## InfraClay3600GL®

## **Building Australia's future**



## InfraClay® Bentonite Clay Liner

InfraClay3600GL® is a superior geosynthetic clay liner, constructed from top-notch composite materials. Our unique manufacturing process involves needle punching Sodium bentonite, in both powder and granule forms, between a robust carrier layer of PP woven and a protective non woven covering layer. Enhanced waterproof properties are achieved by laminating PE onto one side of the InfraClay3600GL® Geosynthetic Clay Liner.

APPLICATIONS

- ⊘ Dam liners
- ⊘ Landfill capping
- ⊘ Ponds

|   | Technical                             | Specifications       |                         |                  |
|---|---------------------------------------|----------------------|-------------------------|------------------|
| Material property                           |                                       | Units                | <b>Required Value</b>   | Testing method   |
| GEOTEXTILE PROTECTION LAYER'                | PP non-woven white                    | g/m2                 | 200                     | EN ISO 9864      |
| GEOTEXTILE CARRIER LAYER                    | PP slit film woven                    | g/m2                 | 110                     | Or<br>ASTM D5261 |
| BENTONITE LAYER<br>(0% moisture content)    | Sodium Bentonite granule <sup>2</sup> | g/m2                 | ≥3600                   | ASTM D5993       |
|   | Fluid Loss                            | ml                   | ≤18                     | ASTM D5891       |
|   | Swell Index                           | ml/2g                | ≥25                     | ASTM D5890       |
| BONDED LAYER                                | PE Membrane                           | mm                   | ≥0.2                    | ASTM D5199       |
| MASS PER UNIT AREA<br>(0% moisture content) | Geosynthetic clay liner               | g/m2                 | 4100                    | ASTM D5993       |
| BONDING PROCESS                             |                                       | Fully Needle-punched |                         |                  |
| TENSILE STRENGTH                            | MACHINE                               | kN/m                 | ≥10                     | ASTM D6768       |
|   | ACROSS                                | kN/m                 | ≥10                     |                  |
| PEEL STRENGTH BETWEEN<br>WOVEN AND NONWOVEN |                                       | N/m                  | ≥650                    | ASTM D6496       |
| STATIC PUNCTURE<br>RESISTANCE (CBR BURST)   | STRENGTH                              | Ν                    | ≥ 1800                  | EN ISO 12236     |
|   | ELONGATION                            | %                    | ≥ 25                    |                  |
| PERMEABILITY                                |                                       | m/s                  | ≤5.0 *10 <sup>-12</sup> | ASTM D5084       |
| INDEX FLUX(q10)                             |                                       | (m³ /m² )/s          | ≤1X10-9                 | ASTM D5887       |
| ROLL SIZE⁴ (Length X Width)                 |                                       | (m)                  | 30mt X 5.0mt or tailore | d                |
|   |                                       |                      |                         |                  |

## Notes:

1. This represents the typical average value we have attained, with a permissible deviation tolerance of 8% for specific tests.

2. The unit mass of bentonite is presented as a typical average value. We have a range of products available from 3600–5500gsm. Additionally, the moisture content of the delivered bentonite is maintained below 12%.

3. The unit mass of GCL (Geosynthetic Clay Liner) is presented as a typical average value, with a usual deviation tolerance of 5%.