOF COVER
Table 6	C-D3 to C-D18	Concrete	CONCRETE DECK, PRELIMINARILY SECURED INSULATION, MECHANICALLY ATTACHED ROOF COVER
Table 7	C-F1 to C-F5	Concrete	CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER
Table 8	LWC-F1 to LWC-F20	Lightweight Concrete	LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A1	Structural Concrete	V-Force, Self-adhered followed by Min. 0.5" ISO or RESISTA followed by Cover Board II	I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-45.0**
				UltraPly TPO XR	XR Membrane Adhesive II	
				UltraPly TPO SA	Self-adhered	
C-A2	Structural Concrete	V-Force (Self-adhered) followed by Min. 1.5" ISO	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-57.5**
				UltraPly TPO XR	XR Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A3	Structural concrete (primed with SA Water-Based (WB) Primer)	V-Force (Self-adhered) followed by Min. 1.5" ISO or RESISTA	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-75.0**
				UltraPly TPO XR	XR Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A4	Structural Concrete (primed with SA Water-Based (WB) Primer)	V-Force (Self-adhered) followed by Min. 1.5" ISO	I.S.O. Twin Pack Insulation Adhesive or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-97.5**
				UltraPly TPO XR	XR Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A5	Structural Concrete	APP 80 Glass Base (torched adhered) followed by Min. 1.5" ISO followed by **(Optional)** Min. 1.5" ISO or tapered ISO	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-112.5**
				UltraPly TPO XR	XR Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A6	Structural Concrete	APP 80 Glass Base (torched adhered) followed by Min. 0.5" ISO followed by SECUROCK	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-112.5**
				UltraPly TPO XR	XR Membrane Adhesive II	
				UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A7	Structural Concrete	APP 80 Glass Base **(Optional)** torched adhered followed by Min. 0.5" ISO followed by DensDeck Prime	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-112.5**
				UltraPly TPO XR	XR Membrane Adhesive II	
				UltraPly TPO SA	Self-adhered	
C-A8	Structural Concrete (new or existing)	Min. 0.5" ISO or RESISTA followed by Cover Board II	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-112.5**
				UltraPly TPO XR	XR Membrane Adhesive II	
				UltraPly TPO SA	Self-adhered	
C-A9	Structural Concrete	APP 80 Glass Base (torched adhered) followed by Min. 0.5" ISO	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO XR	XR Stick Membrane Adhesive (6″ o.c.) or I.S.O. Spray R (12" o.c.)	**-135.0**
				UltraPly TPO	Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A10	Structural Concrete	APP 80 Glass Base (torched adhered) followed by Min. 1.5″ ISO followed by **(Optional)** Min. 1.5″ ISO or tapered ISO	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.) or I.S.O. Spray R (12" o.c.)	**-142.5**
				UltraPly TPO	Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A11	Structural Concrete	Min. 1" ISO or RESISTA or Min. 0.5" ISO HD	Insulation Adhesive II	UltraPly TPO XR	XR Stick Membrane Adhesive	**-150.0**
				UltraPly TPO	Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A12	Structural Concrete	Min. 1" ISO or RESISTA followed by DensDeck Prime or Min. 0.5" ISO HD	Insulation Adhesive	UltraPly TPO XR	XR Stick Membrane Adhesive	**-163.5**
				UltraPly TPO	Membrane Adhesive	
				UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A13	Structural Concrete	Min. 0.5" ISO or RESISTA followed by SECUROCK	I.S.O. Fix (not with SECUROCK), I.S.O. Twin Pack (not with SECUROCK), I.S.O. Stick	UltraPly TPO	Membrane Adhesive	**-175.0**
				UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.), HA, PermaMop, or XR Bonding Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A14	Structural Concrete	V-Force (Self-adhered) followed by min. 0.5" ISO or RESISTA followed by Cover Board II	I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-187.5**
				UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.), HA, PermaMop, or XR Bonding Adhesive	
				UltraPly TPO SA	Self-adhered	
C-A15	Structural Concrete	Min. 0.5" ISO or RESISTA followed by min. 0.5" ISO HD	I.S.O. Fix II, I.S.O. Stick, or I.S.O. Twin Pack (not with ISOGARD HD), or I.S.O. Spray R (not to concrete)	UltraPly TPO XR	XR Membrane Adhesive	**-195.0**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A16	Structural Concrete	Min. 1.5″ ISO or RESISTA followed by Cover Board II	I.S.O. Spray R or I.S.O. Stick	UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.), HA, PermaMop, or XR Bonding Adhesive	**-205.0**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A17	Structural Concrete	Min. 1.5" ISO	I.S.O. Spray R	UltraPly TPO XR	XR Membrane Adhesive	**-255.0**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A18	Structural Concrete	V-Force self-adhered to SA Solvent-Based (SB) primed deck followed by min. 1.5" ISO followed by **(Optional)** min. 1" ISO	I.S.O. Twin Pack Insulation Adhesive (not to V-Force) or I.S.O. Stick	UltraPly TPO XR	XR Membrane Adhesive	**-262.5**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A19	Structural Concrete	V-Force self-adhered to SA Solvent-Based (SB) primed deck followed by Tapered ISO followed by **(Optional)** min. 0.5" ISO HD	I.S.O. Stick	UltraPly TPO XR	XR Membrane Adhesive	**-262.5**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A20	Structural Concrete	min. 0.5" ISO HD	Insulation Adhesive	UltraPly TPO XR	XR Membrane Adhesive	**-285.0**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A21	Structural Concrete	Min. 0.5" ISO or Cover Board II	I.S.O. Twin Pack Adhesive	UltraPly TPO	UltraPly Bonding Adhesive	**-300.0**
				UltraPly TPO SA	Self-adhered	
C-A22	Structural Concrete	V-Force self-adhered to SA Solvent-Based (SB) primed deck followed by min. 1.5" ISO	I.S.O. Twin Pack Insulation Adhesive or I.S.O. Stick	UltraPly TPO XR	XR Membrane Adhesive	**-337.5**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A23	Structural Concrete	Min. 0.5" ISO followed by SECUROCK	I.S.O. Fix II (not to SECUROCK), I.S.O. Stick, I.S.O. Twin Pack Insulation Adhesive (not to SECUROCK)	UltraPly TPO XR	XR Stick Membrane Adhesive, XR Bonding Adhesive, Perma-Mop, hot asphalt	**-347.5**
				UltraPly TPO SA	Self-adhered	
				UltraPly TPO	Membrane Adhesive	
C-A24	Structural Concrete	Min. 1" ISO **(Optional)** followed by DensDeck Prime	I.S.O. Spray R	UltraPly TPO XR	I.S.O. Spray R	**-360**
C-A25	Structural Concrete	Min. 0.5" ISO or tapered ISO	I.S.O. Twin Pack Adhesive	UltraPly TPO	Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168	**-360**
C-A26	Structural Concrete	Min. 1" RESISTA	I.S.O. Twin Pack Adhesive	UltraPly TPO	UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168	**-360**
				UltraPly TPO SA	Self-adhered	
C-A27	Structural Concrete	Min. 0.5" ISO or Cover Board	I.S.O. Stick	UltraPly TPO	UltraPly Bonding Adhesive or Water Based Bonding Adhesive P	**-405**

