

BentoLiner®SWL

Geosynthetic Clay Liner

BentoLiner®SWL is a high-performance self-healing reinforced geosynthetic clay liner (GCL) with an adhered Polyethylene geomembrane. It is a primary component of the Solmax **Structural Waterproofing** system ideal for waterproofing of underground reinforced concrete structures. It comprises a uniform layer of sodium bentonite, encapsulated between a woven and a nonwoven geotextile that is needle-punched together, on top with a geomembrane, creating a composite structural waterproofing membrane that mechanically bonds to cast-in-place concrete.

Product Specifications

Geotextile/Geomembrane Property	Test Method	Value ⁽¹⁾
Cap Nonwoven, Mass/Unit Area (nominal) ⁽²⁾	ASTM D 5261 EN ISO 9864	220 g/m ²
Carrier Woven, Mass/Unit Area (nominal) ⁽²⁾	ASTM D 5261 EN ISO 9864	110 g/m ²
PE-Geomembrane, thickness (nominal) ⁽²⁾	EN ISO 9863-1	0.3 mm
Bentonite Properties		
Swell Index	ASTM D 5890	24 ml/2 g (min.)
Moisture Content	ASTM D 4643 ISO 11465	13 % (max.)
Fluid Loss	ASTM D 5891	18 ml (max.)
Bentonite, Mass/Unit Area ⁽³⁾	ASTM D 5993 EN ISO 14196	4,800 g/m ²
GCL Membrane Composite		
Mass/Unit Area ⁽³⁾	ASTM D 5993 EN ISO 14196	5,400 g/m ²
Tensile Strength, MD/CMD	EN ISO 10319	12/10 kN/m
CBR Puncture Strength	ASTM D 6241 EN ISO 12236	2,500 N
Peel Strength ⁽⁴⁾	ASTM D 6496	360 N/m
Thickness	EN ISO 9863-1	7 mm - 0.5 mm
Hydraulic Conductivity	ASTM D 5887	1 x 10 ⁻¹⁰ cm/s
Typical roll dimensions		
Width and length ⁽⁵⁾	---	1.15 m x 5 m

NOTES:

⁽¹⁾ All values - unless otherwise noted - are minimum average values; obtained from in-house or external laboratory testing.

⁽²⁾ Minimum average value: Nominal -10%

⁽³⁾ Bentonite mass per unit area is calculated with 13% moisture content

⁽⁴⁾ Peel strength between geotextile components

⁽⁵⁾ Approximate roll dimensions, other dimensions available upon request.

SOLMAX 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.

For more information on this product and other, please visit us at SOLMAX.