



0799 - CPD - 30

GEOTEXTILE

FINESSE FILDRAIN 7DWP consists of a non-woven geotextile filter, thermally bonded on one side and fully wrapped over a double cusped HDPE (High Density Polyethylene) core. A perforated pipe is included at the base of the fin drain to collect water and transport it to outfall. Pipe and fin are supplied separately. **Fildrain 7DWP** is principally intended for drainage within soil masses, commonly at the edge of a carriageway, within an engineered fill or within landscaping.

Type	Non woven continuous filament needle punched & heat treated			
Material	Polypropylene			
Thickness at 2kPa	(mm)	1.1	±20%	EN 964-1
Tensile strength MD/CD	(kN/m)	7.5 / 10.0	-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	+20%	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)	7.6	±10%	EN 964-1
Mass per unit area	(g/m ²)	870	approx	EN 965
Tensile strength MD/CD	(kN/m)	18 / 16	±10%	EN ISO 10319
Elongation MD/CD	(%)	50 / 25	±10%	EN ISO 10319
CBR puncture resistance	(N)	3900	-20%	EN ISO 12236
Compressive Creep	Guidance available on request (note 3)			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	1.2×10^{-3}				EN ISO 12958
at 20kPa pressure	(l/m/sec)	1.2	±0.1	0.33	±0.05	EN ISO 12958
at 100kPa pressure		0.85	±0.1	0.23	±0.05	EN ISO 12958
at 240kPa pressure		0.51	±0.1	0.16	±0.05	EN ISO 12958
with soft foam contact surfaces to simulate textile intrusion into the core due to soil pressure. Flow occurs on both sides of the core, half each side.						
<u>Longitudinal flow in system</u>		Depends on chosen pipe diameter				
with 100mm pipe		typically 45 l/sec at HG = 1.0				
with 150mm pipe		typically 45 l/sec at HG = 1.0				

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 structural and general fills	Compatible with all granular backfills and most common soils. Specific filter performance tests undertaken on request		
Health, safety, environment	INERT. No known health hazard. No precautions necessary		

SUPPLY AND FITTINGS

Available in widths of 450, 600, 750, 900, 1000, 1100 and 1200mm inc pipe; up to 5000mm to special order. Standard lengths 50m or 100m rolls, or 6.0m lengths of pipe already threaded. Ordinary perforated pipe fittings are used for connections, etc. A 600mm high Fildrain 7DWP with a 100mm pipe sleeve is specified as 7DWP600P100.

NOTES

- (1) 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.
- (2) 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.
- (3) The above figures have been obtained from statistical interpretation of test results. ABG will be pleased to discuss available test data and arrange testing if appropriate.
- (4) 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.
- (5) Refer to separate sheets for fixing instructions and packing dimensions.