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A28	Structural Concrete	V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered followed by min. 0.5" ISO or RESISTA followed by SECUROCK	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R	UltraPly TPO XR	XR Bonding Adhesive, PermaMop	**-435.0**
C-A29	Structural Concrete	SECUROCK	I.S.O. Spray R	UltraPly TPO XR	XR Stick Membrane Adhesive	**-435.0**
				UltraPly TPO	UltraPly Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168	
C-A30	Structural Concrete	SECUROCK	Insulation Adhesive	UltraPly TPO XR	XR Stick Membrane Adhesive	**-445.0**
C-A31	Structural Concrete	V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered followed by min. 0.5" ISO or RESISTA followed by SECUROCK	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R	UltraPly TPO XR	XR Stick Membrane Adhesive	**-445.0**
C-A32	Structural Concrete	Min. 0.5" ISO HD	Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-445.0**
				UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.)	
				UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 1: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Membrane**	**Attach**	
C-A33	Structural Concrete	V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered followed by min. 0.5" ISO or RESISTA followed by min. 0.5" ISO HD	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-445.0**
				UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c.)	
				UltraPly TPO SA	Self-adhered	
C-A34	Structural Concrete	SECUROCK	Insulation Adhesive	UltraPly TPO	UltraPly Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168	**-495.0**
C-A35	Structural Concrete	V-Force or 1-2 ply of Ply IV or VI in hot asphalt or APP 80 Glass Base, SBS Glass FR Torch, or SBS Poly Torch Base torch adhered followed by min. 0.5" ISO or RESISTA followed by SECUROCK	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R	UltraPly TPO	UltraPly Bonding Adhesive or Single-Ply LVOC Bonding Adhesive 1168	**-495.0**

