

Hydro WMS Ltd - 1.0mm LLDPE Geomembrane Specification

Properties	Test Method	Nominal Values
Thickness (mm)	ASTM D 5199	1.0
Multi-axial strain (%)	ASTM D 5617	70
Low temperature brittleness (°C)	ASTM D 746, cond B	> -77
Oxidative induction time (minutes)	ASTM D 3895 (200°C, Pure O ₂ 1Atm)	100
Dimensional stability (each direction) %	ASTM D 1204 (100°C 1 hour)	±2
Melt flow Index g/10 minutes	ASTM D 1238	≤1.2
Water Permeability	m ³ /m ² .day	<1.1 ⁻⁶
Stress Crack Resistance	h	>300
		Minimum Values
Thickness (mm)	ASTM D 5199	0.91
Density g.cm ⁻³	ASTM D 792/1505A	0.92
Tensile Strength at break (N/mm)	UN-EN ISO 527 Type V	31 (26)
Elongation at break	G.L. (50mm)	800 (≥750)
Tear resistance (N)	ASTM D 1004	≤100
Puncture resistance (KN)	SM D 4833	2.5
Carbon Black content (%)	ASTM D 1603	2.0 – 2.5

Values Shown are medium – Values in brackets () with 95% confidence level

**pH - Resistant to all naturally occurring soil acids and alkalis

***Chemical/biological resistance - Resistance to all substances found to naturally occur in soils and rainwater. Detailed information would need to be provided to geomembrane manufacturer in instances of contaminated land.