GEOTEX® BY PROPEX

Product Data
GEOTEX® 451

GEOTEX® 451 is a polypropylene, staple fiber, needlepunched nonwoven geotextile produced by Propex, and will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. The fibers are needled to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

GEOTEX 451 conforms to the property values listed below[1]. Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

PROPERTY	TEST METHOD	MARV[2] ENGLISH	MARV[2] METRIC
ORIGIN OF MATERIALS			
% U.S. Manufactured Inputs		100%	100%
% U.S. Manufactured		100%	100%
MECHANICAL			
Tensile Strength (Grab)	ASTM D-4632	100 lbs	445 N
Elongation	ASTM D-4632	50%	50%
CBR Puncture	ASTM D-6241	250 lbs	1112 N
Trapezoidal Tear	ASTM D-4533	45 lbs	200 N
ENDURANCE			
UV Resistance % Retained at 500 hrs	ASTM D-4355	70%	70%
HYDRAULIC			
Apparent Opening Size (AOS)[3]	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	1.8 sec^{-1}	1.8 sec^{-1}
Water Flow Rate	ASTM D-4491	120 gpm/ft^2	4889 $l/min/m^2$

ROLL SIZES	12.5 ft x 360 ft 15 ft x 360 ft	3.81 m x 109.8 m 4.57 m x 109.8 m

NOTES:
1. The property values listed above are effective 04/2011 and are subject to change without notice.
2. Values shown are in weaker principal direction. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
3. Maximum average roll value.

GEOTEXTILE SYSTEMS BY PROPEX

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