

# Voltite<sup>®</sup> Waterproofing Solutions

## VOLTITE<sup>®</sup> LM

### Polyethylene Laminated

### Bentonite Geosynthetic Clay Liner

Voltite<sup>®</sup> LM is a factory pre-hydrated needle-punched waterproofing GCL membrane composed of natural sodium bentonite granules encapsulated between high strength woven and non-woven geotextiles.

#### GEOCOMPOSITE

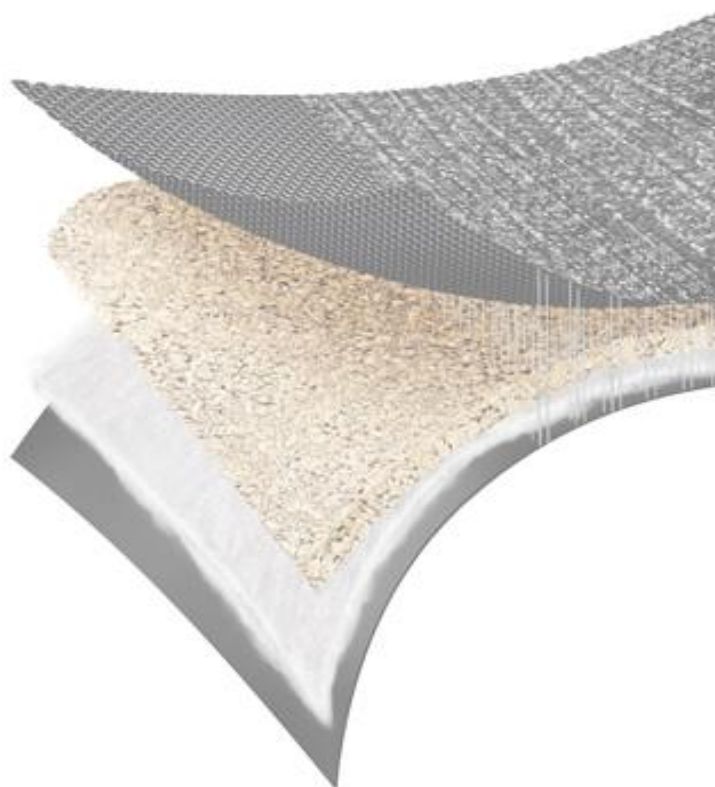
<b>Permeability</b> ASTM D 5887	$<5,0 \times 10^{-11}$ m/sec
<b>Index Flux</b> ASTM D 5887	$<1,0 \times 10^{-8}$ m <sup>3</sup> /sec-m <sup>2</sup>
<b>Tensile Strength</b> ASTM D 6768	$>10$ kN/m
<b>CBR Puncture</b> EN ISO 12236	$>1850$ N
<b>Peel Adhesion to Concrete</b> ASTM D 903	$>2,0$ Kn/m
<b>Thickness</b> EN 964-1	6,0 mm

#### BENTONITE LAYER

<b>Bentonite Content<sup>(1)</sup></b> ASTM 5993	$> 5000$ g/m <sup>2</sup>
<b>Free Swell</b> ASTM D 5890	$> 24$ ml/2g
<b>Fluid Loss</b> ASTM D 5891	$< 18$ ml

#### GEOTEXTILE LAYERS

<b>PE Layer</b>	0,2mm
<b>Non Woven- Mass/Unit Area</b> ASTM D 5261	200 g/sqm
<b>Woven- Mass/Unit Area</b> ASTM D 5261	110 g/sqm



#### DIMENSION

width: 1,10 - 1,25 - 2,50 - 5,00  
length: 5,00 - 20 - 25 - 40  
\*different roll sizes available on demand

(1) min. weight of sodium bentonite with 15 % moisture content.  
(2) results are reported as nominal values with max.10% tolerance.

The values in the table are achieved in manufacturers laboratories and accredited testing institutes by following the ASTM Standards and GeoShield quality plan.