

UltraPly™ TPO Roofing Membrane

1. Description

Firestone UltraPly TPO is a flexible Thermoplastic Polyolefin (FPO) roofing membrane made from the incorporation of a ethylene propylene rubber into a polypropylene matrix and produced with a polyester weft inserted reinforcement.

2. Preparation

Roofing structure needs to be stable enough to support the temporary loading. Substrates need to be clean, smooth, dry and free of sharp edges, loose or foreign materials, oil, grease and other materials that may damage the membrane. All surface voids greater than 6 mm wide shall be properly filled with an acceptable fill material.

3. Application

Place the membrane panel over the substrate and allow it to relax for at least 30 minutes before seaming or flashing. Membranes are overlapped (side laps and end laps) in accordance with the installation instructions and details. Seams are heat-welded.

4. Coverage

The dimensions of the membrane are calculated to cover the substrate, including seam overlaps (75 mm for standard seams – 150 mm for seams with mechanical anchoring in the seam) and upstands. Provide an additional length (150 mm) at upstands for easy manipulation.

5. Characteristics

Physical			
<ul style="list-style-type: none">■ Excellent durability and tear and puncture resistance■ High chemical, (micro)bacterial, UV and weathering resistance■ No plasticizers or chlorinated ingredients■ Avoid contact with oil and petroleum based products, grease and hot bitumen			
Technical	Property	Test Method	Declared Value
	■ Watertightness	EN 1928 (B)	pass
	■ Tensile strength (L/T)	EN 12311-2 (A)	≥ 800 N/50mm
	■ Elongation at reinforcement break (L/T)	EN 12311-2 (A)	≥ 20%
	■ Resistance to static load - soft substrate	EN 12730 (A)	≥ 25 kg
	■ Resistance to static load - hard substrate	EN 12730 (B)	≥ 25 kg
	■ Resistance to impact - soft substrate	EN 12691 (B)	≤ 10 mm
	■ Resistance to impact - hard substrate	EN 12691 (A)	≤ 10 mm
	■ Tear resistance (L/T)	EN 12310-2	≥ 400 N
	■ Joint peel resistance	EN 12316-2	≥ 100 N/50mm
	■ Joint shear resistance	EN 12317-2	≥ 800 N/50mm
	■ Foldability at low temperature	EN 495-5	≤ -45 °C
	■ Durability - UV exposure	EN 1297	pass
	■ Resistance to root penetration	EN 13948	pass
	■ Dimensional stability	EN 1107-2	≤ 0.5%
	■ Reaction to fire	EN 13501-1	E
	■ External Fire performance	EN 13501-5	B _{ROOF} (t1)

Note: For latest updates and additional info, please consult our website at www.firestonebpe.com. Testing results and/or copies of Approval Documents for above-mentioned membranes are available upon request.



6. Packaging / Storage / Shelf Life

	Thickness (mm)	Width (m)	Length (m)	Weight (kg/m ²)
EU Sizes	1.2	1.50-2.00	30.5	1.235
	1.5	1.50-2.00	30.5	1.525
	1.8	1.50-2.00	30.5	1.815
US Sizes	.045" (1.14 mm)	1.52-2.44-3.05	30.5	1.140
	.060" (1.52 mm)	1.52-2.44-3.05	30.5	1.430
	.080" (2.03 mm)	2.44-3.05	30.5	1.900

Storage: Store away from sources of puncture and physical damage. Store away from ignition sources and open flame.

Shelf Life: Unlimited.

7. Precautions

Exercise caution when lifting, moving, transporting, storing or handling membrane rolls to avoid sources of punctures and possible physical damage.

Contact Firestone Technical Department for specific recommendations regarding chemical or waste product compatibility with Firestone UltraPly TPO Membrane.

