

# GSE UltraFlex Textured Geomembrane (Single-Sided)



**AT THE CORE:**  
An LLDPE geomembrane suitable for applications that require increased frictional resistance, flexibility and elongation properties.

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 or exceed GRI GM17.

Tested Property	Test Method	Frequency	Minimum Average Value		
Thickness, mm (mil) <sup>(1)</sup> Lowest individual reading, mm (mil)	ASTM D 5994	every roll	1.0 (40) 0.85 (34)	1.5 (60) 1.28 (51)	2.0 (80) 1.7 (68)
Density, g/cm <sup>3</sup>	ASTM D 1505	every 5th roll	0.92	0.92	0.92
Tensile Properties (each direction) <sup>(2)</sup> Strength at Break, N/mm-width (lb/in) Elongation at Break, %	ASTM D 6693, Type IV Dumbbell, 2 ipm G.L. 51 mm (2.0 in)	every 5th roll	18 (103) 400	23 (131) 400	28 (160) 400
Tear Resistance, N (lb)	ASTM D 1004	every 5th roll	100 (22)	150 (34)	200 (45)
Puncture Resistance, N (lb)	ASTM D 4833	every 5th roll	214 (48)	325 (73)	436 (98)
Carbon Black Content, %	ASTM D 1603 / D 4218	every 5th roll	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	every 5th roll	Note <sup>(3)</sup>	Note <sup>(3)</sup>	Note <sup>(3)</sup>
Asperity Height	ASTM D 7466	every 5th roll	Note <sup>(4)</sup>	Note <sup>(4)</sup>	Note <sup>(4)</sup>
Oxidative Induction Time, minutes	ASTM D 3895, 200° C; O <sub>2</sub> , 1 atm	90,000 kg	>100	>100	>100
<b>TYPICAL ROLL DIMENSIONS</b>					
Roll Length <sup>(5)</sup> , m (ft)			200 (656)	100 (328)	80 (262)
Roll Width <sup>(5)</sup> , m (ft)			7.0 (23)	7.0 (23)	7.0 (23)
Roll Area, m <sup>2</sup> (ft <sup>2</sup> )			1,400 (15,088)	700 (7,544)	560 (6,026)
40' Standard Container, roll			9	14	14

### NOTES:

- <sup>(1)</sup>Minimum average core thickness is -5% of the nominal thickness; lowest thickness for 8 out of 10 values is -10% of the nominal value; lowest thickness for any of the 10 values is -15% of the nominal value.
- <sup>(2)</sup>The combination of stress concentrations due to co-extrusion texture geometry and the small specimen size results in large variation of test results. Therefore, these tensile properties are minimum average values.
- <sup>(3)</sup>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.
- <sup>(4)</sup>0.25 mm average. 8 of 10 readings >0.18 mm. Lowest individual > 0.13 mm.
- <sup>(5)</sup>Roll lengths and widths have a tolerance of ±1%.
- GSE UltraFlex Textured is provided in rolls weighing approximately 1,050 kg (2,315 lb) each.
- 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.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.



**[ DURABILITY RUNS DEEP ]** For more information on this product and others, please visit us at [GSEworld.com](http://GSEworld.com), call 66.2.937.0091 or contact your local sales office.