

Fibre-reinforced Geosynthetic Clay Liner (GCL)

Bentofix® BFG 5300



NAUE GmbH & Co. KG
Gewerbestrasse 2
32339 Espelkamp-Fiestel, Germany

Phone: +49 5743 41-0 · Fax: +49 5743 41-240
E-Mail: info@naue.com · Internet: www.naue.com

The following table lists properties of **Bentofix® BFG 5300** a shear strength transmitting geosynthetic clay liner, continuously needle-punched through all components. Additional bentonite powder is impregnated into the complete cover layer. The 30 cm longitudinal overlapping area is marked on the bottom side.

Property	Test method*	Unit	Values
Geotextile layers:			
Cover layer (polypropylene nonwoven filled with bentonite):			
Mass per unit area	EN ISO 9864	g/m ²	220
Carrier layer (polypropylene woven):			
Mass per unit area	EN ISO 9864	g/m ²	110
Bentonite layer (sodium bentonite powder):			
Mass per unit area	EN 14196 (ρ_{CLAY})	g/m ²	4,170 + 800
Swell index	ASTM D 5890	ml/2g	24
Fluid Loss	ASTM D 5891	ml	≤ 18
Water content	DIN 18121 / ISO 11465 (5hrs, 105 °C)	%	approx. 10
Geosynthetic Clay Liner:			
Mass per unit area	EN 14196 (ρ_{GBR-C})	g/m ²	5,300
Thickness	EN ISO 9863-1	mm	6.0
Max. tensile strength, md/cmd**	EN ISO 10319 / ASTM D 4595	kN/m	12.0 / 9.0
Elongation at break, md/cmd**	EN ISO 10319 / ASTM D 4595	%	10.0 / 6.0
Peel strength	ASTM D 6496	N/10 cm***	≥ 30
		N/m	≥ 180
Puncture force	EN ISO 12236	N	2,000
Permeability / Hydraulic Conductivity	DIN 18130 / ASTM D 5887	m/s	2 x 10 ⁻¹¹
Index Flux	DIN 18130 / ASTM D 5887	(m ³ /m ²)/s	5 x 10 ⁻⁹
Roll dimensions:			
width x length, / diameter	-	m x m / m	1.20 x 4.5 / (on pallet) 2.50 x 15 / Ø 0.25 5.00 x 40 / Ø 0.65

* = based on; **md = machine direction, cmd = cross machine direction; ***max. peak

The listed technical values are guiding values, achieved in our laboratories and/or independent testing institutes. Our products are subject to changes without prior notice.