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A2	Steel (G33, P, L6, S18) Or Structural Concrete	Min. 1/4" slurry coat of min. 310 psi, Celcore MF with Celcore HS Rheology Modifying Admixture over deck treated with Celcore S-1 (steel deck only) followed by 1" EPS board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	SBS Base, with 3.4" laps, is secured with 1.8" Two-Piece Impact Nail installed 12" o.c. at the laps and 12" o.c. in two (2) staggered rows in the field	Min. 0.5" ISO	I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-45.0**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	
LWC-A3	Steel (G33, P, L6, S18) Or Structural Concrete	Min. 1/4" slurry coat of min. 382 psi, Celcore MF with Celcore HS Rheology Modifying Admixture over deck treated with Celcore S-1 (steel deck only) followed by 1" EPS board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	SBS Base, with 3.4" laps, is secured with 1.8" Two-Piece Impact Nail installed 7" o.c. at the laps and 7" o.c. in two (2) staggered rows in the field	SECUROCK	I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-67.5**
						UltraPly TPO XR	XR Membrane Adhesive II	
						UltraPly TPO SA	Self-adhered	
LWC-A4	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Min. 1" ISO followed by **(Optional)** tapered ISO	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R, I.S.O. Stick	UltraPly TPO	*Membrane Adhesive*	**-112.5**
						UltraPly TPO XR	*XR Membrane Adhesive*	
						UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A5	Structural Concrete	Min. 1/8" slurry coat of min. 300 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" EPS board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	DensDeck Prime	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	*Membrane Adhesive*	**-133.5**
				Min. 0.5" ISO HD	I.S.O. Twin Pack Insulation Adhesive or I.S.O. Spray R			
LWC-A6	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Tapered ISO or RESISTA **(Optional)** followed by min. 2" ISO HD-C	I.S.O. Spray R	UltraPly TPO	*Membrane Adhesive*	**-135.0**
						UltraPly TPO XR	*XR Membrane Adhesive*	
						UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A7	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Min. 1.5" ISO or RESISTA followed by **(Optional)** tapered ISO or RESISTA followed by Cover Board	I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R, I.S.O. Stick	UltraPly TPO	*Membrane Adhesive*	**-135.0**
						UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c. to DensDeck, 12" o.c. to ISO HD or SECUROCK) or I.S.O. Spray R or (to DensDeck Prime or SECUROCK only) HA or PermaMop or XR Bonding Adhesive	
						UltraPly TPO SA	Self-adhered	
LWC-A8	Structural Concrete	Min. 1/8" slurry coat of min. 200 psi, Elastizell LWIC with 1" EPS board and a 2" top coat	None	DensDeck Prime	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-150.0**
				Min. 0.5" ISO HD	I.S.O. Twin Pack Insulation Adhesive or I.S.O. Spray R			

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A9	Structural Concrete	Min. 1/8" slurry coat of min. 300 psi, Elastizell LWIC with 1" EPS board and a 2" top coat	None	DensDeck Prime	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-158.0**
				Min. 0.5" ISO HD	I.S.O. Twin Pack Insulation Adhesive or I.S.O. Spray R			
LWC-A10	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Min. 1" ISO or RESISTA followed by **(Optional)** tapered ISO or RESISTA	I.S.O. Stick, I.S.O. Twin Pack Insulation Adhesive, or (not to *ISO*) I.S.O. Spray R	UltraPly TPO	UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168	**-187.5**
						UltraPly TPO SA	Self-Adhered (to RESISTA only)	
						UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c. with ISO, 12" o.c. with RESISTA) or I.S.O. Spray R	

