



## Product Data Sheet

### ■ Carthage 15%™

Carthage 15%™ is a woven monofilament filtration geotextile of 100% polypropylene yarns. This product features *Percent Open Area* – a property found to be critical to long term filtration – and is unique to geotextiles woven with monofilament yarns. Values  $\geq 4\%$  indicate that a sufficient quantity of 'direct paths' through the fabric exist to allow for the release of troublesome migrating fines and make them the ideal choice for most *any* long term filtration/drainage application.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> <b>Hydraulics / Filtration</b>			
Apparent Opening Size (AOS)	ASTM D 4751	0.600 – 0.425 mm	30 – 40 US Sieve
<b>Percent Open Area</b>	<b>CW-02215</b>	<b>11 – 15%</b>	
Permittivity	ASTM D 4491	1.10 sec <sup>-1</sup>	
Permeability		0.05 cm/sec	
Flow Rate		4482 l/min/m <sup>2</sup>	110 gpm/ft <sup>2</sup>
<input type="checkbox"/> <b>Mechanical</b>			
Grab Tensile	ASTM D 4632	1645 x 980 N	370 x 220 lbs
Grab Tensile Elongation			
Wide Width Tensile	ASTM D 4595	35 x 24 kN/m	200 x 135 lbs/in 2400 x 1620 lbs/ft
Mullen Burst	ASTM D 3786	3240 kPa	470 psi
Puncture	ASTM D 4833	512 N	115 lbs
Trapezoidal Tear	ASTM D 4533	510 x 335 N	115 x 75 lbs
<input type="checkbox"/> <b>Endurance</b>			
UV Resistance	ASTM D 4355	90% @ 500 hrs	
<input type="checkbox"/> <b>Physical / Dimensional</b>			
Mass Per Unit Area	ASTM D 5261	190 g/m <sup>2</sup>	5.7 oz/yd <sup>2</sup>
Standard Roll Sizes / Packaging (Special sizes, packaging and fabrication are available.)	Measured (Typical)	1.91 m x 91.44 m	6.25 ft x 300 ft
		173.9 m <sup>2</sup>	208 yd <sup>2</sup>
		40 kg	87 lbs
		25.4 cm diameter	10 in. diameter
		3.81 m x 91.44 m	12.5 ft x 300 ft
		348.4 m <sup>2</sup>	416.7 yd <sup>2</sup>
		82 kg	181 lbs
		35.6 cm diameter	14 in. diameter

Unless otherwise noted, all properties reported are Minimum Average Roll Values (MARV), and are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any sample taken during quality assurance testing will exceed the value reported.

The properties reported above are effective 01/14/04 and are subject to change without notice.

For more information on Percent Open Area, please see papers entitled *Why Percent Open Area?* and *Independent Research on Fabric Clogging* included with our information package.

Seller makes no warranty, expressed or implied, concerning the product furnished hereunder other than at the time of delivery it shall be of the quality and specification stated herein. Any implied warranty of fitness for a particular purpose is expressly excluded, and, to the extent that it is contrary to the foregoing sentence, any implied warranty of merchantability is expressly excluded. Any recommendations made by seller concerning the uses or applications of said product are believed reliable and seller makes no warranty of results to be obtained. If the product does not meet Carthage Mills current published specifications, and the customer gives notice to Carthage Mills before installing the product, then Carthage Mills will replace the product without charge or refund the purchase price.