

EZ TPO Peel & Stick™ Membrane

Item Description

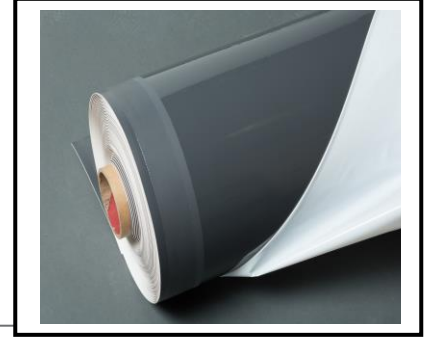
.060" x 5' x 100' (1.5 mm x 1.5 m x 3 m)

.060" x 10' x 100' (1.5 mm x 1.5 m x 3 m)

Item Number

W59GSA1610

W59GSA1410



Product Information

Description

GenFlex EZ TPO Peel & Stick membrane with Secure Bond™ Technology is a heat weldable, flexible thermoplastic polyolefin (TPO) roofing membrane manufactured with a factory applied, pressure sensitive adhesive. Designed to be the next generation in fully adhered roof system application, GenFlex's Secure Bond Technology helps ensure uniform adhesion across the entire membrane, creating a powerful bond. This advanced technology not only improves installation speed over traditional fully adhered application, but also widens the weather window, with the ability to install down to 20 °F (-7 °C). With no VOCs, GenFlex EZ TPO Peel & Stick membrane with Secure Bond Technology is an excellent solution for all your roofing needs. GenFlex EZ TPO Peel & Stick membrane meets or exceeds all the requirements for ASTM D6878-03. The membrane is reinforced with a 9 x 9, 1,000 denier polyester weft-inserted fabric. The product is self-adhering. No primers or adhesives are required on horizontal surfaces, thus eliminating Volatile Organic Compounds (VOCs).

Installation

GenFlex EZ TPO Peel & Stick membrane is self-adhering. Vertical substrates require an acceptable primer (GenFlex Clear Primer or GenFlex Clear Primer LVOC), but horizontal substrates do not require the use of a bonding adhesive. Eliminating bonding adhesives greatly increases the speed of installation.

Membrane Preparation

1. Substrates must be clean, dry and free of foreign material such as grease and any debris which could inhibit adhesion. This may require cleaning with a broom or blower.
2. Insulation must be fastened per current GenFlex technical specifications to provide a proper substrate.
3. Install EZ TPO Peel & Stick membrane only when ambient and substrate temperatures are min. 20 °F (-7 °C) and rising. Do not install EZ TPO Peel & Stick membrane below this minimum temperature.
4. Unroll and position the membrane over the substrate to achieve the desired alignment and overlaps. Allow membrane to relax before positioning and adhering. **NOTE: once membrane has fully relaxed, follow field membrane and roof edge membrane application methods below to attach the membrane to the approved substrate.**

Method of Application:

Field Membrane Application (Steps 1-5):

1. Once the membrane has relaxed in place a minimum of 30 minutes (longer in colder weather), and the seam positions are aligned, carefully fold the sheet back approximately 10' (3 m) from one end to expose the release liner without disturbing the original position of the membrane. **NOTE: Fold the membrane back from the end, not from the side.**
2. Starting from the center split of the exposed release liner, remove the liner at a 45° angle from the center of the sheet back beyond the membrane edge. Be sure to pull enough of the release liner to hold below the membrane. Remove at least 5' (1.5 m) of release liner from one end of the sheet and adhere it to the substrate. The removed liner should extend at a 45° angle beyond the edges of the membrane.

3. Keeping the membrane flat and secured, and the seam overlap aligned, continue removing the release liner at a 45° angle along the entire length of the sheet (up to 100' / 3 m). Pulling the release liner at a higher angle can cause the sheet to move and may trap air. The two halves of the release liner should be pulled out at the same time by two people. Keep the release liner as close to the roof surface as possible during removal. **NOTE: Removal of the liner and any handling of the exposed SA adhesive should be completed by two persons minimum.**
4. To initiate adhesion, use a stiff bristled broom and apply downward pressure across the installed membrane. Broom the membrane from the center of the sheet working toward the edge.
5. Roll the installed membrane with a weighted roller (5 lb per lineal inch) across the width of the sheet to ensure full contact with the substrate. **NOTE: Do not roll membrane in place with a weighted roller if installed over GenFlex HD ISO or GenFlex CG ISO (Coated Glass Facer).**

Roof Edge (Gutter, Drip Edge, Gravel Stop) Membrane Application (Steps 1-6):