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A11	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Tapered *ISO* or RESISTA **(Optional)** followed by min. 2" *ISO HD-C*	I.S.O. Stick	UltraPly TPO	Membrane Adhesive	**-187.5**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	
LWC-A12	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft^2/sq.	None	Min. 1.5" ISO or RESISTA followed by **(Optional)** tapered ISO or RESISTA followed by Cover Board	I.S.O. Stick	UltraPly TPO	Membrane Adhesive	**-187.5**
						UltraPly TPO SA	Self-Adhered	
						UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c. with DensDeck Prime, 12" o.c with ISO HD), I.S.O. Spray R (ISO HD only), XR Bonding Adhesive, HA (DensDeck Prime only), PermaMop (DensDeck Prime Only)	

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A13	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft2/sq.	None	Min. 1" ISO or RESISTA followed by **(Optional)** tapered ISO or RESISTA	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	UltraPly Bonding Adhesive, Single-Ply LVOC Bonding Adhesive, or Single-Ply LVOC Bonding Adhesive 1168 or (to RESISTA Only) Water Base Bonding Adhesive P	**-217.5**
						UltraPly TPO SA	Self-Adhered (to RESISTA only)	
						UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c with RESISTA only) or I.S.O. Spray R	
LWC-A14	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft2/sq.	None	Tapered ISO or RESISTA **(Optional)** followed by min. 2" ISO HD-C	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-217.5**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 2: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER LIGHTWEIGHT CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	**Substrate**	**Lightweight Concrete**	**Base Sheet and Attachment**	**Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
				Type	**Attach**	**Membrane**	**Attach**	
LWC-A15	Structural Concrete	Min. 1/8" slurry coat of min. 350 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" Holey board and a 2" top coat. Celcore PVA curing compound is applied at 300 ft2/sq.	None	Min. 1.5" ISO or RESISTA followed by **(Optional)** tapered ISO or RESISTA followed by Cover Board	I.S.O. Twin Pack Insulation Adhesive	UltraPly TPO	Membrane Adhesive	**-217.5**
						UltraPly TPO SA	Self-Adhered	
						UltraPly TPO XR	XR Stick Membrane Adhesive (6" o.c. with DensDeck, 12" o.c with ISO HD or SECUROCK), I.S.O. Spray R (not with DensDeck), XR Bonding Adhesive (not with ISO HD), HA (not with ISO HD), PermaMop (not with ISO HD)	

TABLE 3: ELEVATE ULTRAPLY TPO AND GENFLEX TPO – NEW CONSTRUCTION or RECOVER CONCRETE DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER								
Assembly No.	**Deck**	**Base Insulation**		**Top Insulation Layer (s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Type**	**Fastener**	**Membrane**	**Attachment**	
C-B1	Structural Concrete	DensDeck Prime primed with SA Solvent-Based (SB) primer	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:4 ft^2	V-Force self-adhered followed by min. 1.5" ISO or tapered ISO followed by **(Optional)** min. 1.5" ISO, 0.5" ISO HD or DensDeck Prime	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-45.0**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 3: ELEVATE ULTRAPLY TPO AND GENFLEX TPO – NEW CONSTRUCTION or RECOVER CONCRETE DECK, MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER								
Assembly No.	**Deck**	**Base Insulation**		**Top Insulation Layer (s)**		**Roof Cover**		**Design Pressure (psf)**
		Type	**Attach**	**Type**	**Fastener**	**Membrane**	**Attachment**	
C-B2	Structural Concrete	Min. 2" ISO or RESISTA	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.78 ft^2	Min. 0.5" ISO or RESISTA followed by min. 0.5" ISO HD	I.S.O. Twin Pack or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-60**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	
C-B3	Structural Concrete	Min. 2" ISO or RESISTA	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.78 ft^2	Min. 0.5" ISO HD	Insulation Adhesive II	UltraPly TPO	Membrane Adhesive	**-67.5**
						UltraPly TPO XR	XR Membrane Adhesive	
						UltraPly TPO SA	Self-adhered	
C-B4	Structural Concrete	Min. 2" ISO or RESISTA	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.78 ft^2	Min. 0.5" SECUROCK	I.S.O. Stick or I.S.O. Spray R	UltraPly TPO	Membrane Adhesive	**-67.5**
						UltraPly TPO XR	XR Membrane Adhesive II	
						UltraPly TPO SA	Self-adhered	
C-B5	Structural Concrete	Min. 2" ISO or RESISTA	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.6 ft^2	Min. 0.5" ISO HD	Insulation Adhesive II (6" o.c.)	UltraPly TPO	Membrane Adhesive	**-82.5**

