

**GenFlex Peel & Stick™ TPO  
(HW)**

**DESCRIPTION**

GenFlex TPO Peel & Stick (HW) membrane is a heat weldable flexible Thermoplastic Polyolefin (TPO) roofing membrane that is produced with a factory applied pressure sensitive hot melt adhesive on the backside of the membrane. Available in 45 and 60-mil white membranes both thicknesses come in 6.25' and 10' widths and roll lengths of 100'.

GenFlex TPO Peel & Stick (HW) membrane meets or exceeds all of the requirements for ASTM D6878-03 Thermoplastic Polyolefin membrane. Each membrane is reinforced with a 9x9, 1,000 denier polyester fabric.

**INSTALLATION**

Having a pre-applied adhesive on the backside of the membrane allows GenFlex Peel & Stick TPO (HW) systems to be installed using fewer components like contact or bonding adhesives. Eliminating bonding adhesive application and dry times greatly increases the speed which Peel & Stick TPO can be installed and when combined with heat welded seams the total VOC's per job are virtually eliminated.

Successful installation of GenFlex Peel & Stick TPO (HW) starts with having the proper substrate and the installation follows the following technical requirements.

1. Proper substrates must be clean, dry and free of foreign material such as grease, and any debris and other materials which could inhibit the adhesion. This may require the substrate surface to be cleaned with either a broom or blower.
2. Insulation must be adequately fastened to provide a sound substrate per current technical specifications.
3. GenFlex Peel & Stick TPO can be installed directly to GenFlex ½" HD ISO when the outdoor temperature is 60°F and rising.
4. All other substrates will need to be primed, regardless of the outdoor temperature, with GenFlex Clear Primer applied at a rate of 600 ft<sup>2</sup> per gallon. (Note: When the outdoor temperature drops below 60°F all substrates including GenFlex ½" HD ISO must be primed with GenFlex Clear Primer).
5. Unroll and position the membrane over the substrate to achieve the desired alignment and overlaps.
6. Fold back one side or ½ of the membrane to expose the release liner without disturbing the original position.
7. Remove the release liner from that section of membrane starting at one end and remove at a 45° angle in one continuous motion.
8. After the release liner has been properly removed, mate or roll the membrane onto the substrate starting in the middle of the sheet and proceed to the outer edges. This will help with the membrane application and avoid wrinkles.
9. Roll the installed membrane with a weighted roller weighing 150 lb or 50 lb per lineal foot to ensure full contact with the approved substrate.
10. After rolling is complete, fold back the remaining half of membrane and repeat the steps outlined above.

**Seaming**

GenFlex Peel & Stick TPO (HW) membrane is designed with an uncoated side lap that allows the membrane to be spliced together using a hot air welder or seam tape.

**Heat Welded Seams**

1. Heat welding procedures should follow GenFlex's current Technical Specifications designed for Heat Welding TPO membranes.
2. **Side Laps** -Each membrane has been designed with a 2" area that is uncoated along one side of the membrane. This allows the adjoining sheets to be properly overlapped and heat welded with a minimum 1 ½" weld.
3. **End Laps** - The ends of each membrane will contain the hot melt adhesive and will therefore require them to be butted together and stripped in. This can be accomplished using a 6" wide piece of reinforce standard GenFlex TPO membrane hot air welded along all edges. Standard heat welding practice should apply including the application of Cut Edge Sealant to any exposed scrim areas.

**Seam Tape Seams**

1. As an alternative seaming method, GenFlex will allow the use of TPO Seam Tape (White) to be used to adjoin membrane side laps.
2. GenFlex requires the use of GenFlex Clear Primer applied with a scrub pad and handle to be applied in the splicing areas prior to Seam Tape application. Please refer current GenFlex Technical Specifications for the proper seaming techniques.

**Parapet and Vertical Flashings**

Parapet and vertical TPO Flashings may consist of standard GenFlex TPO or GenFlex Peel & Stick TPO (HW). Please contact GenFlex Roof Solutions for specific design questions or refer to current GenFlex TPO Technical Specification.

