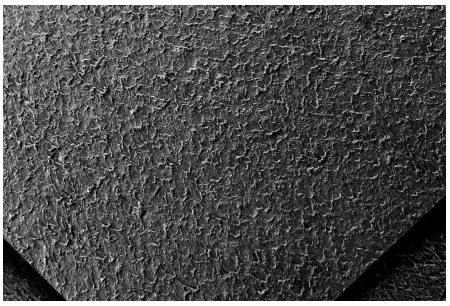
Specialist Geomembranes

Technical Data Sheet

Landflex™ Textured HDPE

(Single or both sides)



A high quality, single or double sided textured high density polyethylene (HDPE) geomembrane. It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased frictional resistance, excellent chemical resistance and endurance properties. The smooth edges (width approx. 15cm) allow for an easier, quicker welding process.

The information herein is based upon data obtained by the manufacturer and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data. This information is furnished upon the condition that the person receiving it shall evaluate its suitability for the specific application.

Tested Property	Unit	Test Method	Values(*)				
Thickness[a]	mm	ASTM D 5994	1.0	1.5	2.0	2.5	3.0
Density	g/cm³	ASTM D 792	≥0.94	≥0.94	≥0.94	≥0.94	≥0.94
Tensile properties (each direction)		ASTM D 638 / D 6693; Type IV					
Strength at yield	N/mm	50mm/min	16(15)	24(22)	32(30)	40(37)	48(45)
Elongation at yield	%	lo=33 mm	16(13)	16(13)	16(13)	16(13)	16(13)
Strength at break	N/mm	50mm/min	33(27)	49(40)	66(53)	83(67)	100(80)
Elongation at break	%	lo=50mm	800(700)	800(700)	800(700)	800(700)	800(700)
Tear resistance	N	ASTM D 1004	140(130)	205(190)	275(250)	350(315)	420(375)
Puncture resistance	N	ASTM D 4833	420(320)	560(480)	690(640)	830(800)	980(960)
Carbon black content	%	ASTM D 4218	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0
Carbon black dispersion	Category	ASTM D 5596	1/2[b]	1/2[b]	1/2[b]	1/2[b]	1/2[b]
Dimensional stability (each direction)	%	ASTM D 1204 (120°C/1h)	±2	±2	±2	±2	±2
Melt flow index[c]	g/10 min	ASTM D 1238 (190°C / 5kg) (190°C / 2.16kg	≤3.0 ≤1.0	≤3.0 ≤1.0	≤3.0 ≤1.0	≤3.0 ≤1.0	≤3.0 ≤1.0
Stress crack resistance (NCTL)	h	ASTM D 5397; appendix	≥500	≥500	≥500	≥500	≥500
Asperity height (each side) (minimum average)	mm	ASTM D 7466	0.40[d]	0.40[d]	0.40[d]	0.40[d]	0.40[d]
Oxidative induction time (OIT)	min	ASTM D 3895 (200°C; Pure O_2; 1 atm)	≥100	≥100	≥100	≥100	≥100

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Reference Property	Unit	Test Method	Values				
Low temperature brittleness	°C	ASTM D 746	-77	-77	-77	-77	-77
UV resistance[e] HP-OIT retained after 1,600 hours[f]	%	ASTM D 723 ASTM D 5885	≥50	≥50	≥50	≥50	≥50
Roll Width[g]	m	---	6.95 / 7.5			7.5	
Surface	---	---	Single sided or double sided textured				

Notes:
(*) : All values - unless otherwise noted - are nominal values. Values in brackets are minimum values within the 95% confidence interval.
(a) : Tolerance ±10% for the lowest individual reading - special thickness available upon request.
(b) : 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.
(c) : Standard test conditions: 190°C / 5.0kg.
(d) : 8 out of 10 readings must be ≥ 0.35mm and lowest individual reading must be ≥ 0.30mm.
(e) : Test conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C.
(f) : UV resistance is based on percent retained value regardless of the original high pressure - OIT value.
(g) : Roll widths and lengths have a tolerance of ±1%.



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