Limitations and Installation:

TABLE 4: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER CONCRETE DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	**Substrate**	**Base Insulation/Vapor Barrier Layer (s)**	**Top Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
			Type	**Attach**	**Membrane**	**Attach**	
C-C3	Structural Concrete	None	Min. 1.5" ISO or RESISTA	InvisiWeld S; Fastener Density: 1:4 ft^2	UltraPly TPO	Induction welded to InvisiWeld S plates	**-45.0**
C-C4	Structural Concrete	Min. 1.5" ISO or RESISTA	Min. 0.5" ISO HD or DensDeck Prime	InvisiWeld; Fastener Density: 1:5.33 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-45.0**
C-C5	Structural Concrete	Min. 0.5" ISO or RESISTA or min. 1.5" ISO HD-C	**(Optional)** Cover Board	InvisiWeld; Fastener Density: 1:4 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-45.0**
C-C6	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" DensDeck Prime or SECUROCK	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:2.67 ft^2	UltraPly TPO	Membrane Adhesive	**-45.0**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C7	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" SECUROCK	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:4 ft^2	UltraPly TPO	Membrane Adhesive	**-45.0**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C8	Structural Concrete	SECUROCK **(Optional)** followed by V-Force, Self-adhered	Min. 2.5" ISO or RESISTA	InvisiWeld; Fastener Density: 1:4 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-52.5**
C-C9	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" DensDeck Prime	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.78 ft^2	UltraPly TPO	Membrane Adhesive	**-52.5**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	

Limitations and Installation:

TABLE 4: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER CONCRETE DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	**Substrate**	**Base Insulation/Vapor Barrier Layer (s)**	**Top Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
			Type	**Attach**	**Membrane**	**Attach**	
C-C10	Structural Concrete	Min. 1.5" ISO	Min. 0.5" ISO HD or DensDeck Prime	InvisiWeld; Fastener Density: 1:4 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-60.0**
C-C11	Structural Concrete	None	Min. 1" ISO	InvisiWeld; Fastened 6" o.c. in rows spaced 144″ o.c.	UltraPly TPO	Induction welded to InvisiWeld plates	**-60.0**
C-C12	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" SECUROCK	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:2.13 ft^2	UltraPly TPO	Membrane Adhesive	**-60.0**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C13	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" SECUROCK	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:4 ft^2	UltraPly TPO	Membrane Adhesive	**-62.5**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C14	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	SECUROCK or min. 0.5" DensDeck Prime	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.6 ft^2	UltraPly TPO	Membrane Adhesive	**-67.5**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C15	Structural Concrete	None	Min. 1.5" ISO or RESISTA	InvisiWeld S; Fastener Density: 1:3.2 ft^2	UltraPly TPO	Induction welded to InvisiWeld S plates	**-75.0**

Limitations and Installation:

TABLE 4: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER CONCRETE DECK, LOOSE-LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, BONDED ROOF COVER							
Assembly No.	**Substrate**	**Base Insulation/Vapor Barrier Layer (s)**	**Top Insulation Layer(s)**		**Roof Cover**		**Design Pressure (psf)**
			Type	**Attach**	**Membrane**	**Attach**	
C-C16	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" ISO HD, min. 1" ISO or RESISTA, DensDeck Prime or SECUROCK or min. 1.5" ISO HD-C	InvisiWeld; Fastener Density: 1:2.67 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-75.0**
C-C17	Structural Concrete	None	Min. 1" ISO	InvisiWeld; Fastened 6" o.c. in rows spaced 72" o.c.	UltraPly TPO	Induction welded to InvisiWeld plates	**-82.5**
C-C18	Structural Concrete	**(Optional)** Min. 0.5" ISO or RESISTA	Min. 0.5" SECUROCK	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:1.78 ft^2	UltraPly TPO	Membrane Adhesive	**-82.5**
					UltraPly TPO XR	XR Membrane Adhesive II	
					UltraPly TPO SA	Self-adhered	
C-C19	Structural Concrete	Min. 1.5" ISO or RESISTA	Min. 0.5" ISO HD or DensDeck Prime	InvisiWeld; Fastener Density: 1:2 ft^2	UltraPly TPO	Induction welded to InvisiWeld plates	**-105.0**

