

GSE GundSeal Geosynthetic Clay Liner (Smooth HDPE)

METRIC

GSE GundSeal geosynthetic clay liner (GCL) is a composite liner system that consists of a high quality sodium bentonite adhered to a smooth high density polyethylene (HDPE) geomembrane with a spun-bonded geotextile to protect the bentonite during installation. This one product composite liner system combines the low permeability of an HDPE geomembrane with the self-seaming characteristics of bentonite clay. The intimate contact of the bentonite with the geomembrane provides the best leak protection in the industry.



AT THE CORE:

A composite liner system that combines the low permeability of an HDPE geomembrane with the self-seaming characteristics of bentonite clay to provide the best leak protection in the industry.

Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Value					
			0.381 mm	0.5 mm	0.75 mm	1.0 mm	1.5 mm	2.0 mm
Finished GCL Property								
Bentonite Coating ⁽¹⁾ , kg/m ²	ASTM D 5993	1/4,000 m ²	> 3.66					
Effective Hydraulic Conductivity, cm/sec	ASTM D 5887/E96	periodically	< 4 x 10 ⁻¹²					
Bentonite Moisture Content	ASTM D 2216	1/4,000 m ²	25% Typical					
GCL Tensile Strength ⁽³⁾ , N/mm	ASTM D 6768	1/20,000 m ²	3	7	11	15	23	30
Geomembrane Property⁽²⁾								
Thickness, mm Lowest individual reading	ASTM D 5199	1/10,000 m ²	0.381 0.342	0.50 0.45	0.75 0.675	1.00 0.90	1.50 1.35	2.00 1.80
Density, g/cm ³	ASTM D 1505	1/20,000 m ²	0.94	0.94	0.94	0.94	0.94	0.94
Tensile Properties Tensile Break Strength, N/mm Elongation at Break, %	ASTM D 6693 ASTM D 6693	1/20,000 m ² 1/20,000 m ²	7 500	12 500	20 700	27 700	40 700	53 700
Puncture Resistance, N	ASTM D 4833	1/20,000 m ²	89	158	240	320	480	640
Sodium Bentonite Property								
Hydraulic Flux: Bentonite, m ³ /m ² /sec	ASTM D 5887	periodically	≤ 1 x 10 ⁻⁸					
Hydraulic Conductivity, cm/sec	ASTM D 5887	periodically	≤ 5 x 10 ⁻⁹					
Swell Index, ml/2 g	ASTM D 5890	1/30,000 kg	≥ 24					
Fluid Loss, ml	ASTM D 5891	1/30,000 kg	≤ 18					
TYPICAL ROLL DIMENSIONS								
Roll Width ⁽⁴⁾ , m			5.3	5.3	5.3	5.3	5.3	5.3
Roll Length ⁽⁴⁾ , m			61	64	61	54	54	45
Roll Area, m ²			323	339	325	286	286	238
Roll Weight, kg			1,900	1,900	1,900	1,900	1,900	1,900

NOTES:

- ⁽¹⁾0% moisture content.
- ⁽²⁾See specific GSE HD geomembrane product data sheet for additional information.
- ⁽³⁾101 mm wide sample, 305 mm/min. Values are representative of the geomembrane tensile yield strength.
- ⁽⁴⁾Roll lengths and widths have a tolerance of ± 1%.

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, call 800.435.2008 or contact your local sales office.