1. Once the membrane has relaxed in place a minimum of 30 minutes (longer in colder weather), and it is positioned correctly along the roof edge, carefully fold the sheet back approximately 10' (3 m) from one end to expose the release liner without disturbing the original position of the membrane. **NOTE: Fold the membrane back from the end, not from the side.**
2. Starting with the outside (roof edge) portion of the release liner, carefully pull it beneath the membrane, toward the field of the roof at a 45° angle to expose the SA adhesive without disturbing the original position of the membrane. Next, pull the inside portion of the release liner beneath the membrane. Maintain a 12" (305 mm) wide minimum separation between the two sections of liner. Back-roll the 10' (3 m) exposed SA section into position onto the substrate without trapping any air beneath the sheet. **NOTE: Removal of the liner and any handling of the exposed SA adhesive should be completed by two persons minimum.**
3. Keeping the release liner as close to the roof surface as possible and maintaining a 10' (3 m) (minimum) space between the two liner halves, pull both halves of the liner at a 45° angle along the length of the roof edge. Pulling the release liner at a higher angle can cause the sheet to move and may trap air.
4. To initiate adhesion, use a stiff bristled broom and apply downward pressure across the installed membrane. Broom the membrane from the center of the sheet working toward the edge.
5. Roll the installed membrane with a weighted roller (5 lb per lineal inch) across the width of the sheet to ensure full contact with the substrate. **NOTE: Do not roll membrane in place with a weighted roller if installed over GenFlex HD ISO or GenFlex CG ISO (Coated Glass Facer).**

Seaming

1. Follow current GenFlex technical specifications for heat welding TPO membrane.
2. Side Laps are to be heat-welded. Each membrane panel has a 2" (51 mm) uncoated selvage edge. Overlap side laps and heat weld the 2" (51 mm) uncoated area to create a minimum 1½" (38 mm) robotic welded seam.
3. End Laps – Because the pressure sensitive adhesive extends the entire length of the roll, all adjoining rolls must be stripped in. Butt end laps together, or prime lap area of bottom sheet and create a 3" (76 mm) overlap, then strip in the end lap with an 8" (203 mm) wide UltraPly TPO membrane cover strip, centered on the end lap and heat-welded along all edges. (Do not allow primer to contaminate the area to be heat welded.)
4. Detailing – Install approved t-joint patches, caulking and apply UltraPly TPO Cut Edge Sealant as required by general specification.

Precautionary Data

- Take care when moving, transporting and handling the membrane to avoid sources of punctures and physical damage.
- Removal of the plastic release liner from the adhesive backing may create a static electric charge; care should be used when removing and handling the release liner.
- Refer to Safety Data Sheets (SDS) for additional safety information.

Storage

- Warehouse membrane in a clean dry location.
- Membrane stored on jobsite must be kept dry.
- Material must be a minimum of 20 °F (-7 °C) prior to installation.
- Store away from sources of physical damage.
- Make certain the structural decking will support the loads incurred by material when stored on rooftop. The deck load limitations should be specified by the project designer.
- Store away from ignition sources.

Shelf Life

18 months when stored between 60 °F (16 °C) and 80 °F (27 °C) out of direct sunlight.

LEED® Information

Post-Consumer Recycled Content: 0%
 Post Industrial Recycled Content: 3-5%
 Manufacturing Location: Tuscumbia, AL
NOTE: LEED® is a registered trademark of the U.S. Green Building Council.



Substrates			
Acceptable Substrates	Primer Req'd	Acceptable Application Temperatures	Special Application Considerations/NOTE
GenFlex GL ISO	No	20 - 120 °F (-7 – 49 °C)	
GenFlex HD ISO	No	20 - 120 °F (-7 – 49 °C)	Do not roll in place with weighted roller
GenFlex CG ISO (Coated Glass Facer)	No	20 - 120 °F (-7 – 49 °C)	Do not roll in place with weighted roller
Structural Concrete	No	20 - 120 °F (-7 – 49 °C)	Must be clean, dry and properly cured prior to application
Lightweight Concrete	No	20 - 120 °F (-7 – 49 °C)	Use on clean, dry and properly cured cellular lightweight concrete only, not acceptable with lightweight aggregate concrete
DensDeck®*	No	20 - 120 °F (-7 – 49 °C)	
DensDeck Prime	No	20 - 120 °F (-7 – 49 °C)	
Securock®**	No	20 - 120 °F (-7 – 49 °C)	
Plywood	No	20 - 120 °F (-7 – 49 °C)	Check local code for acceptance of direct application
OSB Board	No	20 - 120 °F (-7 – 49 °C)	Check local code for acceptance of direct application
CMU / Masonry and Vertical Substrates	Yes	20 - 120 °F (-7 – 49 °C)	Apply Firestone Single-Ply or Single-Ply LVOC Primer to all vertical substrates

* DensDeck is a registered trademark of the G-P Gypsum Corp.

