



# Certified Properties

## BENTOMAT<sup>®</sup> SS100 CERTIFIED PROPERTIES

MATERIAL PROPERTY	ANALYSIS CONDUCTED BASED ON TEST METHOD	TEST FREQUENCY	REQUIRED VALUES
Bentonite Swell Index <sup>3</sup>	ASTM D 5890	10,000 m <sup>2</sup>	24 ml / 2g min.
Bentonite Mass per unit Area <sup>4</sup>	ASTM D 5993/EN 14196	5,000 m <sup>2</sup>	4.8 kg/m <sup>2</sup>
Bentonite Fluid Loss	ASTM D 5891	10,000 m <sup>2</sup>	18 ml max.
GCL Peel Strength	ASTM D 6496	5,000 m <sup>2</sup>	65 N
GCL Index Flux <sup>1</sup>	ASTM D 5887	25,000 m <sup>2</sup>	$2 \times 10^{-9} \text{ (m}^3/\text{m}^2\text{)/s}^{-1}$
GCL Permeability <sup>1</sup>	ASTM D 5887	25,000m <sup>2</sup>	$1 \times 10^{-11} \text{ m/s}^{-1}$
Tensile Strength <sup>2</sup>	EN ISO 10319	20,000 m <sup>2</sup>	8 kN/m
Elongation	EN ISO 10319	20,000 m <sup>2</sup>	15 percent typical
Mass per unit area of woven geotextile	ASTM D 5261	1 per 20,000 m <sup>2</sup>	100 g/m <sup>2</sup>
Mass per unit area of (non woven) needle-punched geotextiles	ASTM D 5261	1 per 20,000 m <sup>2</sup>	200 g/m <sup>2</sup>

***Bentomat<sup>®</sup> SS100 is a reinforced GCL consisting of a layer of natural sodium Bentonite between a woven and a non-woven geotextile which are needle-punched together.***

Notes:

- <sup>1</sup> Index flux and permeability testing with de-aired distilled/de-ionized water at 80 psi (551 kPa) cell pressure, 77 psi (531 kPa) headwater pressure and 75 psi (517 kPa) tail water pressure.
- <sup>2</sup> All tensile testing is performed in the machine direction.
- <sup>3</sup> Bentonite properties as removed from the finished GCL.
- <sup>4</sup> Bentonite mass/area reported at 12 percent moisture.



Birch House, Scotts Quays, Birkenhead, Merseyside, CH41 1FB

Tel: +44 (0)151 606 5900

Fax: +44 (0)151 606 5932

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