



0799 - CPD - 30

GEOTEXTILE

FINESSE DECKDRAIN 700S consists of a selected geotextile filter thermally bonded to one side of a second generation single cusped HDPE (High Density Polyethylene) high performance core. It is used as an engineered drainage layer in structural applications, it's major areas of use being behind retaining structures and in subsurface works.

Type	Needle punched, heat treated continuous filament non-woven			
Material	Polypropylene			
Thickness at 2kPa	(mm)	1.1	-10%	EN 964-1
Tensile strength MD/CD	(kN/m)	7.5 / 10	-15%	EN ISO 10319
Elongation at break MD/CD	(%)	100 / 30	±30%	EN ISO 10319
Pore size O_{90}	(micron)	110	±30%	EN ISO 12956
Static puncture resist CBR	(N)	1500	-15%	EN ISO 12236
Dynamic perf cone drop	(mm)	32	+25%	EN 918

CORE

Carbon black content	(%)	0.8-2.5		ASTM D1603
Type	Single Cusped (Dimpled)			
Material	prime HDPE (High Density Polyethylene)			

COMPOSITE

Thickness at 2kPa	(mm)	7.0	±10%	EN 964-1
Mass per unit area	(g/m ²)	875	approx	EN 965
Tensile strength MD/CD	(kN/m)	11 / 14	±10%	EN ISO 10319
Elongation MD/CD	(%)	50 / 30	±10%	EN ISO 10319
CBR puncture resistance	(N)	2200	-20%	EN ISO 12236
Compressive Creep	Guidance available on request (note 4)			EN ISO 13431
<u>Perpendicular Water Inflow</u>				
Water flow at 50mm	(l/m ² /s)	90	±30%	EN ISO 11058
At 2kPa permeability (coeff)	(m/s)	2.2×10^{-3}	±30%	EN ISO 11058
Breakthrough head	(mm)	0		BS 6906 pt 3

<u>In-plane water flow</u>		<u>HG = 1.0</u>		<u>HG = 0.1</u>		
at 20kPa pressure	m ² /sec	2.5×10^{-3}				EN ISO 12958
at 20kPa pressure	(l/m/sec)	2.5	±0.24	0.60	±0.12	EN ISO 12958
at 100kPa pressure		2.0	±0.24	0.45	±0.12	EN ISO 12958
at 200kPa pressure		1.45	±0.24	0.30	±0.12	EN ISO 12958
at 300kPa pressure		1.15	±0.24	0.25	±0.12	EN ISO 12958

with soft foam contact surfaces to simulate textile intrusion into the core due to soil pressure						
Resistance to weathering	To be covered in 14 days			EN 12224		
Life expectancy	(yrs)	In excess of 25 years in pH 4 to 9 at 25°C				
Working temperature	(°C)	-20° to 80°				
Chemical resistance	Excellent resistance to common chemicals			EN 14030		
Resistance to microbes	No significant effect			EN 12225		
Compatibility with membranes	Fully compatible. All components compatible with potable water					
Protection efficiency	Guidance available on request (note 4)			EN 13719		
Health, safety, environment	INERT. No known health hazard. No precautions necessary					

NOTES

- (1) The geotextile is bonded to the core to prevent intrusion into and blockage of the drainage passage under the action of pressure of backfill material.
- (2) The values given are indicative and correspond to nominal results obtained in our laboratories and testing institutes. In line with our policy of continuous improvement the right is reserved to make changes without notice at any time.
- (3) Unless otherwise stated allowable tolerances are ± 10% of the typical value. The tolerance on roll width is 1%; in multi-core products this may manifest itself between core elements.
- (4) The above figures have been obtained from statistical interpretation of test results. Due to the range of products, interfaces with other products and loading conditions, only selected testing has been done on creep and protection efficiency. ABG will be pleased to discuss available test data and arrange testing if appropriate.
- (5) Final determination of the suitability of any information is the sole responsibility of the user. ABG will be pleased to discuss the use of this or any other product but responsibility for selection of a material and its application in any specific project remains with the user.
- (6) Refer to separate sheets for fixing instructions and packing dimensions.