

POZIDRAIN 4S500D/NW8 is a geocomposite drainage layer comprising a high performance second generation single cusped HDPE (High Density Polyethylene) core with a geotextile filter thermally bonded on both sides. The textile filters have flap extending beyond the core on both edges. The major application is its use instead of stone drainage layers in landfill containment systems.

Geocomposite Properties

Thickness at 2kPa	(mm)	5.9	±10%	EN ISO 9863-1
Mass per unit area	(g/m ²)	940	approx	EN ISO 9864
Tensile strength MD / CMD	(kN/m)	26 / 19	-10%	EN ISO 10319
Elongation at peak MD / CMD	(%)	45 / 45	nominal	EN ISO 10319
CBR puncture resistance	(N)	4 000	-20%	EN ISO 12236
<u>Perpendicular Water Inflow</u> (dimple side only)				
Water flow at 50mm head	(l/m ² ·s)	103	±30%	EN ISO 11058
At 2kPa permeability (<i>coefficient</i>)	(m/s)	2.5 x 10 ⁻³	±30%	EN ISO 11058
Breakthrough head	(mm)	0	nominal	

In-plane water flow MD ²		HG = 1.0		HG = 0.1		Hydraulic gradient
at 20kPa confining pressure	(l/m·s)	0.75	±0.15	0.24	±0.09	EN ISO 12958
at 100kPa confining pressure	(l/m·s)	0.71	±0.25	0.19	±0.07	EN ISO 12958
at 200kPa confining pressure	(l/m·s)	0.53	±0.19	0.14	±0.05	EN ISO 12958
at 500kPa confining pressure	(l/m·s)	0.25	±0.09	0.06	±0.03	

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	EN 14030
Design life	120 years (manufacturer's declaration)	

Geotextile Properties

Thickness at 2kPa	(mm)	1.2	±20%	EN ISO 9863-1
Tensile strength MD/CMD	(kN/m)	9.5 / 9.5	-13%	EN ISO 10319
Pore size O ₉₀	(µm)	120	±30%	EN ISO 12956
CBR puncture resistance	(N)	1600	-20%	EN ISO 12236
Dynamic perforation cone drop	(mm)	32	+20%	EN ISO 13433
Type and material	Non-woven needle-punched and heat-treated long staple fibre polypropylene			

Product Dimensions

Standard roll dimensions	4.4 x 110 m. Other sizes on request.
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Notes

- The values given are indicative and correspond to nominal results obtained in our laboratories and testing institutes. In line with our policy of continuous improvement the right is reserved to make changes without notice at any time.
- CMD flow is typically 80% of the value in the MD.
- The tolerance on roll length is ±1.5% and on roll width is ±1.0%; in multi-core products this may manifest itself between core elements.
- Guidance on interface shear strength, creep and certain other parameters is available. Site specific tests are strongly recommended.
- Final determination of the suitability of any information is the sole responsibility of the user. ABG will be pleased to discuss the use of this or any other product but responsibility for selection of a material and its application in any specific project remains with the user.