

## HDPE Geomembrane Technical Specifications

Parameter	Standard Value	Test Method
Material Composition	97.5% HDPE + 2.5% Carbon Black	ASTM D883
Thickness Range	0.5mm - 3.0mm (20-120 mil)	ASTM D5199
Density	≥0.940 g/cm³	ASTM D1505
Tensile Strength	≥17 MPa (MD & TD)	ASTM D6693 Type IV
Elongation at Break	≥700%	ASTM D6693
Tear Resistance	≥93 N (MD & TD)	ASTM D1004
Puncture Resistance	≥320 N	ASTM D4833
Carbon Black Content	2.0-3.0%	ASTM D4218
UV Resistance	≤20% strength loss after 1600 hrs	ASTM D7238
Chemical Resistance	Resistant to pH 1-14	ASTM D5747
Permeability	≤1×10 <sup>-13</sup> cm/sec	ASTM E96
Operating Temp Range	-60°C to +80°C	ASTM D746