



■ FX[®]-45HS

Carthage Mills' FX-45HS is a multipurpose nonwoven geotextile made of polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX-45HS is part of the Carthage [FX-HS Series](#) of nonwoven geotextiles, is inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids.

AASHTO M 288: FX-45HS meets the geotextile requirements of Class 3, ≥50% elongation for Subsurface Drainage, Separation, and Stabilization.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Grab Tensile Strength	ASTM D 4632	0.53 kN	120 lbs
Grab Tensile Elongation		50%	
Trapezoidal Tear	ASTM D 4533	0.22 kN	50 lbs
CBR Puncture	ASTM D 6241	1.38 kN	310 lbs
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	1.70 sec ⁻¹	
Water Flow Rate ⁽¹⁾		5,500 lpm/m ²	135 gpm/ft ²
Apparent Opening Size (AOS) ^(1,2)	ASTM D 4751	0.212 mm	70 US Std. Sieve
<input type="checkbox"/> Physical			
Mass Per Unit Area (Typical)	ASTM D 5261	152.55 g/m ²	4.5 oz/yd ²
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418 m ² 68 kg	12.5 ft x 360 ft 500 yd ² 150 lbs
		4.57 m x 109.7 m 501.6 m ² 90 kg	15.0 ft x 360 ft 600 yd ² 198 lbs

NOTES: Mullen Burst Strength ASTM D 3786 is no longer recognized by ASTM D35 on Geosynthetics. Puncture Strength ASTM D 4833 is not recognized by AASHTO M 288 and has been replaced with CBR Puncture ASTM D 6241.

- (1) At the time of manufacturing. Handling, storage and shipping may change these properties.
(2) Maximum Average Roll Value
- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV).
 - The properties reported above are effective 01-01-24 and are subject to change without notice.

» [AASHTO M 288: Geotextile Product Selection Guide](#)

Carthage Mills assumes no liability for the accuracy or completeness of this information or for the ultimate use by the purchaser. Carthage Mills disclaims any and all express, implied, or statutory standards, warranties or guarantees, including without limitation any implied warranty as to merchantability or fitness for a particular purpose or arising from a course of dealing or usage of trade as to any equipment, materials, or information furnished herewith. This document should not be construed as engineering advice.