



100gsm Non-Woven Geotextile Membrane

4.5 x 100m

Product Code: **AS00287**

Pack Quantity: **4***

Non-woven geotextiles are produced from continuous polypropylene filaments, mechanically bonded by needle-punching to create a high-permeability, dimensionally stable fabric. It allows water through while retaining fines - making it the standard solution for drainage, filtration and protection duties.

A high elongation at break gives excellent puncture and impact resistance, so it performs well as a cushioning layer over geomembranes, around perforated pipe, and in landscaping where roots, stones or plant traffic are a concern.

100gsm 4.5m x 100m rolls stocked as standard. Additional weights and widths can be specified to suit a variety of projects.

KEY FEATURES

- Grade: 100gsm
- 4.5m x 100m = 450m² Coverage (supplied on a roll)
- Needle-punched structure providing high water permeability
- Excellent filtration performance, preventing soil migration and effective fines retention
- Flexible and conformable to irregular subgrades
- Excellent puncture, tear and CBR resistance
- Provides separation in low-load environments
- UV-stabilised, rot and chemical-resistant

TYPICAL APPLICATIONS

- Pipe wraps, French drains, filter drains and soakaways
- Behind retaining walls / erosion control
- Protection of damp-proof and waterproof membranes
- Landscaping, planters, green roofs, SuDS and paving sub-bases
- Root barriers and weed suppression at depth



Needle-punched polypropylene fibres, create a permeable, dimensionally stable fabric.

* Minimum order quantity of 4 rolls



CONFORMITY

Property	Test Method	Unit	Value
GSM	ASTM D 5261	g/m ²	100
Thickness	ASTM D 5199	mm	0.6
Tensile Strength	ASTM D 4595	kN/mtr	6
Elongation	ASTM D 4595	%	50
Grab Tensile Strength	ASTM D 4632	N	330
Elongation	ASTM D 4632	%	55
Trapezoid Tear Strength	ASTM D 4533	N	120
CBR Puncture Resistance	ASTM D 6241	N	1000
Water Flow	ASTM D 4491	l/m ² /s	100
Apparent Opening Size (AOS)	ASTM D 4751	micron	212
UV Resistnace	ASTM D 4355	%	70

WOVEN VS NON-WOVEN - THE KEY DISTINCTION:

Woven geotextiles are produced from extruded polypropylene tapes, woven into a high-tensile fabric. They are the go-to choice where strength and separation under load are critical - beneath haul roads, working platforms, car parks and hardstandings.

Non-woven geotextiles are needle-punched from continuous polypropylene filaments, creating a felt-like fabric with high water permeability. They excel in filtration, drainage and protection roles - French drains, soakaways, behind retaining structures and over geomembranes.

Property	Woven Geotextile (100gsm)	Non-Woven Geotextile (100gsm)	Property	Woven Geotextile (100gsm)	Non-Woven Geotextile (100gsm)
Primary Function	Reinforcement & separation	Filtration, drainage & separation	Filtration Performance	Limited	Excellent
Manufacturing Method	Woven polypropylene tapes	Needle-punched polypropylene fibres	Ground Conformity	Moderate	High (follows subgrade profile closely)
Tensile Strength	High (load-bearing applications)	Moderate (not designed for reinforcement)	Typical Load Capacity	Light to medium loading	Light-duty applications
Elongation	Low	Higher (more flexible)	Durability	High resistance to mechanical stress	High resistance to environmental degradation
Permeability	Lower	High			