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Bentotex Range

Bentotex®

Bentotex is a high specification geosynthetic clay liner, comprising of high quality natural sodium bentonite encapsulated between a woven and a non-woven needlepunched polypropylene geotextiles. Bentotex CL also has a geomembrane laminated to one side.

Bentotex adopts unique self-seeming overlaps technology which doesn't require any additional treatment of its longitudinal edges.

Property	Test Method	Bentotex 30	Bentotex 30-SL	Bentotex 45	Bentotex 45-SL	Bentotex 50	Bentotex 50-SL
Physical Properties							
Total mass per unit area[1]	EN 14196	3500 g/m^2	3700 g/m^2	4850 g/m^2	5050 g/m^2	5500 g/m^2	5700 g/m^2
Bentonite mass per unit area[1]	EN 14196	3200 g/m^2	3200 g/m^2	4550 g/m^2	4550 g/m^2	5200 g/m^2	5200 g/m^2
Bentonite mass per unit area[3]	EN 14196	2860 g/m^2	2860 g/m^2	4000 g/m^2	4000 g/m^2	4640 g/m^2	4640 g/m^2
Thickness[6, 7]	EN 9863-1	5.5 mm	5.7 mm	7.0 mm	7.0 mm	7.5 mm	7.5 mm
Hydraulic Properties							
Flux index[2]	EN 16416	6x10^{-9} m^3/m^2/s	No flow	4*10^{-9} m^3/m^2/s	No flow	3*10^{-9} m^3/m^2/s	No flow
Permeability[9]	DIN 18130 / ASTM 5887	3* 10^{-11}	No flow	1.5*10^{-11}	No flow	1*10^{-11}	No flow
Water Absorption		600%	600%	600%	600%	600%	600%
Montmorillonite content[8]	XRD	80%	80%	80%	80%	80%	80%
Mechanical Properties							
Peel Strength	ASTM D6496	1000 N/m	1000 N/m	1000 N/m	1000 N/m	1000 N/m	1000 N/m
Tensile strength[4]	EN ISO 10319	11 kN/m	12.5 kN/m	11 kN/m	12.5 kN/m	11 kN/m	12.5 kN/m
Static puncture resistance (CBR)[5]	EN ISO 12236	2.0 kN	2.2 kN	2.0 kN	2.2 kN	2.0 kN	2.2 kN
Textiles (PP)							
Non-Woven Mass/Unit Area[8]	EN ISO 9864	200 g/m^2	200 g/m^2	200 g/m^2	200 g/m^2	200 g/m^2	200 g/m^2
Woven Mass/Unit Area[8]	EN ISO 9864	100 g/m^2	110 g/m^2	110 g/m^2	100 g/m^2	100 g/m^2	100 g/m^2
Membrane[8]	EN ISO 9864	-	200 g/m^2	-	200 g/m^2	-	200 g/m^2

1 average, at 12% moisture content, tolerance 4%
2 average, tolerance 0,5x10^{-9} m^3/m^2/s
3 bentonite mass at 0% moisture content
4 average, tolerance 2.0 kN
5 Puncture resistance (CBR) with tolerance – 0.2 kN
6 material is fully saturated and it is this measured at 2kPa pressure
7 average, tolerance 10 %
8 certified by supplier
9 average tolerance 0.5*10^{-11} m/s

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