



■ Carthage 10%HD™

Carthage 10%HD is a woven filtration geotextile made of high-tenacity, monofilament polypropylene yarns which are woven into a stable network such that they retain their relative position. Carthage 10%HD is part of the [Carthage % Open Area Series](#) of woven monofilament filtration 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	1.89 x 1.56 kN	425 x 350 lbs
Grab Tensile Elongation		21%	
Wide Width Tensile Strength	ASTM D 4595	47.29 x 39.41 kN/m	270 x 225 lbs/in 3240 x 2700 lbs/ft
Trapezoidal Tear	ASTM D 4533	0.65 x 0.56 kN	145 x 125 lbs
CBR Puncture	ASTM D 6241	5.96 kN	1340
<input type="checkbox"/> Endurance			
UV Resistance	ASTM D 4355	90% @ 500 hrs	
<input type="checkbox"/> Hydraulics / Filtration			
Permittivity ⁽¹⁾	ASTM D 4491	0.96 sec ⁻¹	
Water Flow Rate ⁽¹⁾		2852 lpm/m ²	70 gpm/ft ²
Percent Open Area	CW-02215	6-10%	
Apparent Opening Size (AOS) ^{(1) (2)}	ASTM D 4751	0.425 mm	40 US Std. Sieve
<input type="checkbox"/> Physical			
Standard Roll Sizes / Packaging / Weight (Custom fabrication and packaging are available.)	Measured (Typical)	3.81 m x 91.44 m 348.7 m ² 111 kg	12.5 ft x 300 ft 417 yd ² 245 lbs
		4.6 m x 91.5 m 418 m ² 145.15 kg	15 ft x 300 ft 500 yd ² 320 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⁾ AOS, typically referred to as a MARV, is actually reported as a MAXIMUM allowable opening when in English US Sieve units; or as the SMALLEST allowable opening when in Metric units (mm).

- Unless otherwise stated, all values stated here are Minimum Average Roll Values (MARV).
- The properties reported above are effective 01-01-2022 and are subject to change without notice.

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