

**Carthage Mills****Series Data**

Geotextiles | Erosion Control | Geogrids | Geomembranes

## ■ FX<sup>®</sup>-HSE Series of Nonwoven Geotextiles

Carthage Mills' FX-HSE Series of nonwoven geotextiles is designed specifically for the environmental market, is constructed of 100% polypropylene staple fibers which are formed into a random network, needle-punched and heatset for dimensional stability. The [FX<sup>®</sup>-HSE 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.

The Carthage Mills' FX-HSE Series of environmental nonwoven geotextiles designates "Mass Per Unit Area" or "Weight Per Square Yard" as a true Minimum value.

**Note:** The listing below is a sampling of available products in this Series environmental geotextiles. For more information and/or a complete listing of all the products in this Series, please call or visit our website.

PROPERTY	ASTM TEST	UNIT	FX <sup>®</sup> -120HSE*	FX-600HSE	FX-800HSE	FX-1000HSE	FX-1200HSE
<input type="checkbox"/> <b>Mechanical</b>							
Grab Tensile Strength	D 4632	lbs	320	170	230	270	320
Grab Tensile Elongation		%	50%	50	50	50	50
Trapezoidal Tear	D 4533	lbs	125	70	95	105	125
CBR Puncture	D 6241		900	450	675	725	900
<input type="checkbox"/> <b>Endurance</b>							
UV Resistance	D 4355	% @ 500 hrs	70%	80	80	80	80
<input type="checkbox"/> <b>Hydraulics/Filtration</b>							
Permittivity <sup>(1)</sup>	D 4491	sec <sup>-1</sup>	0.70	1.50	1.40	1.20	.90
Water Flow Rate <sup>(1)</sup>		gpm/ft <sup>2</sup>	50	110	110	85	65
Apparent Opening Size (AOS) <sup>(1)</sup>	D 4751	US Std Sieve	100	80	80	100	100
<input type="checkbox"/> <b>Physical</b>							
Mass Per Unit Area (Minimum)	D 5261	oz/yd <sup>2</sup>	12.0	6.0	8.0	10.0	12.0
Thickness (Typical)	D 5199	mils	120	80	90	115	130
Standard Roll Sizes / Packaging / Weight			Call for all Roll Sizes, Packaging and Weights				

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.

<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 01-01-24 and subject to change without notice.

**\*NOTE:** Please note that the data for FX-120HSE has not been updated since 2020, and will be updated when possible in 2021

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