



## Material Specifications Non-Woven Geotextile

Wrap Eco-Rain Tanks and Drainage Cells with a polypropylene, staple fibre, needle-punched nonwoven Geotextile. Fibers are needed to form a stable network that retains dimensional stability relative to each other. The Geotextile needs to be resistant to ultraviolet degradation and to biological and chemical environments normally found in soils. Specifications must meet or exceed the following minimum average roll values:

PROPERTY	TEST METHOD	Minimum Average ROLL VALUE	
		Metric	English
<b>Mechanical</b>			
Grab Tensile Strength	ASTM D4632	4 oz. 0.445 kN	4 oz. 100 lbs
		6 oz. 0.711 kN	6 oz. 160 lbs
		8 oz. 0.911 kN	8 oz. 205 lbs
(Elongation @ Break)	ASTM D4632	50%	50%
Trapezoidal Tear	ASTM D4533	4 oz. 0.222 kN	4 oz. 50 lbs
		6 oz. 0.289 kN	6 oz. 65 lbs
		8 oz. 0.378 kN	8 oz. 85 lbs
Mullen Burst	ASTM D3786	4 oz. 1481 kPa	4 oz. 215 psi
		6 oz. 2170 kPa	6 oz. 315 psi
		8 oz. 2756 kPa	8 oz. 400 psi
Puncture Strength	ASTM D4833	4 oz. 0.285 kN	4 oz. 65 lbs
		6 oz. 0.400 kN	6 oz. 90 lbs
		8 oz. 0.578 kN	8 oz. 130 lbs
<b>Hydraulic</b>			
Pore Size (O <sub>95</sub> )	ASTM D4751 (Dry)	4 oz. 0.212 mm	4 oz. 70 US Sieve
		6 oz. ----- mm	6 oz. 75 US Sieve
		8 oz. 0.18 mm	8 oz. 80 US Sieve
Permittivity	ASTM D4491	4 & 6 oz. $\geq 1.6 \text{ s}^{-1}$ 8 oz. $\geq 1.4 \text{ s}^{-1}$	
Water flow rate	ASTM D4491	4 oz. 5689 l/min/m <sup>2</sup>	4 oz. 140 gal/min/ft <sup>2</sup>
		6 oz. 4480 l/min/m <sup>2</sup>	6 oz. 110 gal/min/ft <sup>2</sup>
		8 oz. 3657 l/min/m <sup>2</sup>	8 oz. 90 gal/min/ft <sup>2</sup>
<b>Endurance</b>			
UV Resistance (% retained @ 500 hours)	ASTM D4355	70% at 500 hours	

\*For Road Applications that require AASHTO H-20 Load Capacity, please refer to specifications in AASHTO Designation M 288-00 publication.