InfraWick® PVD

Technical Data Sheet

Building Australia's future

Introducing InfraWick®:

InfraWick® Prefabricated Vertical Drains (PVD) are designed to accelerate the consolidation of deep, soft and compressible soils before construction. Manufactured with a durable plastic core wrapped in a high-permeability nonwoven geotextile filter, they shorten drainage paths and speed up the dissipation of pore water pressure. This helps improve ground strength, reduce settlement time, and enhance the performance of embankments, platforms and other ground improvement works in Australian conditions.

Technical Specifications

Material Property	Test Method	Unit	Type A	Type B	Type C
Core Material	-	-	PE / White	PE / White	PE / White
Filter Fabric	-	-	PET / White	PET / White	PET / White
Width	ASTM D3774	mm	98 ± 1	98 ± 1	98 ± 1
Thickness	ASTM D5199	mm	> 4.0	> 4.5	> 5.0
Tensile Strength (Dry State)	-	kN / Core Width	≥ 2.0	≥ 2.4	≥ 2.8
Longitudinal Discharge Capacity @ 350 KPa	ASTM D4716	cm^3/s	≥ 60	≥ 70	≥ 80
Longitudinal Discharge Capacity @ 350 KPa (Buckled)	-	cm^3/s	≥ 40	≥ 50	≥ 60
Transverse Discharge Capacity	-	L/s	$\geq 1 \times 10^{-1}$	$\geq 1 \times 10^{-1}$	$\geq 1 \times 10^{-1}$
Tear Strength (Longitudinal)	ASTM D638	N	≥ 70	≥ 70	≥ 70
Puncture Strength	-	N	≥ 400	≥ 400	≥ 400
Composite Bond Integrity	-	-	No Rupture / No Peel-Off	No Rupture / No Peel-Off	No Rupture / No Peel-Off
Filter Fabric Mass	-	g/m^2	105–120	105–120	105–120
Filter Fabric Thickness	–	mm	0.28–0.32	0.28–0.32	0.28–0.32
Filter Fabric Tensile Strength (Longitudinal, Dry)	ASTM D638	N/cm	≥ 25	≥ 30	≥ 30
Filter Fabric Tensile Strength (Transverse, Wet)	ASTM D638	N/cm	≥ 25	≥ 25	≥ 25
Filter Permittivity*	-	cm/s	$\geq 5.0 \times 10^{-3}$	$\geq 5.0 \times 10^{-3}$	$\geq 5.0 \times 10^{-3}$
Apparent Opening Size	-	mm	≤ 0.10	≤ 0.10	≤ 0.10

Notes:

- Values shown are typical values and may vary slightly between production batches.
- *Filter permittivity is based on testing after 24 hours water immersion.
- Final selection of drain type and spacing should be confirmed by the project designer based on geotechnical conditions and required consolidation performance.

APPLICATIONS

- Embankments
- Platforms
- Leach Pads
- Tailing Ponds