Product Datasheet
Hydrodrain FC25

Description
Hydrodrain FC25 is a geocomposite drainage layer comprising a medium weight geotextile filter, thermally bonded on one side of a high strength single cuspated HDPE (High Density Polyethylene) core. The textile filter has a flap extending beyond the core on one edge. The product is practically impermeable one side. Its main application is as a drainage layer to the external walls, floor and roof of underground structures.

Geocomposite Properties

Thickness at 2kPa	(mm)		26.9	+10%%		EN ISO 9863-1
Mass per unit area	(g/m²)		2 500	approx		EN ISO 9864
Tensile strength MD / CMD	(kN/m)		20 / 20	-13%		EN ISO 10319
Elongation at peak MD / CMD	(%)		45 / 55	nominal		EN ISO 10319
CBR puncture resistance	(N)		5 600	-20%		EN ISO 12236
Perpendicular Water Inflow	**(dimple side only)**					
Water flow at 50mm head	(l/m² s)		75	±30%		
At 2kPa permeability *(coefficient)*	(m/s)		2.8×10^{-3}	±30%		EN ISO 11058
Breakthrough head	(mm)		0	Nominal		EN ISO 11058
In-plane water flow MD / CMD		**HG = 1.0**		**HG = 0.1**		**Hydraulic gradient**
at 20kPa confining pressure	(l/m s)	11.75	-20%	4.05	-20%	EN ISO 12958
at 100kPa confining pressure	(l/m s)	9.15	-20%	2.85	-20%	EN ISO 12958
At 200kPa confining pressure	(l/m s)	7.95	-20%	2.35	-20%	EN ISO 12958
With soft foam contact surfaces to simulate textile intrusion into the core due to soil pressure. The confining pressures of the flow rates shown above are all equal to or less than the long-term compressive strength of the product.						
Resistance to weathering	The geotextile has high UV stabilisation which may allow exposure up to 12 months depending on location					EN 12224
Resistance to chemicals	Excellent					EN 14030
Design life	120 years (manufacturer's declaration)					

Geotextile Properties

Thickness at 2kPa	(mm)	1.75	±20%	EN ISO 9863-1
Tensile strength MD / CMD	(kN/m)	20 / 20	-13%	EN ISO 10319
Pore size O_{90}	(µm)	70	±30%	EN ISO 12956
CBR puncture resistance	(N)	3 400	-20%	EN ISO 12236
Dynamic perforation cone drop	(mm)	17	+20%	EN ISO 13433
Type and material	Non-woven needle-punched and heat-treated long staple fibre polypropylene			

Product Dimensions

Standard roll dimensions	0.915 m x 50 m. Other sizes on request.

Health & Safety
Safety Data Sheets are available upon request and can also be downloaded directly from www.alumascroofing.com.

Technical Support
Technical advice is available from Alumasc Technical Services at:

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