



■ FX[®]-35HS

Carthage Mills' FX-35HS is a multipurpose nonwoven geotextile made of polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX-35HS 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-35HS exceeds the geotextile requirements for TEMPORARY SILT FENCE (NONWOVEN – SUPPORTED).

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Grab Tensile Strength	ASTM D 4632	0.40 kN	90 lbs
Grab Tensile Elongation		50%	
Trapezoidal Tear	ASTM D 4533	0.18 kN	40 lbs
CBR Puncture	ASTM D 6241	1.11 kN	250 lbs
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	2.00 sec ⁻¹	
Water Flow Rate ⁽¹⁾		5908 lpm/m ²	145 gpm/ft ²
Apparent Opening Size (AOS) ^(1, 2)	ASTM D 4751	0.300 mm	50 US Std. Sieve
<input type="checkbox"/> Physical			
Mass Per Unit Area (Typical)	ASTM D 5261	118.65 g/m ²	3.5 oz/yd ²
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418.1 m ² 54 kg	12.5 ft x 360 ft 500 yd ² 120 lbs
		4.57 m x 109.7 m 501.6 m ² 72.5 kg	15.0 ft x 360 ft 600 yd ² 160 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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■ FX[®]-40HS

Carthage Mills' FX-40HS is a multipurpose nonwoven geotextile made of polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX-40HS 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.

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Grab Tensile Strength	ASTM D 4632	0.445 kN	100 lbs
Grab Tensile Elongation		50%	
Trapezoidal Tear	ASTM D 4533	0.20 kN	45 lbs
CBR Puncture	ASTM D 6241	1.113 kN	250 lbs
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	2.00 sec ⁻¹	
Water Flow Rate ⁽¹⁾		5700 lpm/m ²	140 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	135.6 g/m ²	4.0 oz/yd ²
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418 m ² 64 kg	12.5 ft x 360 ft 500 yd ² 142 lbs
		4.57 m x 109.7 m 501.6 m ² 72.5 kg	15.0 ft x 360 ft 600 yd ² 160 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.

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FX[®]-60HS

Carthage Mills' FX-60HS is a multipurpose nonwoven geotextile made of polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX-60HS 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-60HS exceeds the geotextile requirements for Subsurface Drainage/Class 2 (nonwoven – all soil types), Separation/Class 2 (nonwoven), Stabilization/Class 2 (nonwoven), and Permanent Erosion Control/Class 2 (nonwoven – all soil types / with engineer approval).

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Grab Tensile Strength	ASTM D 4632	0.71 kN	160 lbs
Grab Tensile Elongation		50%	
Trapezoidal Tear	ASTM D 4533	0.27 kN	60 lbs
CBR Puncture	ASTM D 6241	1.82 kN	410 lbs
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	1.50 sec ⁻¹	
Water Flow Rate ⁽¹⁾		4278.3 lpm/m ²	110 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	203.4 g/m ²	6.0 oz/yd ²
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418 m ² 105 kg	12.5 ft x 360 ft 500 yd ² 231 lbs
		4.57 m x 91.44 m 418 m ² 92 kg	15.0 ft x 300 ft 500 yd ² 203 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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■ FX[®]-80HS

Carthage Mills' FX-80HS is a multipurpose nonwoven geotextile made of polypropylene staple fibers which are formed into a random network, needlepunched and heatset for dimensional stability. FX-80HS 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-80HS exceeds the geotextile requirements for SEPARATION/CLASS 1 (NONWOVEN), STABILIZATION/CLASS 1 (NONWOVEN) and PERMANENT EROSION CONTROL/CLASS 1 (NONWOVEN – ALL SOIL TYPES).

PROPERTY	TEST METHOD	DATA	
		METRIC	ENGLISH
<input type="checkbox"/> Mechanical			
Grab Tensile Strength	ASTM D 4632	0.91 kN	205 lbs
Grab Tensile Elongation		50%	
Trapezoidal Tear	ASTM D 4533	0.36 kN	80 lbs
CBR Puncture	ASTM D 6241	2.23 kN	500 lbs
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	70% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	1.4 sec ⁻¹	
Water Flow Rate ⁽¹⁾		3870 lpm/m ²	95 gpm/ft ²
Apparent Opening Size (AOS) ^(1,2)	ASTM D 4751	0.180 mm	80 US Std. Sieve
<input type="checkbox"/> Physical			
Mass Per Unit Area (Typical)	ASTM D 5261	271.2 g/m ²	8.0 oz/yd ²
Standard Roll Sizes / Packaging / Weight	Measured (Typical)	3.81 m x 109.7 m 418 m ² 121 kg	12.5 ft x 360 ft 500 yd ² 266 lbs
		4.57 m x 91.5 m 418 m ² 115 kg	15.0 ft x 300 ft 500 yd ² 254 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 12-01-21 and are subject to change without notice.

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