

TECHNICAL DATA SHEET

TM600 SERIES



Product	Geosynthetic Clay Liner (GCL)
Composition	Thermal Lock® Geocomposite
Main Function	Impermeabilisation

Property	Test Method	Texel NS	Texel NSL	Texel CNSL	Texel SRNW	Texel SRNWL
Physical						
Top layer - Geotextile	ASTM D5261	Non-woven - 200 g/m ²				
Bottom layer - Geotextile - Geomembrane PP	ASTM D5261	Woven - 105 g/m ² -	Woven - 105 g/m ² -	Woven - 105 g/m ² Flexible geofilm - 200 g/m ²	Reinforced non woven - 200 g/m ² -	Reinforced non woven - 200 g/m ² -
Bentonite						
Composition	-	Mineral montmorillonite from Wyoming				
Swell index	ASTM D5890	24 ml / 2g				
Moisture content	ASTM D4643	12%				
Fluid loss max.	ASTM D5891	18 ml				
Smectite (Montmorillonite) min.	ASTM XRD	90%				
Geocomposite						
Bentonite mass/unit area ⁽¹⁾	ASTM D5993	4.34 kg/m ²	3.66 kg/m ²	3.66 kg/m ²	4.34 kg/m ²	3.66 kg/m ²
Tensile strength ⁽²⁾	ASTM D6768	5 kN/m	5 kN/m	5 kN/m	8.8 kN/m	8.8 kN/m
Peel strength	ASTM D6496	610 N/m				
Permeability max. ⁽³⁾	ASTM G160	5 x 10 ⁻⁹ cm/sec	5 x 10 ⁻⁹ cm/sec	5 x 10 ⁻¹⁰ / 5 x 10 ⁻¹³ (4)	5 x 10 ⁻⁹ cm/sec	5 x 10 ⁻⁹ cm/sec
Index flux max. ⁽³⁾	ASTM D6392	1 x 10 ⁻⁸ m ³ /m ² /sec	1 x 10 ⁻⁸ m ³ /m ² /sec	1 x 10 ⁻⁹ m ³ /m ² /sec	1 x 10 ⁻⁸ m ³ /m ² /sec	1 x 10 ⁻⁸ m ³ /m ² /sec
Internal shear strength ⁽⁵⁾	ASTM D6243	24 kPa				
Dimensions						
Width X length	-	4.72 m X 45.72 m				

This technical information comes from the manufacturer and was transcribed by Texel. Properties are typical MARV except when specified otherwise

1- Oven-dried measurement. Equates to 0.84 lb/sqft (4.1 kg/sqm) when indexed to 12% moisture content. / 2 - Tested in machine direction. / 3 - Deaired, deionized water @ 5 psi (34.5 kPa) maximum effective confining stress and 2 psi (13.8 kPa) head pressure. / 4 - According to ASTM E96. / 5 - Typical peak value for specimen hydrated for 24 hours and sheared under a 200 psf (9.6 kPa) normal stress.

Store material in a dry, flat area. For joints, a bag of bentonite powder will be required for each roll of the project.

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