

UltraFlex Textured Geomembrane

GSE UltraFlex Textured is a co-extruded textured linear low density polyethylene (LLDPE) geomembrane available on one or both sides. It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased frictional resistance, flexibility and elongation properties where differential or localized subgrade settlements may occur such as in a landfill closure application.

Product Specifications

These product specifications meet GRI GM17

Tested Property	Test Method	Frequency	Minimum Average Value			
			1.00 mm	1.50 mm	2.00 mm	2.50 mm
Thickness, mm Lowest individual reading	ASTM D 5994	every roll	1.00 0.90	1.50 1.35	2.00 1.80	2.50 2.25
Density, g/cm ³ , (max.)	ASTM D 1505	90,000 kg	0.939	0.939	0.939	0.939
Tensile Properties (each direction) Strength at Break, N/mm Elongation at Break, %	ASTM D 6693, Type IV Dumbbell, 50 mm/min G.L. 50 mm	9,000 kg	11 250	16 250	21 250	26 250
Tear Resistance, N	ASTM D 1004	20,000 kg	100	150	200	250
Puncture Resistance, N	ASTM D 4833	20,000 kg	200	300	400	500
Carbon Black Content, % (Range)	ASTM D 1603*/4218	9,000 kg	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	20,000 kg	Note ⁽¹⁾	Note ⁽¹⁾	Note ⁽¹⁾	Note ⁽¹⁾
Asperity Height, mm	ASTM D 7466	second roll	0.45	0.45	0.45	0.45
Oxidative Induction Time, min	A5TM D 3895, 200°C; O ₂ , 1 atm	90,000 kg	>100	>100	>100	>100
TYPICAL ROLL DIMENSIONS						
Roll Length ⁽²⁾ , m	Double-Sided Textured		213	158	122	100
	Single-Sided Textured		236	164	124	100
Roll Width ⁽²⁾ , m			6.86	6.86	6.86	6.86
Roll Area, m ²	Double-Sided Textured		1,463	1,087	836	690
	Single-Sided Textured		1,619	1,125	851	690

NOTES:

- ⁽¹⁾Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 3.
- ⁽²⁾Roll lengths and widths have a tolerance of ±1%.
- GSE UltraFlex Textured is available in rolls weighing approximately 1,800 kg.
- All GSE geomembranes have dimensional stability of ±2% when tested according to ASTM D 1204 and LTB of <-77°C when tested according to ASTM D 746.
- *Modified.