



## ■ FX<sup>®</sup>-45HS

Carthage Mills' FX<sup>®</sup>-45HS is a multipurpose nonwoven geotextile of 100% polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. Carthage Mills' FX<sup>®</sup>-45HS is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids.

**AASHTO M 288-06:** FX<sup>®</sup>-45HS exceeds the geotextile requirements for SUBSURFACE DRAINAGE/CLASS 3 (NONWOVEN - ALL SOIL TYPES), SEPARATION/CLASS 3 (NONWOVEN), and STABILIZATION/CLASS 3 (NONWOVEN).

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> <b>Mechanical</b>			
Grab Tensile Strength	ASTM D 4632	0.53 kN	120 lbs
Grab Tensile Elongation		50%	
Mullen Burst	ASTM D 3786	1586 kPa	230 psi
Trapezoidal Tear	ASTM D 4533	0.22 kN	50 lbs
Puncture	ASTM D 4833	0.29 kN	65 lbs
CBR Puncture	ASTM D 6241	1.49 kN	335 lbs
<input type="checkbox"/> <b>Endurance</b>			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> <b>Hydraulics / Filtration</b>			
Permittivity <sup>(1)</sup>	ASTM D 4491	1.50 sec <sup>-1</sup>	
Water Flow Rate <sup>(1)</sup>		4889 lpm/m <sup>2</sup>	120 gpm/ft <sup>2</sup>
Apparent Opening Size (AOS) <sup>(1)</sup>	ASTM D 4751	0.212 mm	70 US Std. Sieve
<input type="checkbox"/> <b>Physical</b>			
Mass Per Unit Area (Typical)	ASTM D 5261	152.6 g/m <sup>2</sup>	4.5 oz/yd <sup>2</sup>
Thickness (Typical)	ASTM D 5199	1.3 mm	55 mils
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418 m <sup>2</sup> 77.1 kg	12.5 ft x 360 ft 500 yd <sup>2</sup> 170 lbs
		4.57 m x 109.7 m 501.6 m <sup>2</sup> 88.4 kg	15.0 ft x 360 ft 600 yd <sup>2</sup> 195 lbs

<sup>(1)</sup> At the time of manufacturing. Handling, storage and shipping may change these properties.

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV), are calculated as the Typical minus two standard deviations and are based on a 97.7% confidence level.
- The properties reported above are effective 07/14/09 and are subject to change without notice.

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.