



■ FX[®]-HS Series of Nonwoven Geotextiles

Carthage Mills' [FX-HS Series](#) of nonwoven geotextiles are of 100% polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. The [FX-HS Series](#) of nonwoven geotextiles delivers high durability; excellent physical and hydraulic properties; is inert to biological degradation; and resistant to naturally encountered chemicals, alkalis, and acids.

PROPERTY	ASTM TEST	UNIT	FX [®] -30HS	FX [®] -35HS	FX [®] -40HS	FX [®] -45HS	FX [®] -60HS	FX [®] -70HS	FX [®] -80HS	FX [®] -100HS	FX [®] -120HS	FX [®] -160HS	
<input type="checkbox"/> Mechanical													
Grab Tensile Strength	D 4632	lbs	80	90	100	120	160	180	205	250	300	380	
Grab Tensile Elongation		%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	
Trapezoidal Tear	D 4533	lbs	30	40	45	50	60	75	80	100	115	140	
CBR Puncture	D 6241		175	250	300	335	410	450	500	625	800	1025	
<input type="checkbox"/> Endurance													
UV Resistance	D 4355	% @ 500 hrs	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	
<input type="checkbox"/> Hydraulics/Filtration													
Permittivity	D 4491	sec ⁻¹	2.10	2.00	2.00	1.70	1.50	1.40	1.35	0.80	0.80	0.70	
Water Flow Rate		gpm/ft ²	150	145	140	120	110	100	90	75	65	50	
Apparent Opening Size (AOS)	D 4751	US Std Sieve	50	50	70	70	70	70	80	100	100	100	
<input type="checkbox"/> Physical													
Mass Per Unit Area (Typical)	D 5261	oz/yd ²	3.0	3.5	4.0	4.5	6.0	7.0	8.0	10.0	12.0	16.0	
Thickness (Typical)	D 5199	mils	45	50	55	60	75	85	90	100	120	150	
Standard Roll Sizes Packaging Weight	Measured (Typical)	ft yd ²	12.5 ft x 360 ft 500 yd ²										
		lbs	120 lbs	150 lbs	142 lbs	150 lbs	231 lbs	250 lbs	266 lbs	324 lbs	383 lbs	511 lbs	
		ft yd ²	15.0 ft x 360 ft 600 yd ²					15.0 ft x 300 ft ⁽¹⁾ 500 yd ²					
		lbs	135 lbs	198 lbs	167 lbs	198 lbs	203 lbs	231 lbs	254 lbs	347 lbs	383 lbs	463 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 288-15 and has been replaced with CBR Puncture ASTM D 6241.

- ⁽¹⁾ 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).
 - The properties reported above are effective 01-01-18 and are subject to change without notice.

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