** Securock is a registered trademark of the USG Corp.

Unacceptable Substrates

Gypsum decks	Coal Tar Pitch
Wood Fiberboard	Built Up Roofs
Perlite	Direct to Steel Deck
Rock Wool (mineral wool) Insulation	5/8" (16 mm) Type X Gypsum
Expanded / Extruded Polystyrene	DexCell**
Fiberglass	Existing Asphalt and Granular Surfaced Modified Bitumen Roofs
Cementitious Wood Fiber / Tectum	Existing Single Ply Roofs

*** DexCell is a registered trademark of the National Gypsum Company

Typical Properties – Pressure Sensitive Adhesives

Property	Test Method	Units	Performance Min	Typical Values
Color	---	---	---	clear
Nominal Thickness	ASTM E 408-71	In(mm)	N/A	0.008"(0.18mm)
Weight	---	Lbf/(kg/m ²)	---	0.04 (.020)
Permeability	ASTM E 96	Perms	N/A	0.6
Specific Gravity	ASTM D 71	---	N/A	0.93

Radiative Properties

Cool Roof Rating Council (CRRC): Initial / 3 yr	White	Tan	Gray
Solar Reflectance	0.74 / 0.59	---	---
Thermal Emittance	0.84 / 0.84		
Solar Reflectance Index (SRI)	90 / 69		
Rated Product ID	0033		
Licensed Manufacturer ID	0608		
Classification	Production Line		
Energy Star®: Initial / 3 yr			
Solar Reflectance	0.74 / 0.59*	---	---
Thermal Emittance	0.84 / 0.84		
* White membrane sample cleaned prior to age test.			
LEED®			
White			
Initial Solar Reflectance Index (SRI)	Pass (90)	---	---
3-year Aged Solar Reflectance Index (SRI)	Pass (69)		

Typical Properties - GenFlex EZ TPO Peel & Stick Membrane				
Property	Test Method	Units	Performance Min	Typical Performance 60-mil
Overall Thickness	D 751	in/mm	0.039 (1.00)	0.060 (1.15) ±10
Coating over Scrim	D 7635	in/mm	0.015 (0.39)	0.021 (0.54)
Breaking Strength	D 751 Grab Method	lb (N)	220 (979)	390 (1,735)
Elongation at Reinforcement Break	D 751 Grab Method	%	15	30
Tearing Strength	D 751	lb (N)	55 (245)	156 (694)
Brittleness Point	D 2137	°F (°C)	-40 (-40)	Pass
Ozone Resistance, No cracks	D 1149	---	Pass	Pass
Properties after Heat Aging (retained Values) (ASTM D 573 670 h at 240 °F (116 °C))				
Retention of Breaking Strength	D 751 Grab Method	%	90	>90
Retention of Elongation at Break	D 751 Grab Method	%	90	>90
Retention of Tearing Strength	D 751 Grab Method	%	60	>60
Weight of Change	D 1204 - 6h at 158 °F (70°C)	%	1	<1
Linear Dimension Change	D 1204	---	---	---
Water Absorption	D 471	%	±3, maximum	<1.2
Weather Resistance, 80 °C Black Panel, no cracking, crazing when wrapped around a 3" mandrel and inspected at 7x magnification	G 155	kJ/m ²	10,080 minimum	>60,000
Puncture Resistance	FTM 101C, Method 2031	lbf (N)	265 (1,180)	300 (1,334)
Dynamic Puncture Resistance MD	D 5635	---	Pass (20 J)	Pass (40 J)
Dynamic Puncture Resistance CD	D 5635	Pass (35 J)	Pass (50 J)	Dynamic Puncture Resistance CD
Static Puncture Resistance	D 5602	Pass (25 kg)	Pass (25 kg)	Static Puncture Resistance
Air Permeance (Material)	E 2178*	ft ³ /ft ² (L/(s·m ²))	<0.004 (0.02)	Pass
*The ASTM 2178 values listed are for the air permeance of the EZ TPO Peel & Stick membrane component only. For use of the product as a component in an air barrier assembly, please consult your GenFlex Building Systems Advisor (BSA), Code Agency or Authority having Jurisdiction (AHJ) for the acceptable air barrier assembly details.				



ENERGY STAR is only valid in the United States



Please contact Technical Services Department at 1-800-443-4272 for further information.

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