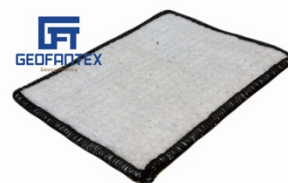


Geofantex GCL

Technical Data Sheet

Geofantex GCL May 2019

Geofantex GCL is a Geosynthetic Clay Liner and represents one of the most modern geosynthetic products available today. Geofantex GCL is a triple-layer composite containment (waterproofing) system comprising two geotextiles sandwiching a layer of highly reactive sodium bentonite material. When this sodium bentonite comes into contact with water, it swells to form an impermeable layer, typically with similar permeability characteristics as a one metre compacted clay layer.



Applications - - landfill construction, basement waterproofing, tailings dams in mining projects, building waterproofing, hydraulic engineering, artificial lakes / reservoirs, gas / vapor barriers, groundwater protection, coastal projects and general waterproofing applications.

Installation - Geofantex- GCL offers large savings over traditional construction methods, is easy to install, requires no specialised labour or welding equipment.

Differing engineering properties are achieved by using a variety of woven / nonwoven geotextiles within the manufacturing process.

Mechanical Properties

(T: Typical value M: Minimum Average Roll Value - MARV)

Standards	Unit	Technical Specification GCL-NP
Geotextile Properties		
Top/Cap Nonwoven geotextile [ASTM D 5261]	g/m ²	220
Woven geotextile [ASTM D 5261]	g/m ²	110
Bentonite Properties		
Weight [ASTM D 5993]	g/m ²	4670
Swell index [ASTM D 5890]	ml/2g	≥24
Moisture Content [ASTM D 4643]	%	12
Fluid Loss [ASTM D 5891]	ml	18
Finished GCL Properties		
Mass per unit area	g/m ²	≥5000
Blue absorption capacity	g/100g	≥30
Max. tensile strength, MD/CMD [ASTM D 4632]	N/100mm	≥600
Elongation at break, MD/CMD	%	≥10
Peel strength [ASTM D 4632] Nonwoven/woven	N/100mm	≥40
CBR Static Puncture [ASTM D 6241]	N	2
Permeability/Hydraulic Conductivity [ASTM D5887]	m/s	≤5.0×10 ⁻¹²
Hydrostatic pressure-resistant		0.6MPa,1h No infiltration
Index Flux	ml	≤18
Bentonite wear	ml/2g	≥24
Soaked pressure- resistance [ASTM D 5321]		≥24KPa Typical

Above values are on an average basis, the data was obtained from in-house test laboratory, National test institutes and international test institutes. Geofantex Geosynthetics keeps the right of data changes and the final explanation right. Liability Exclusion: This publication should not be construed as engineering advice. While information contained here is accurate to the best of our knowledge, Geofantex Geosynthetics does not warrant its accuracy or completeness. The only warranty made by Geofantex Geosynthetics for its products is set forth in our Product Test Report accompanies our shipment of the products, or such other written warranty as may be agreed by Geofantex Geosynthetics and customer. Geofantex Geosynthetics specifically disclaims all other warranty, express or implied, including without agreed by Geofantex Geosynthetics and customer. Geofantex Geosynthetics specifically disclaims all other warranties, express or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, or arising from provision of samples, a course of dealing or usage of trade.



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