

Alidrain® Prefabricated Vertical Drains

Alidrain® Prefabricated Vertical Drains comprise of a double sided ribbed polypropylene core wrapped around with a high performance filter jacket. Alidrain® Prefabricated Vertical Drains have excellent flow discharge capacities even in the kinked form. It is installed in soft clays to provide a shorter path for effective excess pore water dissipation, thereby resulting in accelerated consolidation of soft clay layers and gain in shear strength.

Properties	Test Standard	Unit	AD 230 ^a	AD 250 ^a	Tolerance
Composite					
Discharge capacity - straight (300 kPa) ^b	ASTM D4716	x10 ⁻⁶ m ³ /s	≥ 100	≥ 150	
Discharge capacity - kinked (250 kPa) ^c	ASTM D4716	x10 ⁻⁶ m ³ /s	≥ 70	≥ 110	
Tensile strength (full width test)	ASTM D4595	kN	2.5	2.8	± 0.2
Tensile elongation at 1kN	ASTM D4595	%	≤ 10	≤ 10	
Tensile elongation at break	ASTM D4595	%	≥ 15	≥ 15	
Filter					
Grab strength (MD)	ASTM D4632	N	310	310	± 20
Trapezoidal tear (MD)	ASTM D4533	N	45	45	± 10
Puncture resistance	ASTM D4833	N	80	80	± 10
Apparent opening size	ASTM D4751	µm	80	80	± 5
Permittivity	ASTM D4491	s ⁻¹	0.75	0.75	± 0.05
Coefficient of permeability	ASTM D4491	x10 ⁻⁴ m/s	1.8	1.8	± 0.2
Physical					
Nominal width		mm	100	100	
Nominal thickness	ASTM D5199	mm	3	4.5	
Roll length		m	250	200	

Note :

^a The values given are obtained from accredited testing laboratories and institutes, which subjected to the tolerance

^b Flow measurement taken at i = 1.0; in a confining medium of closed-cell neoprene

^c Flow measurement taken at i = 1.0; in a confining medium of closed-cell neoprene- Kinked geometry according to ASTM D6918 Method A

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Further details of this application and products can be obtained by contacting your nearest TenCate Technical Support office.

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