

FILDRAIN TYPE 6

PRODUCT DESCRIPTION

FILDRAIN TYPE 6 geocomposite drain is a high strength, robust, pre-formed sub-surface drainage system designed to remove infiltration water from the granular foundation layers of highway constructions. It consists of a high density polyethylene double-cusped (dimpled) core wrapped in a geotextile filter, with a fully formed sleeve and draw cord at the base to collect the water and transport it horizontally to the outfall. Pipe and fin are supplied separately. Ordinary pipe fittings may be used with the FILDRAIN TYPE 6. The fin is available in lengths of 50m or 100m, in standard heights (exclusive of pipe) from 300mm to 1100mm and to special order to heights of 5000mm.



Fildrain TYPE 6 meets the requirements of the UK Highways Agency Manual of Contract Documents for Highway Works (MCDHW) which defines a Type 5 Fin Drain, and by Clause 514 of the specification for Highway Works (SHW) which dictates certain parameters. Those Parameters are highlighted on this datasheet in bold type.

GEOCOMPOSITE PROPERTIES		UNITS				TEST METHOD	
THICKNESS AT 2kPa	(mm)	8.3					EN ISO 9863-1
MASS PER UNIT AREA	(g/m ²)	940					EN ISO 9864
USABLE TENSILE STRENGTH MD/CMD	kN/m	32/31					EN ISO 10319
IN-PLANE WATERFLOW MD + CMD	(HG=HYDRAULIC GRADIENT)						
AT 50 kPa CONFINING PRESSURE	(l/m.s)	1.20		at HG = 1.0			EN ISO 12958
AT 100 kPa CONFINING PRESSURE	(l/m.s)	0.95		at HG = 1.0			EN ISO 12958
SHORT-TERM EQUIVALENT LOAD	(kPa)	100					SHW CLAUSE 514
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
RESISTANCE TO CHEMICALS	EXCELLENT						EN14030
DESIGN LIFE	120 YEARS (MANUFACTURER'S DECLARATION)						
GEOTEXTILE PROPERTIES							
THICKNESS AT 2kPa	(mm)	1.1					EN ISO 9863-1
TENSILE STRENGTH MD/CMD	(kN/m)	14.4/15.5					EN ISO 10319
ELONGATION AT BREAK MD/CMD	(%)	65/70					EN ISO 10319
TEAR RESISTANCE	(N)	>200					ASTM D4533
DYNAMIC PERFORATION CONE DROP	(mm)	24					EN ISO 13433
CBR PUNCTURE RESISTANCE	(N)	2200					EN ISO 12236
APPARENT OPENING SIZE 0₉₀	(µm)	70					EN ISO12956
WATERFLOW AT 50mm HEAD	(l/m ² .s)	75					EN ISO 11058
BREAKTHROUGH HEAD	(mm)	0					BS 6906 pt 3
TYPE & MATERIAL	NON-WOVEN NEEDLE PUNCHED LONG STAPLE FIBRE POLYPROPYLENE						
PRODUCT DIMENSIONS							
STANDARD ROLL DIMENSIONS	300 to 1100mm WIDTH x 50m. OTHER WIDTHS AND LENGTHS TO ORDER						

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. The tolerance on roll length is 1.5% and on roll width is 1.0%
8. Guidance on interface shear strength, creep and certain other parameters is available is available. Site specific tests are strongly recommended.
9. Tensile properties of the composite may vary across the width of multi-core products.

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