

# TM600 SERIES

## TECHNICAL DATASHEET

|                               |                               |
|-------------------------------|-------------------------------|
| <b>Geomembrane (GMB) type</b> | Geosynthetic Clay Liner (GCL) |
| <b>Composition</b>            | Thermal Lock® Geocomposite    |
| <b>Main function</b>          | Impermeabilisation            |

| Property                                      | Method     | NS   | NSL  | CNSL  | SRNW   | SRNWL  |
|---|------------|--|--|---|--|--|
| <b>Physical</b>                               |            |  |  |   |  |  |
| Top layer - Geotextile                        | ASTM D5261 | Non-woven - 200 g/m <sup>2</sup>                         |  |   |  |  |
| Bottom layer - Geotextile<br>- Geomembrane PP | ASTM D5261 | Woven - 105 g/m <sup>2</sup><br>-                        | Woven - 105 g/m <sup>2</sup><br>-                        | Woven - 105 g/m <sup>2</sup><br>Flexible geofilm - 200 g/m <sup>2</sup> | Reinforced non woven - 200 g/m <sup>2</sup><br>-         | Reinforced non woven - 200 g/m <sup>2</sup><br>-         |
| <b>Bentonite</b>                              |            |  |  |   |  |  |
| 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%  |  |   |  |  |
| <b>Geocomposite</b>                           |            |  |  |   |  |  |
| Bentonite mass/unit area <sup>(1)</sup>       | ASTM D5993 | 4.34 kg/m <sup>2</sup>                                   | 3.66 kg/m <sup>2</sup>                                   | 3.66 kg/m <sup>2</sup>  | 4.34 kg/m <sup>2</sup>                                   | 3.66 kg/m <sup>2</sup>                                   |
| Tensile strength <sup>(2)</sup>               | 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. <sup>(3)</sup>              | ASTM G160  | 5 x 10 <sup>-9</sup> cm/sec                              | 5 x 10 <sup>-9</sup> cm/sec                              | 5 x 10 <sup>-10</sup><br>5 x 10 <sup>-13</sup> <sup>(4)</sup>           | 5 x 10 <sup>-9</sup> cm/sec                              | 5 x 10 <sup>-9</sup> cm/sec                              |
| Index flux max <sup>(3)</sup>                 | ASTM D6392 | 1 x 10 <sup>-8</sup> m <sup>3</sup> /m <sup>2</sup> /sec | 1 x 10 <sup>-8</sup> m <sup>3</sup> /m <sup>2</sup> /sec | 1 x 10 <sup>-9</sup> m <sup>3</sup> /m <sup>2</sup> /sec                | 1 x 10 <sup>-8</sup> m <sup>3</sup> /m <sup>2</sup> /sec | 1 x 10 <sup>-8</sup> m <sup>3</sup> /m <sup>2</sup> /sec |
| Internal shear strength <sup>(5)</sup>        | ASTM D6243 | 24 kPa   |  |   |  |  |
| <b>Dimensions</b>                             |            |  |  |   |  |  |
| 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.

Revision : 2020-05-18

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