

Penteco's Woven Geotextile

- ❖ Drainage
- ❖ Separation
- ❖ Erosion Control
- ❖ Reinforcement
- ❖ Stabilization
- ❖ Protection

Woven geotextiles comprise individual fabric yarns or tapes, woven or interlaced at right angles. Woven geotextile fabrics can be used for stabilization, separation, reinforcement, and erosion control applications, in line with their typical characteristics of superior dimensional stability and load distribution. Woven geotextiles typically hold a higher strength to weight ratio in comparison with needle-punched non-woven geotextiles.

Penteco carries three types of woven geotextiles viz., monofilament, slit film woven, and High strength woven geotextiles. Woven geotextiles typically exhibit slower drainage but higher strength properties relative to non-woven geotextiles; although, some woven geotextiles (made from monofilament yarns) may exhibit more suitable & desirable properties with respect to clogging, relative to their non-woven counterparts.

Minimum Average Roll Values		Product Series									
Property	Test Method	Monofilament		Slit Tape					High Strength		
		MW200	MW250	SFW180	SFW200	SFW250	SFW270	SFW315	HSW220	HSW330	HSW440
Mechanical											
Grab Tensile	ASTM D-4632	365 x 200 lbs (1.62 x 0.89 kN)	370 x 250 lbs (1.65 x 1.11 kN)	180 lbs (0.8 kN)	200 lbs (0.9 kN)	250 lbs (0.9 kN)	270 lbs (1.2 kN)	315 lbs (1.4 kN)	295 x 260 lbs (1.31 x 1.16 kN)	450 x 350 lbs (2.0 x 1.55 kN)	-
Elongation	ASTM D-4632	15%	16% x 15%	15%	15%	15%	15%	15%	15%	15%	-
CBR Puncture Resistance	ASTM D-6241	675 lbs (3 kN)	950 lbs (4.28 kN)	600 lbs (2.67 kN)	700 lbs (3.12 kN)	900 lbs (4 kN)	1000 lbs (4.45 kN)	1000 lbs (4.45 kN)	1300 lbs (5.7 kN)	1400 lbs (6.22 kN)	-
Trapezoidal Tear	ASTM D-4533	115 x 75 lbs (0.51 x 0.33 kN)	100 x 60 lbs (0.45 x 0.27 kN)	70 lbs (0.31 kN)	75 lbs (0.33 kN)	90 lbs (0.405 kN)	100 lbs (0.444 kN)	120 lbs (0.533 kN)	125 lbs (0.56 kN)	180 x 140 lbs (0.8 x 0.622 kN)	-
UV Resistance	ASTM D-4533	90% / 500 hrs	90% / 500 hrs	70% / 500 hrs	70% / 500 hrs	70% / 500 hrs	70% / 500 hrs	70% / 500 hrs	80% / 500 hrs	80% / 500 hrs	-
Wide Width Tensile Strength	ASTM D-4595	-	-	-	-	-	-	-	2640 x 2460 lb/ft (39 x 36 kN/m)	3600 x 3330 lb/ft (53 x 48 kN/m)	4800 lb/ft (70 kN/m)
Hydraulic											
Apparent Opening Size	ASTM D-4751	40 US Sieve (0.425 mm)	70 US Sieve (0.212 mm)	20 US Sieve (0.212 mm)	40 US Sieve (0.425 mm)	40 US Sieve (0.425 mm)	40 US Sieve (0.425 mm)	40 US Sieve (0.425 mm)	30 US Sieve (0.6 mm)	30 US Sieve (0.6 mm)	30 US Sieve (0.6 mm)
Permittivity	ASTM D-4491	2.1 sec ⁻¹	0.28 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹	0.6 sec ⁻¹	0.52 sec ⁻¹	0.4 sec ⁻¹
Water Flow Rate	ASTM D-4491	145 gpm/sf (5907 l/min/m ²)	18 gpm/sf (733 l/min/m ²)	4 gpm/ft ² (163 l/min/m ²)	5 gpm/ft ² (203 l/min/m ²)	4 gpm/ft ² (163 l/min/m ²)	4 gpm/ft ² (163 l/min/m ²)	4 gpm/ft ² (163 l/min/m ²)	40 gpm/ft ² (1630 l/min/m ²)	40 gpm/ft ² (1630 l/min/m ²)	30 gpm/ft ² (1222 l/min/m ²)
Dimensions											
Typical Roll Size	Measured	12ft x 300ft (3.66m x 91m)	12ft x 300ft (3.66m x 91m)	15 ft x 360 ft (4.57m x 110m)	15 ft x 360 ft (4.57m x 110m)	15 ft x 360 ft (4.57m x 110m)	12.5 ft x 360 ft (3.81m x 132m)	12.5 ft x 360 ft (3.81m x 132m)	15 ft x 300 ft (4.57m x 91m)	15 ft x 300 ft (4.57m x 91m)	15 ft x 300 ft (4.57m x 91m)
Area	W x L	3600 ft ² (346 m ²)	3600 ft ² (346 m ²)	5400 ft ² (500 m ²)	5400 ft ² (500 m ²)	5400 ft ² (500 m ²)	4500 ft ² (420 m ²)	4500 ft ² (420 m ²)	4500 ft ² (416 m ²)	4500 ft ² (416 m ²)	4500 ft ² (416 m ²)

Notes:

- (1) All roll widths/lengths have a tolerance of ±1 %.
- (2) Custom roll lengths can be ordered. Transportation cost might be affected.
- (3) Penteco is a distributor for this product. Manufacturing partners are based out of Canada & USA.
- (4) Manufacturer's data sheet provided at time of bid/purchase includes adjusted widths/lengths.

DISCLAIMER: The data above represents the manufacturer's laboratory testing of their product. It is the user's responsibility to determine the suitability of the products. Penteco is a distributor for these products through its manufacturing partners. Penteco will provide the manufacturers data sheet at the time of sale. There may be very slight variation, but overall, the data represents standard industry specifications. Penteco and manufacturing partners assume no liability, nor can they provide any warranty, without having additional information regarding the use of the products. The same goes for any infringement on patents - no permission can be granted without further disclosure.