



## GEOSYNTHETIC CLAY LINER 4500

GCL 4500 is a woven fabric-like material, primarily used as a fluid barrier for use in construction of liquid waste disposal sites. The granular bentonite clay is sandwiched between a woven and nonwoven geotextile, resulting in a very strong robust product.

### AREAS OF USE

- ▶ Solid waste and hazardous waste landfill areas
- ▶ SUDS Ponds and pools
- ▶ Dams
- ▶ Irrigation channels and water transfer lines
- ▶ Landslide repairs and similar ground reinforcement applications
- ▶ Base insulations in flood controls

### PROPERTIES OF GEOTEXTILE

TEST METHOD		VALUES	UNIT
Cover layer	EN ISO9864 (EN965)	200	g/m <sup>2</sup>
Carrier layer	EN ISO9864 (EN965)	100	g/m <sup>2</sup>

### PROPERTIES OF BENTONITE

Montmorillonite content	CUR 33	≥ 75	%
Swell index	ASTM D 5890	≥ 24	ml/2g
Mass per unit area <sup>(1)</sup>	EN 14196	4500	g/m <sup>2</sup>



# SPECIFICATION

## GEOSYNTHETIC CLAY LINER SPECIFICATIONS

TEST METHOD		VALUES	UNIT	TOLERANCE
Mass per unit area <sup>(1)</sup>	EN 14196	4800	g/m <sup>2</sup>	±10%
Thickness	EN ISO9863-1/9863-2	6.8	mm	±1mm
Tensile strength MD	EN ISO 10319	≥ 10.4	kN/m	-1kN/m
Tensile strength CMD	EN ISO 10319	≥ 8.5	kN/m	-0.8kN/m
CBR Puncture strength	EN ISO12236	≥ 1800	N	-200N
Index flux	ASTM D 5887 / DIN18130	≤ 5.0 x 10 <sup>-9</sup>	m <sup>3</sup> /m <sup>2</sup> /s	
Permeability /K - value	ASTM D 5887	≤ 5.0 x 10 <sup>-11</sup>	m/s	
Peel strength <sup>(2)</sup>	ASTM D6496	≥ 60	N/10cm	-6N/10cm
Roll sizes (min)		5.1x40	m	±1%
Quantity		204	m <sup>2</sup>	

1. At 12% moisture content

2. Max peak



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