Limitations and Installation:

TABLE 5: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (TEAR-OFF) CONCRETE DECK, LOOSE LAID BASE INSULATION, MECHANICALLY ATTACHED TOP INSULATION, MECHANICALLY ATTACHED ROOF COVER							
Assembly No.	**Deck**	**Base Insulation Layer/Vapor Barrier (s)**	**Top Insulation Layer (s)**		**Roof Cover**		**Design Pressure (psf)**
			Type	**Attachment**	**Membrane**	**Fasteners**	
C-CD2	Structural Concrete	V-Force Self-adhered followed by **(Optional)** Min. 0.5" ISO or RESISTA	Min. 3" ISO	HD Fasteners & Insulation Plates. Fastener Density: 1:4 ft^2	UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 12" o.c., side laps spaced 114" o.c.	**-45.0**
C-CD3	Structural Concrete	DensDeck Prime loose-laid followed by V-force self-adhered	Min. 2" ISO or RESISTA or min. 1.5" ISO HD-C	HD Fasteners & Insulation Plates or CD Fasteners & Plates. Fastener Density: 1:4 ft^2	UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 12" o.c., side laps spaced 114" o.c.	**-45.0**
C-CD4	Structural Concrete	Two layers of V-Force Self-adhered followed by **(Optional)** Min. 0.5" ISO or RESISTA	Min. 3" ISO	HD Fasteners & Insulation Plates. Fastener Density: 1:5.33 ft^2	UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 12" o.c., side laps spaced 142" o.c.	**-82.5**

Limitations and Installation:

TABLE 6: ELEVATE ULTRAPLY TPO AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (TEAR-OFF) OR RECOVER STEEL DECK, PRELIMIARILY SECURED INSULATION, MECHANICALLY ATTACHED ROOF COVER					
Assembly No.	**Deck**	**Top Insulation Layer (s)**	**Roof Cover**		**Design Pressure (psf)**
			Membrane	**Fasteners**	
C-D3	Structural Concrete	Min. 0.5" ISO, RESISTA, or Min. 1.5" ISO HD-C, or Cover Board II	60-mil UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 6" o.c., side laps spaced 90" o.c.	**-52.5**
C-D4	Structural Concret	Min. 1.5" ISO, RESISTA, or ISO HD-C, or Min. 0.5" Cover Board II	UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 6" o.c., side laps spaced 142" o.c.	**-52.5**
C-D5	Structural Concrete	Min. 0.5" ISO, RESISTA, or Min. 1.5" ISO HD-C, or Cover Board II	UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 6 o.c., side laps spaced 89" o.c.; 7" wide side laps	**-60.0**
C-D6	Structural Concrete	Min. 0.5" ISO, RESISTA, or Min. 1.5" ISO HD-C, or Cover Board II	Min. 60 mil UltraPly TPO	HD Fasteners & Plates or CD Fasteners & Seam Plates; Attached in-lap 6" o.c., side laps spaced 114" o.c.	**-60.0**
C-D7	Structural Concrete	Min. 1.5" ISO, RESISTA, or ISO HD-C, or Min. 0.5" Cover Board II	UltraPly TPO	HD Fasteners and Polymer Batten Strips centered in-lap and fastened 6" o.c.; Fastener rows 68" o.c.; Min. 5" wide heat weld encapsulating plates and fasteners	**-82.5**
C-D8	Structural Concrete	Min. 1.5" ISO, RESISTA, or ISO HD-C, or Min. 0.5" Cover Board II	UltraPly TPO	HD Plus Fasteners and Polymer Batten Strips centered in-lap and fastened 6" o.c.; Intermediate row in field of sheet with fasteners 6" o.c.; Fastener rows spaced 71" o.c.; Min. 5" wide heat weld encapsulating plates and fasteners in-lap; 5" wide UltraPly TPO cover strip heat welded 1.5" wide on either side of battens in field row	**-135**