**PRODUCT DATA**

Color: White only

Gauge	Size	PRODUCT #
45 mil	6.25' x 100'	W59 TPT 3079
	10' x 100'	W59 TPT 3099
60 mil	6.25' x 100'	W59 TPT 3679
	10' x 100'	W50 TPT 3699



**MEMBRANE PHYSICAL PROPERTIES**

PROPERTY	ASTM TEST METHOD	MINIMUM	TYPICAL VALUES
Thickness, min, mil (mm)	D 751	39 (1.0)	45 (1.14) 60 (1.52)
Thickness over scrim, mil (mm) 45 (1.14) 60 (1.52)	D 6878 Annex A1	12 (0.305)	15 (0.38) 21 (0.53)
Breaking strength, min, lbf (N)	D 751	220 (976)	330 (1500)
Elongation at reinforcement break, min, %	D 751	15	30
Tearing strength, min, lbf (N)	D 751	55 (245)	156 (694)
Brittleness point, max, °F (°C)	D 2137 Method B	-40 (-40)	-49 (-45)
Ozone resistance, no cracks	D 1149	Pass	Pass
Properties after heat aging: (retained values)	D 573		
Breaking strength, % min.	D 751	90	90
Elongation at reinforcement break, % min	D 751	90	90
Tearing strength, % min.	D 751	60	60
Weight change (mass), max %	D 751	±1	-0.02
Linear dimensional change, max, %	D 1204	±1	-0.01
Water absorption, max, mass %	D 471	±3	+1.2
Factory seam strength, lbf (N)	D 751	66 (290)	75 (330)
Weather Resistance			
Visual	G 155	Pass	Pass
Breaking Strength, % min.	90	90	90
Elongation at Reinforcement Break, min, %	90	90	90
Water Vapor Permeance – Perm	E 96	n/a	0.0122
Static Puncture Resistance – lb (kg)	D 5602	n/a	33 (15)
Dynamic Puncture Resistance – J	D 5635	20	20
Puncture Resistance – lbf (N)	FTM 101C Method 2031	200 (890)	337 (1500)

**ADHESIVE PHYSICAL PROPERTIES**

PROPERTY	ASTM TEST METHOD	MINIMUM	TYPICAL VALUES
Color	n/a	n/a	Black
Nominal thickness – inches (mm)	E 408-71	n/a	0.008 (0.20)
Weight mil – lb/ft <sup>2</sup> (kg/m <sup>2</sup> )	n/a	n/a	0.04 (0.20)
Permeability	E 96	n/a	0.6
Specific gravity	D 71	n/a	0.93
Viscosity - cps	D 3236	n/a	30,000

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**LEED INFORMATION**

Reflectivity**, % (ASTM E 903) White	74.0
Emissivity** (ASTM E 408) White	0.84
Solar Reflectance Index** (ASTM D 1980) White	90
Recycled Content Post Consumer Post Industrial	0% 3% - 5%
Manufacturing Location	Tuscumbia, AL



Only applicable  
in the U.S.A.

Cool Roof Rating Council (CRRC)	White 0007
Solar Reflectance Initial*	0.74
Solar Reflectance Weathered*	0.58
Thermal Emittance Initial*	0.84
Thermal Emittance Weathered*	0.84
Solar Reflectance Index (SRI)***	90

\* Values were obtained from independent testing by CRRC.

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\*\*\*SRI was calculated using the SRI calculator from the USGBC



**PRECAUTIONARY INFORMATION**

1. Take care when moving, transporting and handling the membrane to avoid sources of punctures and physical damage.
2. 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. Close all lids on flammable products and have proper safety equipment available during installation.
3. Contact GenFlex Roofing Systems Technical Department for specific recommendations
4. Refer to Material Safety Data Sheets (MSDS) for additional safety information.