

MACDRAIN™ 2L FP GEOCOMPOSITE FOR DRAINAGE


MacDrain™ 2L FP is a light and flexible geocomposite material which has a drainage core of looped polypropylene filaments. It is covered on the one side with a non-woven polyester geotextile and on the other side a polypropylene membrane. The three components are thermally welded all along the surface. The geotextile and membrane exceed the edge of the drainage core by 100mm on either side. A continuous surface filtering is achieved by overlapping the butt-joints of the adjacent MacDrain™ 2L FP strips.

FLOW CAPACITY												
ASTM D 4716	Horizontal Drainage								Vertical Drainage			
Hydraulic gradient	i = 0,01		i = 0,02		i = 0,03		i = 0,10		i = 0,50		i = 1,00	
Pressure	l / s.m	l / h.m	l / s.m	l / h.m	l / s.m	l / h.m	l / s.m	l / h.m	l / s.m	l / h.m	l / s.m	l / h.m
10kPa	0,32	1152	0,40	1440	0,46	1692	0,95	3420	1,96	7092	2,76	9972
20kPa	0,28	1008	0,35	1260	0,40	1476	0,89	3240	1,82	6588	2,53	9144
50kPa	0,16	576	0,20	720	0,23	864	0,54	1980	1,12	4068	1,53	5508
100kPa	0,05	180	0,06	252	0,07	252	0,19	720	0,35	1260	0,51	1836
200kPa	0,03	144	0,04	180	0,05	180	0,12	468	0,25	900	0,38	1368

PHYSICAL PROPERTIES					
	Standard	Unit	Geo-composite	Polyester Geotextile	Polypropylene Membrane
Mass per unit area	ABNT NBR 12563 / ASTM D 5261	g/m ²	750	100	135
Thickness	ABNT NBR 12569 / ASTM D 5199	mm	11,0	0,7	0,15

HYDRAULIC PROPERTIES				
	Standard	Unit	Geocomposite	Polyester Geotextile
Open size	AFNOR G 38017	mm	-	0,145
Permittivity	ASTM D 4491	s ⁻¹	-	1,51
Permeability	ASTM D 4491	cm/s	-	1,1 X 10 ⁻¹

MECHANICAL PROPERTIES					
	Standard	Unit	Geo-composite	Polyester Geotextile	Polypropylene Membrane
Machine - Tensile Strength	ABNT NBR 12824 / ASTM D 4595	kN/m	14,00	5,26	5,60
- Elongation	ABNT NBR 12824 / ASTM D 4595	%	30,00	37,38	52,00
Across - Tensile Strength	ABNT NBR 12824 / ASTM D 4595	kN/m	8,00	2,92	3,06
- Elongation	ABNT NBR 12824 / ASTM D 4595	%	30,00	36,26	50,00
Puncture resistance	ABNT NBR 13359 / ASTM D 4833	N	-	602,50	-

ROLL DIMENSIONS			
	Unit	Geocomposite	
Width	m	1	
Length	m	30	
Area	m ²	30	
Diameter	m	0,70	
Weight	kg	22,5	