Limitations and Installation:

TABLE 7: ELEVATE ULTRAPLY AND GENFLEX EZ TPO – NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER					
Assembly No.	**Substrate**	**Existing Roof**	**Roof Cover**		**Design Pressure (psf)**
			Membrane	**Attach**	
C-F1	Structural Concrete	Smooth Surfaced Built-Up Roofing	UltraPly TPO XR 115 or 135	XR Stick Membrane Adhesive	**-112.5**
C-F2	Structural Concrete	Granule Surfaced SBS Modified Roofing, torch-applied	UltraPly TPO XR	XR Stick Membrane Adhesive	**-125.5**
C-F3	Structural Concrete	None	UltraPly TPO XR	XR Stick Membrane Adhesive	**-155.5**
C-F4	Structural Concrete	Granule Surfaced SBS Modified Roofing	UltraPly TPO XR 115 or 135	XR Stick Membrane Adhesive	**-392.5**
C-F5	Structural Concrete	Granule Surfaced APP Modified Roofing	UltraPly TPO XR 115 or 135	XR Stick Membrane Adhesive	**-422.5**

TABLE 8: ELEVATE ULTRAPLY AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Vapor Barrier**	**Lightweight Concrete**	**Roof Cover**		**Design Pressure (psf)**
				Membrane	**Attach**	
LWC-F1	Steel (G33, F1, L6, S12)	None	LWIC, min. 300 psi, composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in slurry coat with 1" Holey board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO XR	XR Bonding Adhesive	**-45.0**
LWC-F2	Steel (G33, P, L6, S18)	None	Min. 310 psi Celcore MF with HS Rheology over deck treated with Celcore S-1. min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO XR	I.S.O. Spray R	**-45.0**
LWC-F3	Steel (G33, L6, F, W(1/2") S12)	None	LWIC, applied in min. 1/8" slurry coat with 1" EPS board and a 2" topcoat. Secured to deck with Elevate Polymer Batten Strips spaced 18" o.c. with HD fasteners 12" o.c.	UltraPly TPO XR	XR Stick Membrane Adhesive, 6" o.c.	**-60.0**
LWC-F4	Steel (G33, P, L5, S12)	None	Min. 1/8" slurry coat of min. 350 psi, Elastizell LWIC with Zell-Crete Fibers with 1" EPS board and a 2" topcoat	UltraPly TPO XR	I.S.O. Spray R	**-60.0**

Limitations and Installation:

TABLE 8: ELEVATE ULTRAPLY AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Vapor Barrier**	**Lightweight Concrete**	**Roof Cover**		**Design Pressure (psf)**
				Membrane	**Attach**	
LWC-F5	Steel (G33, P, L6, S18)	None	Min. 360 psi Celcore MF with HS Rheology over deck treated with Celcore S-1. min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO XR	I.S.O. Spray R	**-60.0**
LWC-F6	Steel (G33, L5, P, S18)	None	LWIC, min. 281 psi, composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq. Celcore SBS is applied in place, at a rate of 100 ft^2/gal	UltraPly TPO XR	I.S.O. Spray R	**-67.5**
LWC-F7	Steel (G33, L6, P, S18)	None	LWIC, min. 356 psi, composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO	UltraPly Bonding Adhesive	**-67.5**
LWC-F8	Steel (G33, F1, L5, S6)	None	Min. 1/8" slurry of min. 300 psi, Elastizell LWIC with Zell-Crete Fibers with 1" Holey board and a 2" topcoat	UltraPly TPO	UltraPly Bonding Adhesive	**-67.5**
LWC-F9	Steel (G33, L6, F, W(1/2") S12)	None	LWIC, composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in min. 1/8" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq. Secured to deck with Elevate Polymer Batten Strips spaced 18" o.c. with HD fasteners 12" o.c.	UltraPly TPO XR	XR Stick Membrane Adhesive, 4" or 6" o.c.	**-75.0**
LWC-F10	Structural Concrete	None	LWIC, min. 350 psi., composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in min. 1/8" slurry coat with 1" Holey board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO XR	XR Stick Membrane Adhesive (4" o.c.) or XR Bonding Adhesive	**-75.0**

