Carthage Mills | **Series Data**

Geotextiles | Erosion Control | Geogrids | Geomembranes

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
☐ **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	250	310	410	450	500	700	800	1025
☐ **Endurance**												
UV Resistance	D 4355	% @ 500 hrs	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
☐ **Hydraulics/Filtration**												
Permittivity	D 4491	sec^{-1}	2.10	2.00	2.00	1.70	1.50	1.40	1.40	0.80	0.80	0.70
Water Flow Rate		gpm/ft^2	150	145	140	135	110	105	95	75	65	50
Apparent Opening Size (AOS) (1)	D 4751	US Std Sieve	50	50	70	70	70	70	80	100	100	100
☐ **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
Standard Roll Sizes Packaging Weight	Measured (Typical)	ft yd^2	12.5 ft x 360 ft 500 yd^2									
		lbs	120 lbs	120 lbs	142 lbs	150 lbs	231 lbs	250 lbs	266 lbs	324 lbs	386 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	160 lbs	160 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 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.

Carthage Mills
4243 Hunt Road
Cincinnati, OH 45242
www.carthagemills.com

513-794-1600 TELEPHONE
800-543-4430 TOLL FREE
513-794-3434 FACSIMILE
info@carthagemills.com

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