



■ 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 01-01-23 and are subject to change without notice.

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

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