TECHNICAL REFERENCE 401-BM600CL

BENTOMAT® 600 CL CERTIFIED PROPERTIES



MATERIAL PROPERTY	TEST METHOD	TEST FREQUENCY	REQUIRED VALUES
Bentonite Swell Index ¹	ASTM D 5890	1 per 50 tonnes	24 mL/2g min.
Bentonite Fluid Loss ¹	ASTM D 5891	1 per 50 tonnes	18 mL max.
Bentonite Mass/Area ²	ASTM D 5993	40,000 ft ² (4,000 m ²)	0.75 lb/ft² (3.6 kg/m²) min.
GCL Tensile Strength ³	ASTM D 6768	200,000 ft ² (20,000 m ²)	30 lbs/in (53 N/cm) MARV
GCL Peel Strength ³	ASTM D 6496	40,000 ft ² (4,000 m ²)	1 lb/in (1.75 N/cm) min.
GCL Index Flux ⁴	ASTM D 5887	Periodic	1 X 10 ⁻⁹ m ³ /m ² /sec max.
GCL Hydraulic Conductivity ⁴	ASTM D 5887	Periodic	5 X 10 ⁻¹⁰ cm/sec max.
GCL Hydrated Internal Shear Strength ⁵	ASTM D 5321 ASTM D 6243	Periodic	150 psf (7.2 kPa) typical

Bentomat 600CL is a needle-punched GCL consisting of a layer of sodium bentonite between woven and nonwoven geotextiles, which are needlepunched together and laminated to a thin flexible membrane liner.

Notes

- 1 Bentonite property tests performed at a bentonite processing facility before shipment to CETCO's GCL production facilities.
- 2 Bentonite mass/area reported at 0 percent moisture content.
- All tensile strength testing is performed in the machine direction using ASTM D 6768. All peel strength testing is performed using ASTM D 6496. Upon request, tensile and peel results can be reported per modified ASTM D 4632 using 4 inch grips.
- Index flux and permeability testing with deaired distilled/deionized water at 80 psi (551kPa) cell pressure, 77 psi (531 kPa) headwater pressure and 75 psi (517 kPa) tailwater pressure. Actual flux values vary with field condition pressures.
- Peak value measured at 200 psf (10 kPa) normal stress for a specimen hydrated for 48 hours. Site-specific materials, GCL products, and test conditions must be used to verify internal and interface strength of the proposed design.

LAST UPDATED JULY 2009

IMPORTANT: The information contained herein supersedes all previous printed versions, and is believed to be accurate and reliable. For the most up-to-date information, please visit www.CETCO.com. CETCO accepts no responsibility for the results obtained throught application of this product. CETCO reserves the right to update information without notice.



2870 Forbs Avenue Hoffman Estates, IL 60192 847.851.1800 | 800.527.9948