Limitations and Installation:

TABLE 8: ELEVATE ULTRAPLY AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Vapor Barrier**	**Lightweight Concrete**	**Roof Cover**		**Design Pressure (psf)**
				Membrane	**Attach**	
LWC-F11	Steel (G33, PW, L6, S18) or Concrete Deck	None	Min. 1/4" slurry of Min. 360 psi Celcore MF with HS Rheology over deck treated with Celcore S-1 (steel deck only) with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO	UltraPly Bonding Adhesive	**-82.5**
LWC-F12	Steel (G33, F1, L6, S12)	None	LWIC, min. 300 psi, composed with Celcore MF with Celcore HS Rheology Modifying Admixture applied in slurry coat with 1" Holey board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft2/sq. LWIC fastened with HD Fasteners & Plates through-fastened to Steel Deck at a rate of one per 2 ft^2	UltraPly TPO XR	XR Bonding Adhesive	**-90.0**
LWC-F13	Steel (G33, P, L6, S18)	None	Steel deck primed with Celcore S-1. Min. 380 psi Celcore MF with HS Rheology over deck treated with Celcore S-1. min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft2/sq. Celcore SBS applied over topcoat.	UltraPly TPO XR	I.S.O. Spray R (4" o.c.)	**-90.0**
LWC-F14	Steel (G33, P, L6, S18)	None	Min. 310 psi Celcore MF with HS Rheology over deck treated with Celcore S-1. min. 1/4" slurry coat with 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO XR	I.S.O. Spray R (4" o.c.)	**-45.0**
LWC-F15	Structural Concrete	None	Min. 1/8" slurry coat of min. 200 psi, LWIC with 1" EPS board and a 2" topcoat (MCRF ≥ 80 lbf using 1.7" LWC Base-Ply Fastener)	UltraPly TPO	UltraPly Bonding Adhesive	**-105.0**
LWC-F16	Structural Concrete	None	Min. 1/4" slurry coat of min. 200 psi, Elastizell LWIC with Zell-Crete Fibers with 1" EPS board and a 2" topcoat	UltraPly TPO	UltraPly Bonding Adhesive	**-115.0**

Limitations and Installation:

TABLE 8: ELEVATE ULTRAPLY AND GENFLEX EZ TPO – NEW CONSTRUCTION or REROOF (Tear-Off) LIGHTWEIGHT CONCRETE DECK, NON-INSULATED, BONDED ROOF COVER						
Assembly No.	**Substrate**	**Vapor Barrier**	**Lightweight Concrete**	**Roof Cover**		**Design Pressure (psf)**
				Membrane	**Attach**	
LWC-F17	Structural Concrete	None	Min. 1/4" slurry coat of min. 200 psi, Elastizell LWIC with Zell-Crete Fibers with 1" EPS board and a 2" topcoat	UltraPly TPO XR	XR Stick Membrane Adhesive	**-122.5**
LWC-F18	Structural Concrete	None	Min. 1/8" slurry coat of min. 200 psi, Elastizell LWIC with 1" EPS board and a 2" topcoat	UltraPly TPO XR	XR Stick Membrane Adhesive	**-128.0**
LWC-F19	Steel; ASTM A 653 G90	None	Min. 1/4" slurry coat of min. 200 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO	UltraPly Bonding Adhesive	**-130.0**
				UltraPly TPO XR	XR Stick Membrane Adhesive	
LWC-F20	Structural Concrete	None	Min. 1/8" slurry coat of min. 300 psi, Celcore LWIC composed with MF with Celcore HS Rheology Modifying Admixture followed by 1" EPS board and a 2" topcoat. Celcore PVA curing compound is applied at 300 ft^2/sq.	UltraPly TPO	UltraPly Bonding Adhesive	**-133.5**

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.