

TECHNICAL DATASHEET

FILDRAIN 7DW[F][P]/NW8

PRODUCT DESCRIPTION

FILDRAIN 7DW/NW8 is a geocomposite drainage layer comprising a non-woven geotextile filter, thermally bonded to and fully wrapped over a double cusped HDPE (High Density Polyethylene) core. The product is permeable both sides of the central core.

FILDRAIN 7DW/NW8 is principally intended for drainage within or beneath soil masses, engineered fills (commonly at the edge of a carriageway) or landscaping earthworks.

In addition to the standard configuration, the [P] option is offered with a fully sewn geotextile sleeve (with draw cord) to accept a flexible perforated pipe of specified size (maximum 160 mm OD). For larger or rigid pipes, the [F] option is available with extended geotextile flaps to allow pipework of a specified size to be incorporated within the filter envelope. Pipe is supplied separately.



GEOCOMPOSITE PROPERTIES	UNITS				TOLERANCE	TEST METHOD
THICKNESS AT 2kPa	(mm)	8.6			±10%	EN ISO 9863-1
MASS PER UNIT AREA	(g/m ²)	840			APPROX	EN ISO 9864
TENSILE STRENGTH MD/CD	kN/m	28/26			-15%	EN ISO 10319
ELONGATION AT PEAK MD/CMD	(%)	45/45			NOMINAL	EN ISO 10319
CBR PUNCTURE RESISTANCE	(N)	4250			-20%	EN ISO 12236
PERPENDICULAR WATER INFLOW (BOTH SIDES)						
WATERFLOW AT 50mm HEAD	(l/m ² .s)	103			±30%	EN ISO 11058
AT 2kPa PERMEABILITY (COEFFICIENT)	(m/s)	2.8x10 ⁻³			±30%	EN ISO 11058
BREAKTHROUGH HEAD	(mm)	0			nominal	
IN-PLANE WATERFLOW MD & CMD			<u>HG=1.0</u>	<u>HG=0.1</u>		HYDRAULIC GRADIENT
AT 20 kPa CONFINING PRESSURE	(l/m.s)	1.20	±0.18	0.28	±0.05	EN ISO 12958
AT 50 kPa CONFINING PRESSURE	(l/m.s)	1.07	±0.16	0.24	±0.04	EN ISO 12958
AT 100 kPa CONFINING PRESSURE	(l/m.s)	0.95	±0.14	0.18	±0.03	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 28 DAYS					EN 12224
RESISTANCE TO CHEMICALS	EXCELLENT					EN14030
DESIGN LIFE	120 YEARS (MANUFACTURER'S DECLARATION)					
GEOTEXTILE PROPERTIES						
THICKNESS AT 2kPa	(mm)	1.1			±20%	EN ISO 9863-1
TENSILE STRENGTH MD/CMD	(kN/m)	9.5/9.5			-13%	EN ISO 10319
PORE SIZE 0 ₉₀	(µm)	120			±30%	EN ISO 12956
CBR PUNCTURE RESISTANCE	(N)	1600			-20%	EN ISO 12236
DYNAMIC PERFORATION CONE DROP	(mm)	32			+25%	EN ISO 13433
TYPE & MATERIAL	NON-WOVEN NEEDLE PUNCHED LONG STAPLE FIBRE POLYPROYLENE					
PRODUCT DIMENSIONS						
STANDARD ROLL DIMENSIONS	AVAILABLE IN CORE WIDTHS FROM 275 TO 1100mm x 50m or 100m ROLL LENGTHS. OTHER SIZES AVAILABLE ON REQUEST					

1. TCS Geotechnics is a trading name of Technical Civils Solutions Ltd.
2. TCS Geotechnics Ltd reserves the right to alter product specifications without prior notice.
3. It is the responsibility of all users to satisfy themselves that the above data is current.
4. The above figures are average values obtained from testing to current EN ISO standards.
5. TCS Ltd cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
6. Installation details are available on request.
7. CMD flow is typically 80% of the value in the MD.
8. The tolerance on roll length is ±1.5% and roll width ±1.0%.
9. Guidance on interface shear strength, creep and certain other parameters is available. Site specific tests are strongly recommended.

REGISTERED OFFICE ADDRESS

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